



# PROJECT PROPOSAL

CITY OF SAULT STE. MARIE

## **GUARD RAIL REPLACEMENT & REPAIRS**

**B-7-21**

Prepared By:  
City of Sault Ste. Marie  
Engineering Department  
225 E. Portage Ave.  
Sault Ste. Marie, MI 49783  
(906) 632-5733

Bids Due:  
May 10, 2021, 3:00 PM

**CITY OF SAULT STE. MARIE**  
**GUARD RAIL REPLACEMENT & REPAIRS**

**B-7-21**

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**CITY OF  
SAULT STE. MARIE  
MICHIGAN**

**NOTICE TO BIDDERS**

Sealed Bids marked **“GUARD RAIL REPLACEMENT & REPAIRS - B-7-21”** will be accepted at the office of the Purchasing Agent, City Hall, 225 E. Portage Avenue, Sault Ste. Marie, Michigan, 49783 until 3:00 P.M. on Monday, May 10, 2021 at which time and place all Bids will be opened and publicly read. The Bid will be for furnishing the following:

Guard rail replacement and repair for 5 locations:

- 1: W. Easterday Avenue: 26 feet of W-Beam guard rail, 3 wooden posts, 1 Fleet approach end section.
- 2: South side of Oak Street and W. 18th Street: 64 feet of concave curved W-Beam guard rail, 2 steal posts, and 8 wooden posts. Reuse end section. North side of Oak Street and W. 18th Street: 12 feet of convex curved W-Beam guard rail reinstall Fleet end section.
- 3: 1914 Riverside Drive: 12 feet W-Beam guard rail. Reinstall Fleet end section.
- 4: 2191 Seymour Street: 13 feet W-Beam guard rail, 1 post, 1 W-Beam buffer end section.
- 5: Marquette Street and Young Street: 16 feet W-Beam @ wood posts, 1 W-Beam buffer end section.

Specifications, bid forms, and additional information may be obtained at the office of the City Clerk at the above address on March 31, 2021 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

## **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 2012 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 102.15 of the 2012 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 hand written 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. **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.

8. **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.

**9. 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.

**10. 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 P-2)

**11. 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.

**12. INSURANCE AND BONDS**

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 the MDOT, and certificates of such insurance must be attached to each copy of the executed Contract Documents. The insurance certificates provided for this project shall include the City of Sault Ste. Marie and also the Michigan Department of Transportation as insured parties under this project.

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.

**13. 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.

**14. 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.

**15. HEALTH AND SAFETY**

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.

**16. 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 facie evidence of compliance with this section.

**17. EMPLOYMENT OF LOCAL LABOR**

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"  
Construction. . . . .  N/A  Man Hours

Bidders estimate as to man hours which will involve local  
Labor . . . . .  N/A  %

(INFBID-C 8/2020)

**STATEMENT OF CONTRACTOR'S QUALIFICATIONS**  
**FOR ALL CONTRACTS**

**This form, completely filled in and with attachments, shall be submitted upon request to the City Engineering Department by 10 a.m. on the second business day following date of bid opening. Failure to submit this form may be grounds for rejection of bid.**

1. Date of Organization/Incorporation: \_\_\_\_\_
2. Type of Organization (Corporation, Partnership, etc.): \_\_\_\_\_
3. Officers/Principals  
(Titles and Names): \_\_\_\_\_  
\_\_\_\_\_
4. States in which Organization is legally  
qualified to do business: \_\_\_\_\_  
\_\_\_\_\_
5. What is your current bonding capacity? \_\_\_\_\_
6. Name of proposed bonding company for  
this Project: \_\_\_\_\_
- Address and telephone number of agent: \_\_\_\_\_
7. Attach Financial Statement, including latest Balance Sheet, Income Statement, and Retained Earnings. (To be furnished if requested by City prior to bid award.)
8. List, on an attachment, three completed projects that best represent the building type, type of construction, and dollar amount similar to the project being contemplated. Also provide dates, names, addresses and telephone numbers for references.
9. List, on an attachment, all projects currently in progress, including type of work, contract amount, percentage of completion, name, and telephone number of the Owner(s) or their representatives, and Engineer/Architect.

10. List, on an attachment, all projects completed within the last five years, including the type of work, contract amount, and percentage of contract performed by your own forces.
11. During the last five years, what was your largest and average size project amounts in dollars: \$ \_\_\_\_\_ (Largest)  
\$ \_\_\_\_\_ (Average)
12. Has your organization ever failed to complete any projects? If yes, list when, where and why on an attachment. \_\_\_\_\_
13. Has your organization or any predecessor or affiliate thereof been involved in bankruptcy, reorganization, insolvency, or receivership proceedings under federal or state law within the past ten years? If yes, describe the date and nature of the proceedings and court involved on an attachment. \_\_\_\_\_
14. Has your organization been involved in any lawsuits with Owners, Engineers/Architects, or other Contractors involving any projects within the last five years? If yes, describe the date and nature of the proceedings and court involved on an attachment. \_\_\_\_\_
15. Are there any outstanding liens filed against your organization? If yes, explain on an attachment. \_\_\_\_\_
16. List the type of work normally performed by your own forces. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

17. List the names of the project manager and project Superintendent proposed for this project. Attach resumes.

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**I hereby certify the accuracy and completeness of all information on this form and attachments. The discovery of deliberate misinformation given herein shall be considered as grounds for contract termination.**

**Organization:**

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**Signature/Title:**

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**Date:**

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**CITY OF SAULT STE. MARIE**  
**GUARD RAIL REPLACEMENT & REPAIR**

**B-7-21**

**Project Summary**

This project will entail the Guard rail replacement and repair for 5 locations:

- 1: W. Easterday Avenue: 26 feet of W-Beam guard rail, 3 wooden posts, 1 Fleet approach end section.
- 2: South side of Oak Street and W. 18th Street: 64 feet of concave curved W-Beam guard rail, 2 steal posts, and 8 wooden posts. Reuse end section. North side of Oak Street and W. 18th Street: 12 feet of convex curved W-Beam guard rail reinstall Fleet end section.
- 3: 1914 Riverside Drive: 12 feet W-Beam guard rail. Reinstall Fleet end section.
- 4: 2191 Seymour Street: 13 feet W-Beam guard rail, 1 post, 1 W-Beam buffer end section.
- 5: Marquette Street and Young Street: 16 feet W-Beam @ wood posts, 1 W-Beam buffer end section.

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

Proper traffic control procedures in accordance with the 2011 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 and/or Street Department will provide construction observation of the project during construction.

Name of Bidder: \_\_\_\_\_

**BID FORM  
FOR  
GUARD RAIL REPLACEMENT & REPAIRS  
BID NUMBER B-7-21  
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 Bid is submitted in the name of:

(Print) \_\_\_\_\_

The undersigned hereby designates below his/her business address to which all notices, directions or other communications may be served or mailed:

Street \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_ Zip Code \_\_\_\_\_

The undersigned 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

The names, titles and home addresses of all persons who are officers or Partners in the organization are as follows:

NAME AND TITLE	HOME ADDRESS
_____	_____
_____	_____
_____	_____

**BID FORM****CITY OF SAULT STE. MARIE, MICHIGAN****B-7-21****Project Title: GUARD RAIL REPLACEMENT AND REPAIRS****Location: W. EASTERDAY AVE. / OAK ST. / RIVERSIDE DR. / SEYMOUR ST. / MARQUETTE AVE.**

ITEM	ITEM DESCRIPTION	ESTIMATED QUANTITY	UNIT	COST (\$)	TOTAL (\$)
1	MOBILIZATION	1	LSUM		
2	GUARD RAIL SALVAGE	143	FEET		
3	W-BEAM GUARD RAIL	67	FEET		
4	GUARD RAIL CURVED – CONCAVE	64	FEET		
5	GUARD RAIL CURVED – CONVEX	12	FEET		
6	GUARD RAIL BUFFERED END	2	EACH		
7	GUARD RAIL APPROACH TERMINAL – FLEAT END	1	EACH		
<b>TOTAL (\$)</b>					

DESCRIPTION OF WORK: This project will entail the Guard rail replacement and repair for 5 locations:

1: W. Easterday Avenue: 26 feet of W-Beam guard rail, 3 wooden posts, 1 Fleat approach end section.

2: South side of Oak Street and W. 18th Street: 64 feet of concave curved W-Beam guard rail, 2 steal posts, and 8 wooden posts. Reuse end section. North side of Oak Street and W. 18th Street: 12 feet of convex curved W-Beam guard rail reinstall Fleat end section.

3: 1914 Riverside Drive: 12 feet W-Beam guard rail. Reinstall Fleat end section.

4: 2191 Seymour Street: 13 feet W-Beam guard rail, 1 post, 1 W-Beam buffer end section.

5: Marquette Street and Young Street: 16 feet W-Beam @ wood posts, 1 W-Beam buffer end section.

The BIDDER agrees to complete all work as described herein and as shown on the plan sheets and specifications for the total sum of:

\_\_\_\_\_ 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 AMOUNT	STIPULATED INTEREST ON 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 Over	Act No 524 will apply

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 August 31, 2021 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, May 17, 2021**.

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 fifty dollars (\$250.00) 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 \_\_\_\_\_, 2021.

\_\_\_\_\_  
Bidders Name

\_\_\_\_\_  
Official Address

\_\_\_\_\_  
By

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Title

\_\_\_\_\_  
Telephone

## BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned,  
\_\_\_\_\_ as Principal, and \_\_\_\_\_ as  
Surety, are hereby held and firmly bound unto THE CITY OF SAULT STE. MARIE, MICHIGAN as Owner in the  
penal sum of (5% of Proposal at a minimum) for the payment of which, well and truly to be made, we hereby  
jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns.

Signed, this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

The Condition of the above obligation is such that whereas the Principal has submitted to THE CITY OF SAULT STE. MARIE, MICHIGAN a certain Bid, attached hereto and hereby made a part hereof to enter into a contract in writing, for the: Guard Rail Replacement & Repairs B-7-21

Guard rail replacement and repair for 5 locations:

- 1: W. Easterday Avenue: 26 feet of W-Beam guard rail, 3 wooden posts, 1 Fleet approach end section.
- 2: South side of Oak Street and W. 18th Street: 64 feet of concave curved W-Beam guard rail, 2 steal posts, and 8 wooden posts. Reuse end section. North side of Oak Street and W. 18th Street: 12 feet of convex curved W-Beam guard rail reinstall Fleet end section.
- 3: 1914 Riverside Drive: 12 feet W-Beam guard rail. Reinstall Fleet end section.
- 4: 2191 Seymour Street: 13 feet W-Beam guard rail, 1 post, 1 W-Beam buffer end section.
- 5: Marquette Street and Young Street: 16 feet W-Beam @ wood posts, 1 W-Beam buffer end section.

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 hereby waive notice of any such extension.

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

\_\_\_\_\_(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.

**PERFORMANCE 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 the Principal and Surety, bind ourselves, our heirs, executors, administrators and successors, to be liable jointly and severally for the performance of the contract defined below in accordance with the plans, specifications, and terms thereof. The Surety is liable for the costs of correcting and completing the Principal's work above the contract balance and shall be liable for liquidated or actual damages caused by the Principal's default or non-performance. This bond is for the protection of the Owner. The balance due on the contract shall be paid to the Surety upon its undertaking of the work for the Principal. Upon demand of Owner, Surety shall undertake the work of the Principal and prosecute the work with diligence to completion. If Surety shall fail to do this within 15 days of Owner's demand, Owner may proceed to enforce any remedy under the contract available to Owner.

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 the construction of: Guard Rail Replacement & Repairs B-7-21

Guard rail replacement and repair for 5 locations:

- 1: W. Easterday Avenue: 26 feet of W-Beam guard rail, 3 wooden posts, 1 Fleet approach end section.
- 2: South side of Oak Street and W. 18th Street: 64 feet of concave curved W-Beam guard rail, 2 steal posts, and 8 wooden posts. Reuse end section. North side of Oak Street and W. 18th Street: 12 feet of convex curved W-Beam guard rail reinstall Fleet end section.
- 3: 1914 Riverside Drive: 12 feet W-Beam guard rail. Reinstall Fleet end section.
- 4: 2191 Seymour Street: 13 feet W-Beam guard rail, 1 post, 1 W-Beam buffer end section.
- 5: Marquette Street and Young Street: 16 feet W-Beam @ wood posts, 1 W-Beam buffer end section.

NOW, THEREFORE, if the Principal shall well, truly and faithfully perform its duties, all the undertakings, covenants, terms, conditions, and agreements of said contract during the original term thereof, and any extensions

thereof which may be granted by the OWNER with or without notice to the Surety, and if the Principal shall satisfy all claims and demands incurred under such contract, and shall fully indemnify and save harmless the OWNER from all costs and damages which it may suffer by reason of failure to do so, and shall reimburse and repay the OWNER all outlay and expense which the OWNER may incur in making good any default, then this obligation shall be void; otherwise Surety shall make such payments or perform such obligations 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.

IN WITNESS WHEREOF, this instrument is executed in four (4) counterparts each one of which shall be deemed an original, this the \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_ .

\_\_\_\_\_  
(Principal)

By: \_\_\_\_\_

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

\_\_\_\_\_  
(Surety)

By: \_\_\_\_\_

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

\_\_\_\_\_  
(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.

## **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 the construction of: Guard Rail Replacement & Repairs B-7-21

Guard rail replacement and repair for 5 locations:

- 1: W. Easterday Avenue: 26 feet of W-Beam guard rail, 3 wooden posts, 1 Fleet approach end section.
- 2: South side of Oak Street and W. 18th Street: 64 feet of concave curved W-Beam guard rail, 2 steal posts, and 8 wooden posts. Reuse end section. North side of Oak Street and W. 18th Street: 12 feet of convex curved W-Beam guard rail reinstall Fleet end section.
- 3: 1914 Riverside Drive: 12 feet W-Beam guard rail. Reinstall Fleet end section.
- 4: 2191 Seymour Street: 13 feet W-Beam guard rail, 1 post, 1 W-Beam buffer end section.
- 5: Marquette Street and Young Street: 16 feet W-Beam @ wood posts, 1 W-Beam buffer end section.

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.

IN WITNESS WHEREOF, this instrument is executed in four (4) counterparts each one of which shall be deemed an original, this the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

\_\_\_\_\_  
(Principal)

By: \_\_\_\_\_

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

\_\_\_\_\_  
(Surety)

By: \_\_\_\_\_

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

\_\_\_\_\_  
(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

THIS AGREEMENT, made as of the \_\_\_\_ day of \_\_\_\_\_, 2021, by and between the CITY OF SAULT STE. MARIE, MICHIGAN, hereinafter called the OWNER OR CITY, and hereinafter called the CONTRACTOR.

- WITNESSETH, that whereas the CITY intends to contract for the. This project will entail the Guard rail replacement and repair for 5 locations: 1: W. Easterday Avenue: 26 feet of W-Beam guard rail, 3 wooden posts, 1 Fleet approach end section. 2: South side of Oak Street and W. 18th Street: 64 feet of concave curved W-Beam guard rail, 2 steel posts, and 8 wooden posts. Reuse end section. North side of Oak Street and W. 18th Street: 12 feet of convex curved W-Beam guard rail reinstall Fleet end section. 3: 1914 Riverside Drive: 12 feet W-Beam guard rail. Reinstall Fleet end section. 4: 2191 Seymour Street: 13 feet W-Beam guard rail, 1 post, 1 W-Beam buffer end section. 5: Marquette Street and Young Street: 16 feet W-Beam @ wood posts, 1 W-Beam buffer end section. The project title is "B-20-20 GUARD RAIL REPLACEMENT & REPAIRS".
- NOW, THEREFORE, THE CITY AND CONTRACTOR for the considerations hereinafter set forth, agree as follows:
- I. THE CONTRACTOR AGREES to furnish all the necessary labor, materials, equipment, tools and services necessary to perform and complete, in a workmanlike manner, all work required for the complete construction the above described work, as specified in the Proposal and in strict compliance with applicable local, state and federal codes and the Contract Documents herein mentioned, which are hereby made a part of the Contract, including the following Addenda:

ADDENDUM NO.

DATED

_____	_____
_____	_____
_____	_____

- A. Contract Time: Work under this Agreement shall be commenced upon the CONTRACTOR'S receipt of the executed Agreement signed by the CITY or upon the date as specified in the written Notice to Proceed (if such date is different from the date of the executed Agreement) and the work shall be completed according to the following schedule:

**Final Completion: Tuesday, August 31, 2021**

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 One hundred fifty dollars (\$150.00) 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 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 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.

<b>(CONTRACTOR'S COMPANY NAME)</b> _____	
BY: _____ (SIGNATURE)	BY: _____ (SIGNATURE)
_____ (PRINT)	_____ (PRINT)
TITLE: _____ (PRINT)	TITLE: _____ (PRINT)

<b>CITY OF SAULT STE. MARIE, MICHIGAN</b>
_____ CITY MANAGER (Brian Chapman) Approved

## CITY OF SAULT STE. MARIE

### CONTRACTOR INSURANCE REQUIREMENTS

The Contractor 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 insurance carriers acceptable to the City of Sault Ste. Marie, Michigan.

1. Workers' Compensation Insurance: The Contractor shall procure and maintain during the life of this contract, Workers' Compensation and Employers Liability Coverage, 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.

2. Commercial General Liability and Umbrella Liability Insurance: The Contractor shall procure and maintain during the life of this contract, Commercial General Liability Insurance on an "Occurrence Basis" with the following limits:

General Aggregate (other than Products/Completed Operations)	\$3,000,000
Products/Completed Operations Aggregate	\$3,000,000
Personal and Advertising Injury Limit	\$1,000,000
Each Occurrence	\$1,000,000
Fire Damage Limit	\$500,000
Medical Expense	\$5,000

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 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 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. (CG 20 10 04 13 and CG 20 01 04 13 or equivalent)

5. Cancellation Notice: Workers' Compensation Insurance, Commercial General Liability Insurance and Business Auto Liability Insurance and Umbrella Liability Insurance, 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 Avenue  
Sault Ste. Marie, Michigan 49783

6. Waiver of Subrogation: Contractor 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.

7. Proof of Insurance Coverage: **The Contractor 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 Workers' 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.
- b. If so requested, Certified Copies of all policies mentioned above will be furnished.

If any of the above coverages expire during the term of this contract, the Contractor 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 shall not cancel or reduce the coverage of any insurance without providing prior written notice to the City. The Contractor 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 on City projects shall furnish certificates of insurance **before** work is begun.

(Spec-ins. 01/2014)

# **GENERAL CONDITIONS**

## **SECTION 1 - DEFINITIONS**

Wherever used in these General Conditions or in the other Contract Documents, the following terms shall have the meanings indicated which shall be applicable to both the singular and plural thereof:

**AGREEMENT** - The written agreement between the CITY and the CONTRACTOR covering the Work to be performed, including the CONTRACTOR'S Bid and the Bonds.

**APPLICATION FOR PAYMENT** - The form furnished by the CITY which is to be used by the CONTRACTOR in requesting progress payments and which is to include the schedule of values required by Section 26 and an affidavit of the CONTRACTOR that progress payments theretofore received from the CITY on account of the Work have been applied by the CONTRACTOR to discharge in full all of the CONTRACTOR'S obligations incurred in connection with the Work covered by all prior Applications for Payment.

**BID** - The offer or proposal of the Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.

**BIDDER** - Any person, firm or corporation submitting a Bid for the Work to the CITY.

**BONDS** - Bid, performance and payment bonds and other instruments of security, furnished by the CONTRACTOR and his surety in accordance with the Contract Documents.

**CHANGE ORDERS** - A written order to the CONTRACTOR signed by the CITY authorizing an addition, deletion or revision in the Work, or an adjustment in the Contract Price or the Contract Time issued after execution of the Agreement.

**CONTRACT DOCUMENTS** - The complete bound book describing the Work to be done by the CONTRACTOR, including the Agreement, Specifications, Plans, Addends (whether issued prior to opening of bids or execution of the Agreement) and Modifications.

**CONTRACT PRICE** - The total moneys payable to the CONTRACTOR under the Contract Documents.

**CONTRACT TIME** - The number of calendar days stated in the Agreement for the completion of the Work.

**CONTRACTOR** - The person, firm, or corporation with whom the CITY has executed the Agreement.

**FIELD ORDER** - A written order issued by the CITY which clarifies or interprets the Contract Documents in accordance with Section 14 or orders minor changes in the Work in accordance with Section 20.

**MODIFICATION** - (a) a written amendment of the Contract Documents signed by the CITY and the CONTRACTOR, (b) a Change Order, (c) a written clarification or interpretation issued by the CITY in accordance with Section 14 or (d) a written order for a minor change or alteration in the work issued by the CITY pursuant to Section 20. A modification may only be issued after execution of the Agreement.

**CITY** - The Municipality of Sault Ste. Marie, Michigan.

PLANS - The drawings and plans which show the character and scope of the Work to be performed and which have been prepared or approved by the CITY and are referred to in the Contract Documents.

PROJECT - The entire construction to be performed as provided in the Contract Documents.

PROJECT REPRESENTATIVE - The authorized representative of the CITY who is assigned to the Project or any part thereof.

SHOP DRAWINGS - All plans, drawings, diagrams, illustrations, brochures, schedules and other data which are prepared by the CONTRACTOR, a Subcontractor, manufacturer, supplier or distributor and which illustrate the equipment, material or some portion of the Work.

SPECIFICATIONS - The Information for Bidders, these General Conditions, Detailed Specifications, Special Conditions and Technical Provisions.

SUBCONTRACTOR - An individual, firm or corporation having a direct contract with the CONTRACTOR or with any other Subcontractor for the performance of a part of the Work at the site.

SUBSTANTIAL COMPLETION - The date, as certified by the CITY, when the construction of the Project or a specified part thereof is sufficiently completed in accordance with the Contract Documents, so that the Project or specified part can be utilized for the purposes for which it was intended; or if there is on such certification, the date when final payment is due in accordance with Section 30.

WORK - Any and all obligations, duties, and responsibilities necessary to the successful completion of the Project assigned to or undertaken by the CONTRACTOR under the Contract Documents, including the furnishing of all labor, materials, tools, equipment and other incidentals.

## **SECTION 2 - AWARD, EXECUTION OF DOCUMENTS, DELIVERY OF BONDS, ETC.**

- 2.1 The award of the contract, if it is awarded, will be to the lowest responsible Bidder whose qualifications indicate the award will be in the best interest of the CITY and whose proposal complies with all the prescribed requirements. No award will be made until the CITY has concluded such investigations as it deems necessary to establish the responsibility, qualifications and financial ability of the Bidders to do the Work in accordance with the Contract Documents to the satisfaction of the CITY within the time prescribed. The CITY reserves the right to reject the Bid of any Bidder who does not pass the investigation to the CITY'S satisfaction. In analyzing Bids, the CITY may take into consideration alternates and unit prices if requested by the Bid forms. If the contract is awarded, the CITY will give the successful Bidder written notice of the award within the time set forth in the Advertisement. The notification of award will be in the form of Two (2) counterparts of the Notice of Award document that will be signed by the CITY and the CONTRACTOR.
- 2.2 At least Three (3) counterparts of the Agreement and such other Contract Documents as practicable will be signed by the CITY and the CONTRACTOR. The unsigned Agreement forms will be provided to the CONTRACTOR when the Notice of Award is issued. The CITY will identify those portions of the Contract Documents not so signed and such identification will be binding on all parties. The CONTRACTOR and the CITY will each receive an executed counterpart of the Contract Documents.

- 2.3 Simultaneously with the CONTRACTOR'S execution and delivery of the Agreement to the CITY, the CONTRACTOR will deliver to the CITY the required Bonds and Insurance. Within ten (10) days thereafter, the CITY shall deliver one fully signed counterpart of the Agreement to the CONTRACTOR
- 2.4 Failure of the successful Bidder to execute the Agreement and deliver the required Bonds and Insurance within ten (10) days of the issuance of the Notice of Award shall be just cause for the CITY to annul the award and declare the Bid and any guarantee thereof forfeited.

### **SECTION 3 - PROGRESS AND SUBMISSION SCHEDULES: PRECONSTRUCTION CONFERENCE: TIME OF STARTING THE WORK**

- 3.1 Within ten (10) days after the execution of the Agreement, the CONTRACTOR will submit to the CITY for approval, an estimated progress schedule indicating the starting and completion dates of the various stages of the Work, and a schedule of Shop Drawings submissions. At least ten (10) days prior to submitting the first Application for Payment he shall also submit a schedule of values as required by Section 26.
- 3.2 Before starting the Work, a Pre-construction conference will be held to review the above schedules, to establish procedures for handling shop drawings and other submittals, for processing Applications for Payment, to establish a working understanding between the parties, and to discuss the construction safety requirements of the project. Present at the conference will be delegated representatives of the CONTRACTOR, the CITY, and, when possible, other interested parties. The Preconstruction conference will be scheduled by the CITY as soon as possible after the issuance of the Notice of Award to the CONTRACTOR.
- 3.3 Prior to starting the Work the CONTRACTOR will furnish the CITY certificates of insurance as required by Section 34.
- 3.4 The CONTRACTOR will start the Work on the date on which the Agreement is executed by the CITY and delivered, or on such other date, if any, as may be specified in the Agreement. However at the time of the execution and delivery of the Agreement the CITY may give the CONTRACTOR a written notice to proceed, stating the different date on which it is expected that the CONTRACTOR will start the Work, but such date shall not be more than thirty (30) days after the date of execution and delivery of the Agreement. No work shall be done prior to the date on which the work is to start.
- 3.5 The Contract Time shall commence to run on the date when the Work is to start as provided in Section 3.

### **SECTION 4 - CORRELATION, INTERPRETATION AND INTENT OF CONTRACT DOCUMENTS**

- 4.1 It is the intent of the Specifications and Plans to describe a complete Project to be constructed in accordance with the Contract Documents.
- 4.2 The Contract Documents comprise the entire Agreement between the CITY and the CONTRACTOR. They may be altered only by a Modification.
- 4.3 The Contract Documents are complementary; what is called for by one is as binding as if called for by all. If the CONTRACTOR finds a conflict, error or discrepancy in the Contract Documents, he will call it to the CITY'S attention in writing before proceeding with the work affected thereby except at his (CONTRACTOR'S) own risk and expense. In resolving such conflicts, errors, and discrepancies, the

documents shall be given precedence in the following order: Agreement, Specifications, Plans. Within the Specifications the order of precedence shall be as follows: Special Conditions, Information for Bidders, General Conditions, Detailed Specifications, Technical Provisions. Figure dimensions on Plans shall govern over scale dimensions, and detailed Plans shall govern over general Plans. Any work that may reasonably be inferred from the Specifications or Plans as being required to produce the intended result shall be supplied whether or not it is specifically called for. Work, materials or equipment described in words which so applied have a well-known technical or trade meaning shall be deemed to refer to such recognized standards. The CONTRACTOR assumes full responsibility for having familiarized himself with the nature and extent of the Contract Documents, Work, locality, and local conditions that may in any manner affect the Work to be done.

## **SECTION 5 - OWNERSHIP AND COPIES OF DOCUMENTS: RECORD DOCUMENTS**

- 5.1 All Specifications, Plans and copies thereof furnished by the CITY shall remain its property. They shall not be used on another Project, and, with the exception of those sets which have been signed in connection with the execution of the Agreement, shall be returned to them on request upon completion of the Project.
- 5.2 The CITY will furnish to the CONTRACTOR up to five (5) copies of the Specifications and Plans as are reasonably necessary for the execution of the Work. Additional copies will be furnished, upon request, at the cost of reproduction.
- 5.3 The CONTRACTOR will keep one record copy of all Specifications, Plans, Addenda, Modifications, and Shop Drawings at the site in good order and annotated to show all changes made during the construction process. These shall be available to the CITY and shall be delivered to the same upon completion of the Project.

## **SECTION 6 - WORK BY OTHERS**

- 6.1 The CITY may perform additional work related to the Project by itself or it may let other direct contacts therefore which shall contain General Conditions similar to these. The CONTRACTOR will afford the other contractors who are parties to such direct contracts (or the CITY, if it is performing the additional work himself), reasonable opportunity for the introduction and storage of materials and equipment and the execution of work, and shall properly connect and coordinate his Work with theirs.
- 6.2 If any part of the CONTRACTOR'S Work depends for proper execution or results upon the work of any such other contractor (or the CITY), the CONTRACTOR will inspect and promptly report to the CITY in writing any defects or deficiencies in such work that render it unsuitable for such proper execution and results. His failure so to report shall constitute an acceptance of the other work as fit and proper for the relationship of his Work except as to defects and deficiencies which may appear in the other work after the execution of his Work.
- 6.3 The CONTRACTOR will do all cutting, fitting and patching of his Work that may be required to make its several parts come together properly and fit it to receive or be received by such other work. The CONTRACTOR will not endanger any work of others by cutting, excavating or otherwise altering their work and will only cut or alter their work with written consent of the CITY.
- 6.4 If the performance of additional work by other contractors or the CITY is not noted in the Contract Documents prior to the award of the contract, written notice thereof shall be given to the CONTRACTOR prior to starting any such additional work. If the CONTRACTOR believes that the performance of such

additional work by the CITY or others involves him in additional expense or entitles him to an extension of the Contract Time, he may make a claim therefore as provided in Sections 21 and 23.

## **SECTION 7 – SUBCONTRACTS**

- 7.1 Prior to the execution and delivery of the Agreement, the successful Bidder will submit to the CITY for acceptance a list of the names of Subcontractors and such other persons and organizations (including those who are to furnish materials or equipment fabricated to a special design) proposed for those portions of the Work as to which the identity of the Subcontractors and other persons and organizations must be submitted as specified in the Contract Documents. Prior to the execution and delivery of the Agreement, the CITY will notify the successful Bidder in writing if the CITY, after due investigation, has reasonable objection to any Subcontractor, person or organization on such list. The failure of the CITY to make objection to any Subcontractor, person or organization on the list prior to the execution and delivery of the Agreement shall constitute an acceptance of such Subcontractor, person or organization. Acceptance of any such Subcontractor, person or organization shall not constitute a waiver of any right of the CITY to reject defective Work, material or equipment, or Work, material or equipment not in conformance with the requirements of the Contract Documents.
- 7.2 If, prior to the execution and delivery of the Agreement, the CITY has reasonable objection to and refuses to accept any Subcontractor, person, or organization on such list, the successful Bidder shall prior to such execution and delivery, submit an acceptable substitute without an increase in his Bid Price. If, after the execution and delivery of the Agreement, the CITY refuses to accept any Subcontractor, person or organization on such list, the CONTRACTOR will submit an acceptable substitute and the Contract Price shall be increased or decreased by the difference in cost occasioned by such substitution and an appropriate
- Change Order shall be issued; however, no such increase in the Contract Price shall be allowed in respect of any substitution unless the CONTRACTOR has acted promptly and reasonably in submitting a name of the Subcontractor prior to the execution and delivery of the Agreement.
- 7.3 The CONTRACTOR will not employ any Subcontractor (whether initially or as a substitute) against whom the CITY may have reasonable objection, nor will the CONTRACTOR be required to employ any Subcontractor against whom he has reasonable objection. The CONTRACTOR will not make any substitution for any Subcontractor who has been accepted by the CITY unless the CITY determines that there is good cause for doing so.
- 7.4 The CONTRACTOR will be fully responsible for all acts and omissions of his Subcontractors and of persons directly or indirectly employed by them and of persons for whose acts any of them may be liable to the same extent that he is responsible for the acts and omissions of persons directly employed by him. Nothing in the Contract Documents shall create any contractual relationship between any Subcontractor and the CITY or any obligation on the part of the CITY to pay or to see to the payment of any moneys due any Subcontractor, except as may otherwise be required by law. The CITY may furnish to any Subcontractor, to the extent practicable, evidence of amounts paid to the CONTRACTOR on account of specific work done in accordance with the schedule of values.
- 7.5 The divisions and sections of the Specifications and the identifications of any Plans shall not control the CONTRACTOR in dividing the Work among Subcontractors or delineating the Work to be performed by any trade.

- 7.6 The CONTRACTOR agrees to specifically bind every Subcontractor to all of the applicable terms and conditions of the Contract Documents. Every Subcontractor, by undertaking to perform any of the Work, will thereby automatically be deemed to be bound by such terms and conditions.
- 7.7 All work performed for the CONTRACTOR by a subcontractor shall be pursuant to an appropriate agreement between the CONTRACTOR and the Subcontractor which shall contain provisions that waive all rights the contracting parties may have against one another for damages caused by fire or other perils covered by insurance provided in accordance with Section 36, except such rights as they may have to the proceeds of such insurance held by the CITY as trustee under Section 36. The CONTRACTOR will pay each Subcontractor a just share of any insurance moneys received by the CONTRACTOR under Section 36.

#### **SECTION 8 - MATERIALS, EQUIPMENT AND LABOR: SUBSTITUTE MATERIAL OR EQUIPMENT**

- 8.1 The CONTRACTOR will provide and pay for all materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water and sanitary facilities and all other facilities and incidentals necessary for the execution, testing, initial operation and completion of the Work.
- 8.2 All materials and equipment shall be new. If required by the CITY, the CONTRACTOR will furnish satisfactory evidence as to the kind and quality of materials and equipment.
- 8.3 If it is indicated in the Specifications that the CONTRACTOR may furnish or use a substitute that is equal to any material or equipment specified, and if the CONTRACTOR wishes to furnish or use a proposed substitute, he shall promptly after the award of the contract, make written application to the CITY for approval of such a substitute certifying in writing that the proposed substitute will perform adequately the duties imposed by the general design, be similar and of equal substance to that specified and be suited to the same use and capable of performing the same function as that specified. No substitute shall be ordered or installed without the written approval of the CITY who shall be the judge of equality.
- 8.4 All materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned in accordance with the instructions of the applicable manufacturer, fabricator or processors, except as otherwise specifically provided in the Contract Documents.

#### **SECTION 9 - PATENT FEES AND ROYALTIES**

- 9.1 The CONTRACTOR shall pay all license fees and royalties and assume all costs incident to the use of any invention, design, process or device which is the subject of patent rights or copyrights held by others. He will indemnify and hold harmless the CITY and anyone directly or indirectly employed by either of them from and against all claims, damages, losses and expenses (including attorney's fees) arising out of any infringement of such rights during or after completion of the Work, and shall defend all such claims in connection with any alleged infringement of such rights.

#### **SECTION 10 - PERMITS, LAWS, TAXES AND REGULATIONS**

- 10.1 The CONTRACTOR will secure and pay for all construction permits and licenses and will pay all governmental and public utility charges and inspection fees necessary for the prosecution of the Work.
- 10.2 The CONTRACTOR will give all notices and comply with all laws, ordinances, rules and regulations

applicable to the Work. If the CONTRACTOR observes that the Specifications or Plans are at variance therewith, he will give the CITY prompt written notice thereof, and any necessary changes shall be adjusted by an appropriate Modification. If the CONTRACTOR performs any Work knowing it to be contrary to such laws, ordinances, rules and regulations, and without such notice to the CITY, he will bear all costs arising therefrom.

- 10.3 The CONTRACTOR will pay all State Sales, Use and other Taxes that are lawfully assessed against the CONTRACTOR on materials and equipment to be incorporated in the Work.
- 10.4 In the event that the Work involved with this contract specifies that the CITY will furnish certain materials that are to be installed by the CONTRACTOR, the CONTRACTOR shall be responsible for payment of any State of Michigan User Tax for such materials. The original cost of such materials shall be used as the basis for computing the User Tax based upon current State of Michigan rates. The CITY will provide such cost information during the bidding phase of the project and will include an allowance in the bid Proposal for the full amount of User Tax for CITY furnished materials. When the costs of any CITY furnished materials are not known during the bidding phase of the project, the CITY will issue a Change Order to the CONTRACTOR to include the amount of such specific User Tax as required based upon the costs of materials, when such costs are subsequently determined. In any event, the CONTRACTOR will be responsible for the payment of the User Tax to the State of Michigan and documentation of the CONTRACTOR'S payment of the User Tax shall be furnished to the CITY.

#### **SECTION 11 - AVAILABILITY OF LANDS: PHYSICAL AND SUBSURFACE CONDITIONS: REFERENCE POINTS**

- 11.1 The CITY shall endeavor to provide as indicated in the Contract Documents, not later than the date when needed by the CONTRACTOR, the land upon which the Work is to be done, rights of way for access thereto, and such other lands which are designated for the use of the CONTRACTOR. Easements for permanent structures or permanent changes in existing facilities will be secured and paid for by the CITY unless otherwise specified in the Contract Documents. If the CONTRACTOR believes that any delay in the CITY'S furnishing these lands or providing such easements entitles him to an extension of the Contract Time, he may make a claim therefore as provided in Section 23. The CONTRACTOR will provide all additional lands and access thereto that may be required for temporary construction facilities or storage of material and equipment. The CONTRACTOR shall confine his operations, equipment and material to lands on which the CITY or the CONTRACTOR has secured the right to perform the Work. Trespassing on private property shall be the sole responsibility of the CONTRACTOR.
- 11.2 The CITY will, upon request, furnish to the CONTRACTOR copies of all available boundary surveys and subsurface tests.
- 11.3 Any soil borings, if taken, are located as indicated on the plans and Test Boring Reports, for general informational purposes only are included under "Test Boring Reports". These Test Boring Reports shall not relieve the CONTRACTOR of his responsibility in investigating all local conditions affecting the work. The CONTRACTOR shall obtain such additional information as he deems necessary before bidding, as no claims for extra work or damage will be considered if it is found during construction that the actual soil or material conditions vary from those shown on the plans or in the Test Boring Reports.
- 11.4 The CITY will establish such general reference points as in its judgment will enable the CONTRACTOR to

proceed with the Work. The CONTRACTOR will be responsible for the layout of the Work and will protect and preserve the established reference points and will make no changes or relocations without the prior written approval of the CITY. He will report to the CITY whenever any reference point is lost or destroyed or requires relocations because of necessary changes in grades or locations. The CONTRACTOR will replace and accurately relocate all reference points so lost, destroyed or moved.

- 11.5 All elevations shown on the Plans or referred to herein are in feet above mean sea level datum as established by the United States Geological Survey, unless otherwise noted. The CONTRACTOR shall verify all the existing structure locations and elevations at points of connection or possible interference between his work and the existing structures and shall report at once to the CITY any interferences or discrepancies discovered.

## **SECTION 12 - USE OF PREMISES**

- 12.1 The CONTRACTOR will confine his equipment, the storage of materials and equipment, and the operations of his workmen to areas permitted by law, ordinances, permits, or the requirements of the Contract Documents, and shall not unreasonably encumber the premises with materials or equipment.
- 12.2 The CONTRACTOR will not load nor permit any part of the structure to be loaded with weights that will endanger the structure, nor will he subject any part of the Work to stresses or pressures that will endanger it.
- 12.3 The CONTRACTOR shall use every reasonable precaution to prevent injury to the new structures being constructed hereunder. He shall be responsible for the correction of all injury or damage resulting from his operations and/or occurring while the Project is under his supervisory control. He shall furnish and install such guards, coverings and other protection as may be needed to insure that the structures remain undamaged prior to completion of the entire Project. In the event damage does occur to the finished portions of the Project, or to the work in progress, the CONTRACTOR shall take such corrective action and measures as may be necessary to repair the damage to the satisfaction of the CITY.
- 12.4 The CONTRACTOR shall be solely responsible for any damage to any existing underground services, utilities, or structures, or to structures, utilities and roadways above the ground caused by his operations or those of his Subcontractors and/or suppliers.

## **SECTION 13 - CITY'S STATUS DURING CONSTRUCTION**

- 13.1 The CITY shall be the representative during the construction period. All instructions of the CITY to the CONTRACTOR shall be issued through the CITY'S REPRESENTATIVE. The duties and responsibilities and the limitations of authority of CITY during construction are set forth in Sections 1 through 42 of these General Conditions.
- 13.2 The CITY'S REPRESENTATIVE will make periodic or infrequent visits to the site to observe the progress and quality of the executed Work and to determine, in general, if the Work is proceeding in accordance with the Contract Documents. He will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work nor will he be responsible for the construction means, methods, techniques, sequences or procedures, or the safety precautions incident thereto. His efforts will be directed toward providing assurance for the CITY OF SAULT STE. MARIE that the completed Project will conform to the requirements of the Contract Documents, but he will not be responsible for the CONTRACTOR'S failure to perform the Work in accordance with the Contract

Documents. On the basis of his on-site observations as an experienced and qualified design professional, he will keep informed of the progress of the Work and will endeavor to guard against defects and deficiencies in the Work of contractors.

- 13.3 The CITY'S REPRESENTATIVE will have authority to disapprove of or reject Work which is defective; i.e., it is unsatisfactory, faulty or defective, or does not conform to the requirements of the Contract Documents or does not meet the requirements of the Contract Documents or does not meet the requirements of any inspection, test or approval referred to in Section 16. He will also have authority to require special inspection or testing of the Work as provided in Section 19, whether or not the Work is fabricated, installed or completed.
- 13.4 The CITY'S REPRESENTATIVE shall have permissive authority over the work which is proposed to be done during the winter months. The CONTRACTOR shall provide adequate weather protection, temporary heating and take any other measures which are necessary to insure that the work performed during the winter months is properly installed and protected against damage from freezing. When and if temporary heating is used, the CONTRACTOR shall take every precaution to insure that the hazard of fire is reduced to a minimum, and the CONTRACTOR shall bear full responsibility for any damage which may result from the use of temporary heating devices.
- 13.5 Neither the CITY REPRESENTATIVE'S authority to act under this Section 13 nor any decision made by him in good faith either to exercise or not exercise such authority shall give rise to any duty or responsibility of the CITY to the CONTRACTOR, any Subcontractor, any of their agents or employees or any other person performing any of the Work.

#### **SECTION 14 - CITY'S INTERPRETATIONS AND DECISIONS**

- 14.1 The CITY REPRESENTATIVE will issue with reasonable promptness such written clarifications or interpretations (in the form of plans or otherwise) as he may determine necessary for the proper execution of the Work, such clarifications and interpretations to be consistent with or reasonably inferable from the overall intent of the Contract Documents. If the CONTRACTOR believes that a written clarification and interpretation entitles him to an increase in the Contract Price, he may make a claim therefore as provided in Section 21.
- 14.2 The CITY REPRESENTATIVE will be the initial interpreter of the terms and conditions of the Contract Documents and the judge of the performance thereunder. In his capacity as interpreter and judge he will exercise his best efforts to insure faithful performance by the CONTRACTOR. He shall not be liable for the result of any interpretation or decision rendered in good faith. Claims, disputes and other matters relating to the execution and progress of the Work or the interpretation of or performance under the Contract Documents shall be referred to the CITY'S REPRESENTATIVE for decision, which he shall render in writing within a reasonable time.
- 14.3 Either the CITY or CONTRACTOR may demand arbitration with respect to any such claim, dispute or other matter that has been referred to the CITY, except any which may have been waived by the making or acceptance of final payment as provided in Section 31. Such arbitration to be in accordance with Section 42. However, no request for arbitration of any such claim, dispute or other matter shall be made until either (a) the date on which the CITY has rendered its decision or (b) the 10th day after the parties have presented their evidence to the CITY if it has not rendered its written decision before that date, whichever should occur first. No request for arbitration shall be made later than thirty (30) days after the date on

which the CITY rendered its written decision in respect of the claim, dispute or other matter as to which arbitration is sought; and the failure to request arbitration within said thirty (30) days' period shall result in the CITY'S decision being final and binding upon the CITY and CONTRACTOR. If the CITY renders a decision after arbitration proceedings have been initiated, such decision may be entered as evidence but shall not supersede the arbitration proceedings, except where the decision is acceptable to the parties concerned.

## **SECTION 15 - SHOP DRAWINGS AND SAMPLES**

- 15.1 The CONTRACTOR shall submit to the CITY for review, all required shop drawings with such promptness as to cause no delay in the Work under this contract. After checking and verifying all field measurements, the CONTRACTOR will submit to the CITY for review, in accordance with the accepted schedule of Shop Drawing submissions, five (5) copies (or at the CITY'S option, one reproducible copy) of all Shop Drawings, which shall have been checked by and stamped with the approval of the CONTRACTOR and identified as the CITY may require. The data shown on the Shop Drawings will be complete with respect to dimensions, design criteria, materials of construction, brochures, layout and installation drawings, manufacturer, pertinent catalog numbers and the use for which intended and the like to enable the CITY to review the information as required.
- 15.2 The CONTRACTOR will also submit to the CITY for review, with such promptness as to cause no delay in Work, all samples required by the Contract Documents. All samples will have been checked by and stamped with the approval of the CONTRACTOR, identified clearly as to material, manufacturer, and pertinent catalog numbers and the use for which intended.
- 15.3 At the time of each submission, the CONTRACTOR will in writing call the CITY'S attention to any deviations that the Shop Drawings or sample may have from the requirements of the Contract Documents.
- 15.4 The CITY will review with reasonable promptness Shop Drawings and samples, but its review shall be only for conformance with the design concept of the Project and for compliance with the information given in the Contract Documents. The review of a separate item as such will not indicate approval of the assembly in which the item functions. The CONTRACTOR will make any corrections required by the CITY and will return the required number of corrected copies of Shop Drawings and resubmit new samples. The CONTRACTOR shall direct specific attention in writing or on resubmitted Shop Drawings to revisions other than the corrections called for by the CITY on previous submissions.
- 15.5 No work requiring a Shop Drawing or sample submission shall be commenced until the submission has been reviewed by the CITY.
- 15.6 The CITY'S review of Shop Drawings or samples shall not relieve the CONTRACTOR from his responsibility for any deviations from the requirements of the Contract Documents unless the CONTRACTOR has in writing called the CITY'S attention to such deviations at the time of submission and the CITY has given written approval to the specific deviations, nor shall any review by the CITY relieve the CONTRACTOR from responsibility for errors or omissions in the Shop Drawings.

## **SECTION 16 - TESTS AND INSPECTIONS**

- 16.1 If the Contract Documents, laws, ordinances, rules, regulations or orders of any public authority having jurisdiction require any Work to specifically be inspected, tested, or approved by someone other than the CONTRACTOR, the CONTRACTOR will give the CITY timely notice of readiness therefore. The

CONTRACTOR will furnish the CITY the required certificates of inspection, testing or approval. All such tests will be in accordance with the methods prescribed by the American Society for Testing and Materials or such other applicable organization as may be required by law or the Contract Documents. If any such Work required so to be inspected, tested or approved is covered up without written approval or consent of the CITY, it must, if directed by the CITY, be uncovered for observation at the CONTRACTOR'S EXPENSE. The cost of all such inspections, tests and approvals shall be borne by the CONTRACTOR unless otherwise provided.

- 16.2 Any work which fails to meet the requirements of any such test, inspection or approval and any Work which meets the requirements of any such test or approval but does not meet the requirements of the Contract Documents shall be considered defective. Such defective Work may be rejected, corrected or accepted as provided for in Section 25.
- 16.3 Neither observations by the CITY nor inspections, tests, or approvals by persons other than the CONTRACTOR shall relieve the CONTRACTOR from his obligations to perform the Work in accordance with the requirements of the Contract Documents.

#### **SECTION 17 - CONTRACTOR'S SUPERVISION AND SUPERINTENDENCE**

- 17.1 The CONTRACTOR shall supervise and direct the Work efficiently and with his best skill and attention. He will be solely responsible for the means, methods, techniques, sequences and procedures of construction. Before undertaking the Work he will carefully study and compare the Contract Documents. He will at once report in writing to the CITY any conflict, error or discrepancy which he may discover. The CONTRACTOR will be responsible to see that the finished Work complies accurately with the Contract Documents.
- 17.2 The CONTRACTOR will keep on the Work at all times during its progress a resident superintendent satisfactory to the CITY. The superintendent shall not be replaced without the consent of the CITY except under extraordinary circumstances. The superintendent will be the CONTRACTOR'S representative at the site and shall have authority to act on behalf of the CONTRACTOR. All communications given to the superintendent shall be as binding as if given to the CONTRACTOR.
- 17.3 The CONTRACTOR shall provide competent, suitably qualified personnel to survey and lay out the work and to perform construction as required by the Contract Documents. He will, at all times, maintain discipline and order among his employees and workmanlike conditions at the site.
- 17.4 The CITY will not be responsible for the acts or omissions of the CONTRACTOR, or any Subcontractors, or any of his or their agents or employees, or any other persons performing any of the Work.

#### **SECTION 18 - SAFETY AND PROTECTION: EMERGENCIES**

- 18.1 The CONTRACTOR shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work. This is to include all signing, barricades and safety devices related to this Project at the CONTRACTOR'S expense. He will take all necessary precautions for the safety of, and will provide the necessary protection to prevent damage, injury or loss to:
  - a) All employees on the Work and other person(s) who may be affected thereby,
  - b) All the Work and all materials or equipment to be incorporated therein, whether in storage on or off the site, and
  - c) Other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, and utilities not designated for removal, relocation or replacement in the

course of construction.

- 18.2 The CONTRACTOR shall comply with all applicable laws, ordinances, rules, regulations and orders of any public body having jurisdiction for the safety of persons or property or to protect them from damage, injury, or loss. The CONTRACTOR will erect and maintain, at his own expense, as required by the conditions and progress of the Work, all necessary safeguards for safety and protection, including posting danger signs and other warnings against hazards and promulgating safety regulations. He will notify owners of adjacent utilities when prosecution of the work may affect them. When the use of storage of explosives or other hazardous materials is necessary for the prosecution of the Work, the CONTRACTOR will exercise the utmost care and will carry on such activities under the supervision of properly qualified personnel. All damage, injury or loss to any property referred to in Section 18 caused, directly or indirectly, in whole or in part, by the CONTRACTOR, any Subcontractor of anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, will be remedied by the CONTRACTOR.
- 18.3 The CONTRACTOR will designate a responsible member of his organization at the site whose duty shall be the prevention of accidents. This person shall be the CONTRACTOR'S superintendent unless otherwise designated in writing by the CONTRACTOR to the CITY.
- 18.4 In emergencies affecting the safety of persons or the Work or property at the site or adjacent thereto, the CONTRACTOR, without special instruction or authorization from the CITY is obligated to act, at his discretion to prevent threatened damage, injury or loss. If at any time, the CONTRACTOR or his authorized representative cannot be contacted to correct an emergency or deficiency affecting the safety of persons or the Work or property at the site or adjacent thereto, the CITY shall correct the emergency or deficiency and charge the costs incurred thereto against the CONTRACTOR. He will give the CITY prompt written notice of any significant changes in the Work or deviations from the Contract Documents caused thereby, and a Change Order shall thereupon be issued covering the changes and deviations involved. If the CONTRACTOR believes that additional work done by him in an emergency which arose from causes beyond his control entitles him to an increase in the Contract Price or an extension of the Contract Time, he may make a claim therefore as provided in Sections 21 and 23.

#### **SECTION 19 - ACCESS TO THE WORK: UNCOVERING FINISHED WORK**

- 19.1 The CITY and his representatives will at all times have access to the Work. The CONTRACTOR will provide proper facilities for such access and observations of the Work and also for any inspection, or testing thereof by others.
- 19.2 If any Work is covered contrary to the request of the CITY, it must, if requested by the CITY, be uncovered for its observation and replaced at the CONTRACTOR'S expense.
- 19.3 If any Work has been covered which the CITY has not specifically requested to observe prior to its being covered, or if the CITY considers it necessary or advisable that covered work be inspected or tested by others, the CONTRACTOR, at the CITY'S request, will uncover, expose or otherwise make available for observation, inspection or testing as the CITY may require, that portion of the Work in question, furnishing all necessary labor, material and equipment. If it is found that such Work is defective or does not meet the requirements of the Contract Documents, the CONTRACTOR will bear all the expenses of such uncovering, exposure, observation, inspection and testing and of satisfactory reconstruction, including compensation for additional professional services, and an appropriate Change Order shall be issued deducting all such costs from the Contract Price. If, however, such work is found to be non-defective and

meet the requirements of the Contract Documents, the CONTRACTOR will be allowed an increase in the Contract Price or extension of the Contract Time directly attributable to such uncovering, exposure, observation, inspection and testing if he makes a claim therefore as provided in Sections 21 and 23.

## **SECTION 20 - CHANGES IN THE WORK**

- 20.1 Without invalidating the Agreement, the CITY may, at any time or from time to time, order additions, deletions or revisions in the Work; these will be authorized by Change Orders. Upon receipt of a Change Order, the CONTRACTOR will proceed with the Work involved. All such work shall be executed under the applicable conditions of the Contract Documents. If any Change Order causes an increase or decrease in the Contract Price or an extension or shortening of the Contract Time, and equitable adjustment will be made as provided in Sections 21 or 23. The CITY reserves the right to decrease the contract quantities up to twenty five percent (25%) without penalty. The CITY may authorize minor changes or alterations in the Work not involving extra cost and not inconsistent with the overall intent of the Contract Documents. These may be accomplished by a Field Order. If the CONTRACTOR believes that any minor change or alteration authorized by the CITY entitles him to an increase in the Contract Price, he may make a claim therefore as provided in Section 21.
- 20.2 Additional work performed by the CONTRACTOR without authorization of a Change Order will not entitle him to an increase in the Contract Price or an extension of the Contract Time, except in the case of an emergency as provided in Section 18 and except as provided in Sections 16, 19, and 20.
- 20.3 The CITY reserves final approval authority on any Change Order prepared covering changes in the Work to be performed as provided in Section 11 and Work performed in an emergency as provided for in Section 18 and any other claim of the CONTRACTOR for a change in the Contract Time or the Contract Price.
- 20.4 It is the CONTRACTOR'S responsibility to notify his surety of any changes affecting the general scope of the Work or change in the Contract Price and the amount of the applicable Bonds shall be adjusted accordingly. The CONTRACTOR will furnish proof of such adjustment to the CITY.

## **SECTION 21 - DISPUTED CLAIMS FOR EXTRA COMPENSATION**

- 21.1 Any and all claims for extra compensation, whether on behalf of the CONTRACTOR or SUBCONTRACTOR, shall be signed and made directly by the CONTRACTOR. Failure of the CONTRACTOR to file a claim within the following time frames and according to both the CITY's written claim procedures in effect at the time that the CONTRACTOR files the claim and the following process shall constitute waiver of the claim regardless of whether it can be proven that the CITY was prejudiced. When the CONTRACTOR claims extra compensation, which is disputed by the ENGINEER, the following process applies:
- 1) Notice of Claim. All notices of intent to file a claim for extra compensation shall be signed by the CONTRACTOR. If the CONTRACTOR intends to seek extra compensation for any reason not specifically covered elsewhere in the contract, the time requirements for notification shall be as follows:
    1. The CONTRACTOR shall notify the ENGINEER in writing before beginning the work or upon or encountering a circumstance on which the CONTRACTOR intends to base a claim.
    2. The CONTRACTOR shall notify the ENGINEER in writing within two business days after the commencement of a delay, for which the CONTRACTOR intends to seek compensation. Failure of the CONTRACTOR to give written notification will constitute a

waiver of the claim for extra compensation except to the extent that claims are both substantiated by records created by the CITY as to liability and amount, and are for extra costs that were unforeseeable. The determination of extra compensation made by the CITY'S claims process, where the CONTRACTOR has failed to give proper written notice of its claim for extra compensation as provided herein or has failed to afford the ENGINEER proper information for keeping strict account of actual costs, shall be final and binding on the CONTRACTOR.

Neither the refusal of the CONTRACTOR to sign a written Contract Modification or Work Order, nor the CONTRACTOR'S signing a Contract Modification or Work Order under protest, shall constitute the notice required.

- 2) Keeping Records. If a CONTRACTOR files a notice of intent to file a claim, the CONTRACTOR shall keep accurate records of all costs of the work or delay and shall afford the ENGINEER all needed information for keeping costs of the work or delay that is the subject matter of the claim. The CONTRACTOR and ENGINEER shall compare records and bring them into agreement at the end of each day.
- 3) Validity of Claim. The validity of a claim shall not be established either by the filing of notice of intent to file a claim by a CONTRACTOR or the keeping of the cost records by the ENGINEER.
- 4) Timing for Filing of Claim. In addition to filing a timely notice of intent to file a claim, the CONTRACTOR shall file with the ENGINEER every claim for extra compensation within the following time frames (whichever comes first):
  1. No later than 90 days after the work involved in the claim is completed, or the delay, loss of efficiency, loss of productivity, or similar event is terminated; or
  2. No later than 60 days after the contract work is completed.
- 5) No extension of arbitration demand time. The time allowed for filing a claim shall not extend the time allowed for requesting arbitration of a dispute.
- 6) Content of the Claim. The CONTRACTOR'S claim shall include:
  1. All facts which gave rise to the claim;
  2. A copy of the specific provisions of the contract which support the claim; and
  3. When practical, the dollar amount of the claim with an explanation of how the amount was calculated.

The ENGINEER will review timely filed claims pursuant to the CITY'S written claim procedures in effect at the time the claims are filed.

## **SECTION 22 - CHANGE OF CONTRACT PRICE**

- 22.1 The Contract Price constitutes the total compensation payable to the CONTRACTOR for performing the Work. All duties, responsibilities and obligations assigned to or undertaken by the CONTRACTOR shall be at his expense without change in the Contract Price.
- 22.2 The Contract Price may only be changed by Change Order. If the CONTRACTOR shall claim

compensation or extension of time for any losses, damages or delays sustained by reason of the acts of the CITY, or its agents or other causes he shall make a written statement of the nature of the loss, damage or delay sustained to the CITY under Section 21 of the General Conditions. At the time of delivery and as a part of the Application for Payment as hereinafter provided, the CONTRACTOR shall file with the CITY an itemized statement of the details and amount of loss, damage, or delay and unless these statements shall be made as thus required, the CONTRACTOR'S claim for compensation or extension of time shall be forfeited and invalidated, and he shall not be entitled to payment or extension of time on account of any such loss, damage, or delay. Any change resulting from any such claim shall be incorporated in a Change Order.

- 22.3 The value of any Work covered by a Change Order or of any claim for an increase or decrease in the Contract Price shall be determined in one of the following ways:
- a) Where the Work involved is covered by unit prices contained in the Contract Documents, by application of unit prices to the quantities of the items involved.
  - b) By mutual acceptance of a lump sum.
  - c) By cost and a mutually acceptable fixed amount for overhead and profit.
  - d) If none of the above methods is agreed upon, the value shall be determined on the basis of costs and a percentage for overhead and profit. Costs shall include only labor (payroll, payroll taxes, fringe benefits, workmen's compensation, etc.), materials, equipment and other incidentals directly related to the Work involved. The maximum percentage which shall be allowed for CONTRACTOR'S combined overhead and profit, shall be as follows:
  - e) For all such Work done by his own organization, the CONTRACTOR may add up to ten percent (10%) of his actual net increase in cost, and
  - f) For all such Work done by Subcontractors, each Subcontractor may add up to ten percent (10%) of his actual net increase in costs for combined overhead and profit and the CONTRACTOR may add up to five percent (5%) of the Subcontractor's total for his combined overhead and profit; provided that no overhead or profit shall be allowed on costs incurred in connection with premiums for public liability insurance or other special insurance directly related to such Work.
- 22.4 In such case and also under paragraph 21c the CONTRACTOR will submit in form prescribed by the CITY an itemized cost breakdown together with supporting data.
- 22.5 The amount of credit to be allowed by the CONTRACTOR to the CITY for any such change which results in a net decrease in cost will be the amount of the actual net decrease as determined by the CITY. When both additions and credits are involved in any one change, the combined overhead and profit shall be figured on the basis of the net increase, if any. The CITY reserves the right to decrease the contract quantities up to ten percent (10%) without penalty.

## **SECTION 23 - CASH ALLOWANCES**

- 23.1 The CONTRACTOR shall include in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be done by such suppliers or Subcontractors and for such sums as the CITY may approve. Upon final payment the Contract Price shall be increased or decreased, as required and an appropriate Change Order issued for changes in the Contract Price to cover the difference in cost between the work provided in the allowance and the actual work performed. The CONTRACTOR agrees that the original Contract Price includes such sums as he deems proper for overhead and profit on account of cash allowances. No demand for additional overhead or profit in

connection therewith will be allowed.

#### **SECTION 24 - CHANGE OF THE CONTRACT TIME**

- 24.1 The Contract Time may only be changed by a Change Order. If the CONTRACTOR is entitled by the Contract Documents to make a claim for an extension in the Contract Time, his claim shall be in writing delivered to the CITY within ten (10) days of the occurrence of the event giving rise to the claim. All claims for adjustment in the Contract Time shall be determined by the CITY. Any change in the Contract Time resulting from any such claim shall be incorporated in a Change Order.
- 24.2 The Contract Time will be extended in an amount equal to time lost due to delays beyond the control of the CONTRACTOR if he makes a claim therefore as provided in Section 23. Such delays shall include, but not be restricted to acts of neglect by any separate contractor employed by the CITY, fires, floods, labor disputes, epidemics, abnormal weather conditions, or acts of God.
- 24.3 All time limits stated in the Contract Documents are of the essence of the Agreement. The provisions of this Section 23 shall not exclude recovery for damages (including compensation for additional professional services) for delay by either party.

#### **SECTION 25 - NEGLECTED WORK**

- 25.1 If the CONTRACTOR should neglect to prosecute the Work in accordance with the Contract Documents, including any requirements of the progress schedule, the CITY after three (3) days' written notice to the CONTRACTOR may, without prejudice to any other remedy he may have, make good such deficiencies and the cost thereof (including compensation for additional professional services) shall be charged against the CONTRACTOR, in which case a Change Order shall be issued incorporating the necessary revisions in the Contract Documents including an appropriate reduction in the Contract Price. If the payments then or thereafter due the CONTRACTOR are not sufficient to cover such amount, the CONTRACTOR will pay the difference to the CITY.

#### **SECTION 26 - WARRANTY AND GUARANTEE: CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK**

- 26.1 The CONTRACTOR warrants and guarantees to the CITY that all materials and equipment will be new unless otherwise specified and that all work will be of good quality and free from faults or defects and in accordance with the requirements of the Contract Documents and of any inspections, tests or approvals referred to in Section 16. All unsatisfactory Work, all faulty or defective Work and all Work not conforming to the requirements of the Contract Documents or of such inspections, tests or approvals shall be considered defective. Prompt notice of all defects shall be given to the CONTRACTOR. All defective Work, whether or not in place, may be rejected.
- 26.2 If required by the CITY prior to approval of final payment, the CONTRACTOR will promptly, without cost to the CITY, either correct any defective Work, whether or not fabricated, installed or completed, or, if the Work has been rejected by the CITY, remove it from the site and replace it with non-defective Work. If the CONTRACTOR does not correct such defective Work or remove and replace such rejected Work within a reasonable time, all as required by written notice from the CITY, the CITY may have the deficiency corrected or the rejected Work removed and replaced. All direct or indirect costs of such correction or removal and replacement, including compensation for additional professional services shall be paid by the CONTRACTOR, and an appropriate Change Order shall be issued deducting all such costs from the Contract Price.
- 26.3 The CONTRACTOR will also bear the expenses of making good all work of others destroyed or damaged

by his correction, removal or replacement of his defective Work.

- 26.4 If, after the approval of final payment and prior to the expiration of one year after the date of Substantial Completion or such longer period of time as may be prescribed by law or by the terms of any applicable special guarantee required by the Contract Documents, any Work is found to be defective the CONTRACTOR will, promptly without cost to the CITY and in accordance with the CITY'S written instructions, either correct such defective work, or, if it has been rejected by the CITY, remove it from the site and replace it with non-defective Work. If the CONTRACTOR does not promptly comply with the terms of such instructions, the CITY may have the defective Work corrected or the rejected Work removed and replaced, and all direct and indirect costs of such removal and replacement, including compensation for additional professional services, will be paid by the CONTRACTOR. If, instead of requiring correction or removal and replacement of defective Work, the CITY prefers to accept it, it may do so. In such case, if acceptance occurs prior to approval of final payment, a Change Order shall be issued incorporating the necessary revisions in the Contract Documents, including appropriate reduction in the Contract Price; or, if the acceptance occurs after approval in the Contract Price; or, if the acceptance occurs after approval of final payment, an appropriate amount shall be paid by the CONTRACTOR.

## **SECTION 27 - APPLICATIONS FOR PROGRESS PAYMENTS**

- 27.1 At least ten (10) days prior to submitting the first Application for Payment, the CONTRACTOR will submit a schedule of values of the Work including quantities and unit prices, aggregating the Contract Price. This schedule shall be satisfactory in form and substance to the CITY and shall subdivide the Work into component parts in sufficient detail to serve as the basis for progress payments during construction. Upon approval of the schedule of values by the CITY, it shall be incorporated into the form of Application for Payment furnished by the CITY.
- 27.2 At least ten (10) days before each progress payment will be requested (but not more often than once a month), the CONTRACTOR will submit to the CITY for review the Application for Payment and Certificate of the CONTRACTOR filled out and signed by the CONTRACTOR covering the Work performed as of the date of the Application and supported by any such data as the CITY may reasonably require. Ten percent (10%) of all Applications for Payment will be retained until final completion and acceptance of the Work. If Payment is requested on the basis of material and equipment not incorporated in the Work but delivered and suitably stored at the site or at the locations agreed to in writing, the Application for Payment shall also be accompanied by such supporting data satisfactory to the CITY as will establish the CITY'S title to the materials and equipment and protect its interest therein including applicable insurance.
- 27.3 The CONTRACTOR and CITY acknowledge that 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 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

- 27.4 The CONTRACTOR warrants and guarantees that title to all Work, materials and equipment covered by an Application for Payment, whether incorporated in the Project or not, will have passed to the CITY prior to the making of the Application for Payment, free and clear of all liens, claims, security interests and encumbrances and that no Work, materials or equipment covered by an Application for Payment will have been acquired by the CONTRACTOR or by any other person performing the Work at the site or furnishing materials and equipment for the Project, subject to an agreement under which an interest therein or encumbrance thereon is retained by the seller or otherwise imposed by the CONTRACTOR or such other person.
- 27.5 The CITY will, within ten (10) days after receipt of each Application for Payment, either indicate in writing its recommendation for payment or return the Application to the CONTRACTOR indicating in writing its reasons for refusing to recommend payment. In the latter case, the CONTRACTOR may make the necessary corrections and resubmit the Application. The CITY will, within thirty (30) days of presentation to it of a CITY recommended Application for Payment, pay the CONTRACTOR the amount recommended.

## **SECTION 28 - RECOMMENDATION OF PAYMENTS**

- 28.1 The CITY'S recommendation of any payment requested in an Application for Payment shall be based on the CITY'S on-site observations of the Work in Progress with an experienced and qualified design department and on its review of the Application for Payment and the supporting data, that the Work has progressed to the point indicated; that, to the best of its knowledge, information and belief, the equality of the Work is in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning Project upon Substantial Completion, to the results of any subsequent tests called for in the Contract Documents and any qualifications stated in its recommendation); and that the CONTRACTOR is entitled to payment of the amount approved. However, by recommending any such payment the CITY shall not thereby be deemed to have represented that it made exhaustive or continuous on-site inspections to check the quality or the quantity of the Work, or that it has reviewed the means, methods, techniques, sequences, and procedures of construction or that it has made any examination to ascertain how or for what purpose the CONTRACTOR has used the moneys paid or to be paid to him on account of the Contract Price.
- 28.2 The CITY'S recommendation of final payment shall constitute that the conditions precedent to the CONTRACTOR'S being entitled to final payment as set forth in Section 30 have been fulfilled.

- 28.3 The CITY may refuse the whole or any part of any payment, or, because of subsequently discovered evidence or the results of subsequent inspections or tests, nullify any such payment previously recommended, to such extent as may be necessary in its opinion to protect the CITY from loss because:
- a) The Work is defective,
  - b) Claims have been filed or there is reasonable evidence indicating the probably filing thereof,
  - c) The Contract Price has been reduced because of Modifications.
  - d) The CITY has been required to correct defective Work or complete the Work in accordance with Section 24, or
  - e) Unsatisfactory prosecution of the Work, including failure to clean up as required by Section 37.

#### **SECTION 29 - SUBSTANTIAL COMPLETION**

- 29.1 Prior to final payment, the CONTRACTOR may, in writing to the CITY, certify that the entire Project is substantially complete and request that the CITY issue a Certificate of Substantial Completion. Within a reasonable time thereafter, the CITY and CONTRACTOR will make an inspection of the Project to determine the status of completion. If the CITY does not consider the Project substantially complete, it will notify the CONTRACTOR in writing, giving its reasons therefore. If the CITY considers the Project substantially complete, it will prepare a tentative Certificate of Substantial Completion which shall fix the date of Substantial Completion and the responsibilities between the CITY and the CONTRACTOR for maintenance, heat and utilities. There shall be attached to the certificate a tentative list (PUNCH LIST) of items to be completed or corrected before final payment, and the certificate shall fix the time within which such items shall be completed or corrected, said time to be within the Contract Time.
- 29.2 The CITY shall have the right to exclude the CONTRACTOR from the Project after the date of Substantial Completion, but the CITY will allow the CONTRACTOR reasonable access to complete or correct items on the tentative list.

#### **SECTION 30 - PARTIAL UTILIZATION**

- 30.1 Prior to final payment, the CITY may request the CONTRACTOR in writing to permit it to use a specified part of the Project which it believes it may use without significant interference with construction of the other parts of the Project. If the CONTRACTOR agrees, he will certify to the CITY that said part of the Project is substantially complete and request the CITY to issue a certificate of Substantial Completion for that part of the Project. Within a reasonable time thereafter the CITY and the CONTRACTOR will make an inspection of that part of the Project to determine its status of completion. If the CITY does not consider that it is substantially complete, it will notify the CONTRACTOR in writing giving its reasons therefore. If the CITY considers that part of the Project to be substantially complete, it will execute and deliver to the CONTRACTOR a certificate to that effect, fixing the date of Substantial Completion as to that part of the Project, attaching thereto a tentative list (PUNCH LIST) of items to be completed or corrected before final payment and fixing the responsibility between the CITY and CONTRACTOR for maintenance, heat and utilities as to that part of the Project.
- 30.2 The CITY shall have the right to exclude the CONTRACTOR from any part of the Project which the CITY has so certified to be substantially complete, but the CITY will allow the CONTRACTOR reasonable access to complete or correct items on the tentative list.

#### **SECTION 31 - FINAL PAYMENT**

- 31.1 Upon written notice from the CONTRACTOR that the project is complete, the CITY will make a final inspection with the CONTRACTOR and will notify the CONTRACTOR in writing of any particulars in which

this inspection reveals that the Work is defective. The CONTRACTOR shall immediately make such corrections as are necessary to remedy such defects.

- 31.2 After the CONTRACTOR has completed any such corrections to the satisfaction of the CITY and delivered all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection and other documents - all as required by the Contract Documents, he may make application for final payment following the procedure for progress payments. The final Application for Payment shall be accompanied by such supporting data as the CITY may require, together with complete and legally effective releases or waivers (satisfactory to the CITY) of all claims arising out of the Contract Documents and the labor and services performed and the material and equipment furnished thereunder. In lieu thereof and as approved by the CITY, the CONTRACTOR may furnish receipts or releases in full; an affidavit of the CONTRACTOR that the releases and receipts include all labor, services, material and equipment for which a claim could be filed, and that all payrolls, material and equipment bills, and other indebtedness connected with the Work for which the CITY or its property might in any way be responsible, have been paid or otherwise satisfied; and consent of the surety, if any, to final payment. If the Subcontractor or supplier fails to furnish a release or receipt in full, the CONTRACTOR may furnish a bond satisfactory to the CITY to indemnify it against claims.
- 31.3 If, on the basis of its observation and review of the Work during construction, its final inspection and its review of the final Application for Payment - all as required by the Contract Documents, the CITY is satisfied that the Work has been completed and the CONTRACTOR has fulfilled all of his obligations under the Contract Documents, it will, within ten (10) days after receipt of the final Application for Payment, indicate in writing its recommendation of payment. Otherwise, it will return the Application to the CONTRACTOR, indicating in writing its reasons for refusing to recommend final payment, in which case the CONTRACTOR will make the necessary corrections and resubmit the Application. The CITY will, within thirty (30) days of presentation to it of a CITY recommended final Application for Payment, pay the CONTRACTOR the amount recommended.
- 31.4 If after Substantial Completion of the Work final completion thereof is materially delayed through no fault of the CONTRACTOR, and the CITY so confirms, the CITY shall, and without terminating the Agreement, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance for work not fully completed or corrected is less than the retainage stipulated, and if Bonds have been furnished as required in Section 33, the written consent of the surety to the payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by the CONTRACTOR to the CITY prior to certification of such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of claims.

## **SECTION 32 - WAIVERS OF CLAIMS AND CONTINUING OBLIGATIONS**

- 32.1 The CONTRACTOR'S obligations to perform the Work and complete the Project in accordance with the Contract Documents shall be an absolute. Neither recommendation of any progress or final payment by the CITY, nor the issuance of a certificate of Substantial Completion, nor any payment by the CITY to the CONTRACTOR under the Contract Documents nor any use or occupancy of the Project or any part thereof by the CITY, nor any act of acceptance by the CITY nor any failure to do so, nor any correction of faulty or defective work by the CITY shall constitute an acceptance of Work not in accordance with the Contract Documents.

- 32.2 The making and acceptance of final payment shall constitute:
- a) A waiver of all claims by the CITY against the CONTRACTOR other than those arising from unsettled claims for labor or materials furnished in the Project, for faulty or defective work appearing after Final Payment or from failure to comply with the requirements of the Contract Documents or the terms of any special guarantees specified therein. Neither Final Payment or partial or entire occupancy of the premises by the CITY shall relieve the CONTRACTOR of negligence or faulty materials or workmanship and upon written notice he shall repair any defects or deficiencies due thereto and pay for any damages due to other work resulting therefrom which shall appear within one year after Substantial Completion and acceptance.
  - b) A waiver of all claims by the CONTRACTOR against the CITY other than those previously made in writing and still unsettled.

### **SECTION 33 - INDEMNIFICATION**

- 33.1 The CONTRACTOR shall indemnify and hold harmless the CITY and its agents and employees from and against all claims, damages, losses and expenses including attorney's fees arising out of or resulting from the performance of the Work, provided that any such claim, damage, loss or expense (a) is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself) including the loss of use resulting therefrom and (b) is caused in whole or in part by any negligent act or omission of the CONTRACTOR, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder.
- 33.2 If any and all claims against the CITY or any of its agents or employees by any employee of the CONTRACTOR, and Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, the indemnification obligation under this Section 32 shall not be limited in any way by any limitation in the amount or type of damages, compensation or benefits payable by or for the CONTRACTOR or any Subcontractor under workman's compensation acts, disability benefit acts or other employee benefit acts.

### **SECTION 34 - CONTRACT BONDS**

- 34.1 The CONTRACTOR will furnish performance and payment Bonds as security for the faithful performance and payment of all his obligations under the Contract Documents. These Bonds shall be in amounts at least equal to the Contract Price and in such form and with such sureties as are acceptable to the CITY. Prior to execution of the Contract Documents the CITY may require the CONTRACTOR to furnish such other Bonds, in such form and with such sureties as it may require. If such Bonds are required by written instructions given prior to opening of Bids, the premiums shall be paid by the CONTRACTOR; if subsequent thereto, they shall be paid by the CITY. Bonds required as specified in the Information For Bidders will not be paid for as a contract item.

### **SECTION 35 - CONTRACTOR'S LIABILITY INSURANCE**

- 35.1 The CONTRACTOR shall not commence work under this Contract until he has obtained all the insurance required under this Section and such insurance has been approved by the CITY, nor shall the CONTRACTOR allow any Subcontractor to commence work on his subcontract until all similar insurance required of the Subcontractor has been so obtained and approved.
- 35.2 The CONTRACTOR shall procure and shall maintain during the life of this Contract Workmen's compensation Insurance for all of his employees to be engaged in Work on the Project under this Contract.

In case such work is sublet, the CONTRACTOR shall require the Subcontractor similarly to provide insurance for all of the latter's employees to be engaged in such work unless such employees are covered by the protection afforded by the CONTRACTOR'S Workman's Compensation Insurance. In case any class of employees engaged in hazardous work on the Project under this Contract is not protected under the Workmen's Compensation statute, the CONTRACTOR shall provide and shall cause each Subcontractor to provide adequate insurance for the protection of such of his employees not otherwise protected.

- 35.3 The CONTRACTOR shall procure and shall maintain during the life of this Contract, Insurance coverages as specified in Section I-1 of the Bid Documents.
- 35.4 The CONTRACTOR shall either (a) require each of his Subcontractors to procure and to maintain during the life of his Subcontract, Subcontractor's Public Liability Property Damage and Vehicle Liability Insurance of the type and amount specified in the above paragraphs of this Section hereof or, (b) insure the activities of his Subcontractors in his policy, specified in the above paragraphs of this Section hereof.
- 35.5 The insurance required under the above paragraphs of this section hereof shall provide adequate protection for the CITY against damage claims which may arise from operations under this Contract, whether such operations be by the insured or by anyone directly or indirectly employed by him. This paragraph is construed to require the procurement of CONTRACTOR'S protective insurance (or Contingent Public Liability and Property Damage Policies) by a CONTRACTOR, whose Subcontractor has employees working on the Project, unless the General Public Liability and Property Damage Policy (or rider attached thereto) of the CONTRACTOR provides adequate protection against claims arising from operations by anyone indirectly employed by him.

#### **SECTION 36 - CITY'S LIABILITY COVERAGE**

- 36.1 The CONTRACTOR shall procure, as a rider on his liability insurances, additional coverage to protect the CITY against claims which may arise from operations under the Contract Documents.

#### **SECTION 37 - PROPERTY INSURANCE**

- 37.1 Unless otherwise provided, the CONTRACTOR will purchase and maintain property insurance upon the Project to the full insurable value thereof. The insurance shall include the interests of the CITY, the CONTRACTOR and Subcontractors, in the Work and shall insure against the perils of Fire, Extended Coverage, Vandalism and Malicious Mischief.
- 37.2 The CITY upon notification from the CONTRACTOR that such facilities are operative, purchase and maintain such steam boiler and machinery insurance as may be required by the Contract Documents or by law. This insurance shall include the interest of the CITY, the CONTRACTOR and Subcontractors in the Work.
- 37.3 Any insured loss under the policies of insurance required by Section 36, is to be adjusted with the CITY and made payable to the CITY as trustee for the insureds, as their interests may appear, subject to the requirements of any applicable mortgage clauses.
- 37.4 The CONTRACTOR will file a copy of all policies with the CITY before an exposure to loss may occur.

- 37.5 If the CITY requests in writing that other special insurance be included in the property insurance policy, the CONTRACTOR will, if possible, include such insurance, and the cost thereof shall be charged to the CITY by appropriate Change Order.
- 37.6 The CITY and CONTRACTOR waive all rights against each other for damages caused by fire or other perils to the extent covered by insurance provided under this Section 36, except such rights as they may have to the proceeds of such insurance held by the CITY as trustee. The CONTRACTOR shall require similar waivers by Subcontractors in accordance with Section 7.
- 37.7 The CITY as trustee will have power to adjust and settle any loss with the insurers.

#### **SECTION 38 - CLEANING UP**

- 38.1 The CONTRACTOR will keep the premises free from accumulations of waste materials, rubbish and other debris resulting from the Work and at the completion of the Work he will remove all his materials, rubbish and debris from and about the premises as well as all tools, construction equipment and machinery, and surplus materials, and will leave the site clean and ready for occupancy by the CITY. The CONTRACTOR will restore to their original condition those portions of the site not designated for alteration by the Contract Documents.

#### **SECTION 39 - CITY'S RIGHT TO STOP OR SUSPEND WORK**

- 39.1 If the Work is defective, or the CONTRACTOR fails to supply sufficient skilled workmen, or suitable materials or equipment, or if the CONTRACTOR fails to make prompt payments to the Subcontractors, or for labor, materials or equipment, the CITY may order the CONTRACTOR to stop the Work, or any portion thereof, until the cause for such order has been eliminated.
- 39.2 The CITY may, at any time and without cause, suspend the work or any portion thereof for a period of not more than ninety (90) days by notice in writing to the CONTRACTOR which shall fix the date on which Work shall be resumed. The CONTRACTOR will resume the Work on the date so fixed. The CONTRACTOR may be allowed an increase in the Contract Price or an extension of the Contract Time directly attributable to any suspension making a claim therefore as provided in Section 21 and 23.

#### **SECTION 40 - CITY'S RIGHT TO TERMINATE**

- 40.1 If the CONTRACTOR is adjudged a bankrupt or insolvent, or if he makes a general assignment for the benefit of his creditors, or if a trustee or receiver is appointed for the CONTRACTOR or for any of his property, or if he files a petition to take advantage of any debtors' act, or to reorganize under the bankruptcy or similar laws, or if he repeatedly fails to supply sufficient skilled workmen or suitable materials or equipment, or if he repeatedly fails to make prompt payments to Subcontractors, or for labor, materials, or equipment or if he disregards laws, ordinances, rules, regulations or orders of any public body having jurisdiction, or if he disregards the authority of the CITY, or if he otherwise violates any provision of the Contract Documents, then the CITY may, without prejudice to any other right or remedy and after giving the CONTRACTOR and his surety seven (7) days' written notice, terminate the services of the CONTRACTOR and take possession of the Project and of all materials, equipment, tools, construction equipment and machinery thereon owned by the CONTRACTOR, and finish the Work by whatever method it may deem expedient. In such case the CONTRACTOR shall not be entitled to receive any further payment until the Work is finished. If the unpaid balance of the Contract Price exceeds the direct and indirect costs of completing the Project, including compensation for additional professional services, such excess shall be paid to the CONTRACTOR. If such costs exceed such unpaid balance, the CONTRACTOR will pay the difference to the CITY. Such costs incurred by the CITY will be determined

and incorporated into a Change Order.

- 40.2 Where the CONTRACTOR'S services have been so terminated by the CITY, said termination shall not affect any rights of the CITY against the CONTRACTOR then existing or which may thereafter accrue. Any retention or payment of moneys by the CITY due the CONTRACTOR will not release the CONTRACTOR from liability.
- 40.3 Upon seven (7) days' written notice to the CONTRACTOR the CITY may, without cause and without prejudice to any other right or remedy, elect to abandon the Project and terminate the Agreement. In such case, the CONTRACTOR shall be paid for all work executed and any expense sustained plus a reasonable profit.

#### **SECTION 41 - CONTRACTOR'S RIGHT TO STOP WORK OR TERMINATE**

- 41.1 If, through no act or fault of the CONTRACTOR, the Work is suspended for a period of more than ninety (90) days by the CITY or under an order of court or other public authority, or the CITY fails to pay the CONTRACTOR any sum approved or awarded by arbitrators within ninety (90) days of its approval and presentation, then the CONTRACTOR may, upon seven (7) days' written notice to the CITY, terminate the Agreement and recover from the CITY payment for all Work executed and any expense sustained plus a reasonable profit.

#### **SECTION 42 - (NOT APPLICABLE TO THIS CONTRACT)**

#### **SECTION 43 - ARBITRATION**

- 43.1 All claims, disputes and other matters in question arising out of or relating to this Agreement except claims which have been waived by the making or acceptance of final payment as provided in Section 31 shall be decided by arbitration in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association. Any award rendered hereunder shall be final and judgment may be entered based upon said award in accordance with the Michigan Statutes and General Court Rules pertaining thereto. Any award rendered hereunder may be vacated solely upon the grounds specified in said statute and court rules and in addition on the basis that the award is contrary to law.
- 43.2 Notice of the request for arbitration shall be filed in writing with the CITY (and any other party to the Agreement) and with the American Arbitration Association. The request for arbitration shall be made within the thirty (30) day period specified in Paragraph 14.3 where applicable, and in all other cases within a reasonable time after the claim, dispute or other matter in question has arisen, and in no event shall it be made after six (6) months from that date. The location for any such mediation or arbitration shall be the City of Sault Ste. Marie.
- 43.3 CONTRACTOR shall continue to perform the Work and maintain the progress schedule during the pendency of any claim or dispute which may be subject to arbitration and during the pendency of any arbitration proceedings, unless otherwise agreed between the CITY and CONTRACTOR in writing, which agreement shall not extend the delay beyond the time when the arbitrator shall have an opportunity to determine whether the Work shall continue to be suspended.
- 43.4 The CITY may also include the CITY'S consultant(s) involved with the design and/or construction

engineering of the project, as a third party defendant in any mediation or arbitration process regarding any claims, disputes or other matters in question related to this project.

#### **SECTION 44 - MISCELLANEOUS**

- 44.1 Whenever any provision of the Contract Documents requires the giving of written notice it shall be deemed to have been validly given if delivered in person to the individual or to a member of the firm or to an office of the corporation for whom it is intended, or if delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to him who gives the notice.
- 44.2 The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder, and, in particular, but without limitation, the warranties, guarantees and obligations imposed upon the CONTRACTOR by Sections 25 and 32 and the rights and remedies available to the CITY thereunder, shall be in addition to and not a limitation of any otherwise imposed or available by law, by special guarantee or other provisions of the Contract Documents.
- 44.3 Should the CITY or the CONTRACTOR suffer injury or damage to its persons or property because of any error, omission or act of the other or of any of his employees or agents or others for whose acts he is legally liable, claim shall be made in writing to the other party within a reasonable time of the first observance of such injury or damage.
- 44.4 The Contract Documents shall be governed by the law of the place of the Project.
- 44.5 The CONTRACTOR shall not assign the whole or any part of this Contract or any moneys due or to become due hereunder without written consent of the CITY. In case the CONTRACTOR assigns all or any part of any moneys due or to become due under this Contract, the instrument of assignment shall contain a clause substantially to the effect that it is agreed that the right of the assignee in and to any moneys due or to become due to the CONTRACTOR shall be subject to prior liens of all persons, firms and corporations for services rendered or materials supplied for the performance of the Work called for in this Contract.

### **NOTICE OF AWARD**

To: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

PROJECT NAME: GUARD RAIL REPLACEMENT & REPAIR B-7-21

The OWNER has considered your BID dated \_\_\_\_\_ for the above referenced project. You are hereby notified that your bid has been accepted for the WORK described as guard rail replacement and repair for 5 locations for the total sum of \$XX,XXX.XX.

You are required to execute the Agreement and furnish the required CONTRACTOR'S certificates of Insurance coverage, Payment Bond, and Performance Bond in the amount specified in the contract documents within ten (10) calendar days from the date of this Notice. Three (3) unsigned copies of the Agreement, prepared for your signature, will be sent to you within 3 business days of this Notice of Award. The NOTICE TO PROCEED will not be issued until the CITY receives the required Bonds, Insurance and executed Agreement from the CONTRACTOR and until such documents are in accordance with the contract requirements and are approved by the CITY.

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

Dated this \_\_\_\_\_ day of \_\_\_\_\_, 2021

Owner: City of Sault Ste. Marie

BY: \_\_\_\_\_

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### **ACCEPTANCE OF NOTICE**

Receipt of the above NOTICE OF AWARD is hereby acknowledged

this \_\_\_\_\_ day of \_\_\_\_\_, 2021

By: \_\_\_\_\_  
(SIGNATURE)

\_\_\_\_\_  
(PRINT)

Title: \_\_\_\_\_  
(PRINT)

## **NOTICE TO PROCEED**

TO: \_\_\_\_\_ DATE: \_\_\_\_\_  
\_\_\_\_\_  
PROJECT: GUARD RAIL REPLACEMENT &  
\_\_\_\_\_  
REPAIR – B-7-21

You are hereby notified to commence WORK in accordance with the Agreement dated \_\_\_\_\_, **2021**, on or before \_\_\_\_\_, **2021**, and you are to complete the WORK in accordance with the Agreement to ensure that the project is completed by **August 31, 2021**.

You are required to return an acknowledged copy of this NOTICE TO PROCEED to the OWNER.

CITY OF SAULT STE. MARIE, MICHIGAN

Owner

\_\_\_\_\_  
BY:

---

### **ACCEPTANCE OF NOTICE**

Receipt of the above NOTICE TO PROCEED is hereby acknowledged by

\_\_\_\_\_,  
(CONTRACTORS COMPANY NAME)

this the \_\_\_\_\_ day of \_\_\_\_\_, **2021**,

BY: \_\_\_\_\_  
(SIGNATURE)

\_\_\_\_\_  
(PRINT)

TITLE: \_\_\_\_\_  
(PRINT)

**Guard rail replacement and repair for 5 locations:**

1: W. Easterday Avenue: 26 feet of W-Beam guard rail, 3 wooden posts, 1 Fleet approach end section.



2: South side of Oak Street and W. 18th Street: 64 feet of concave curved W-Beam guard rail, 2 steel posts, and 8 wooden posts. Reuse end section. North side of Oak Street and W. 18th Street: 12 feet of convex curved W-Beam guard rail reinstall Fleet end section.





3: 1914 Riverside Drive: 12 feet W-Beam guard rail. Reinstall Fleet end section.



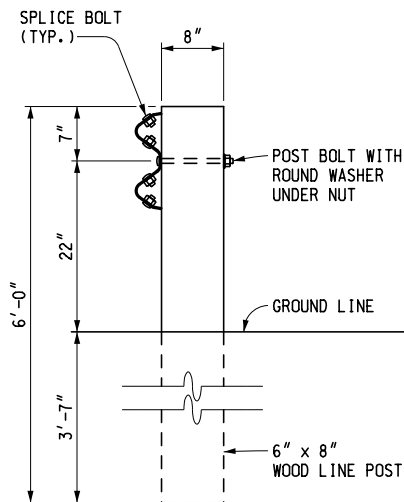
4: 2191 Seymour Street: 13 feet W-Beam guard rail, 1 post, 1 W-Beam buffer end section.



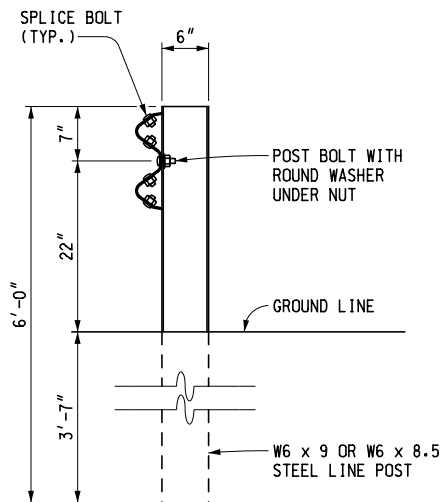
5: Marquette Street and Young Street: 16 feet W-Beam @ wood posts, 1 W-Beam buffer end section.



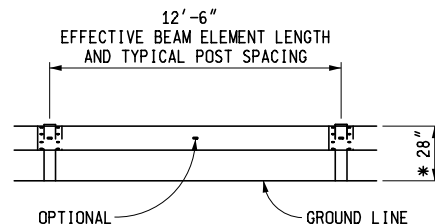
# **MDOT STANDARD PLANS**



WOOD POST



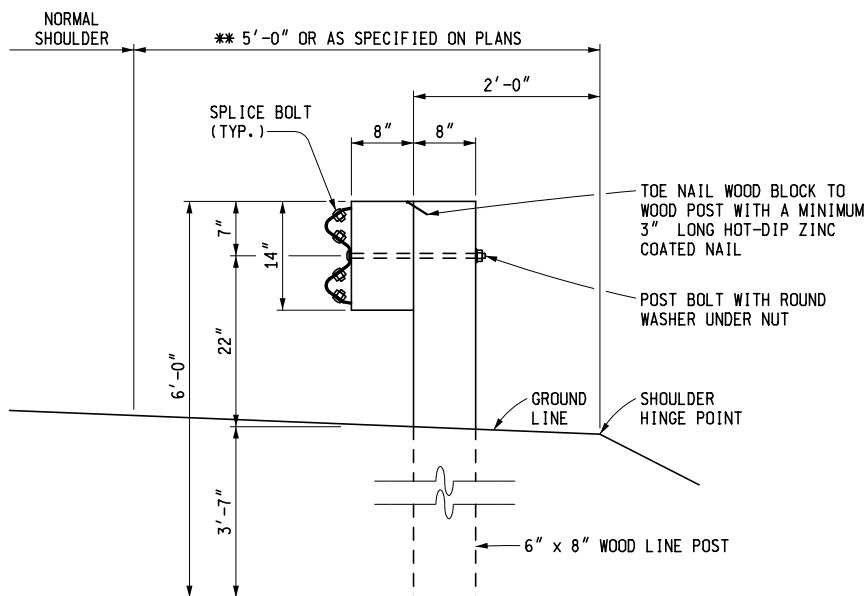
STEEL POST



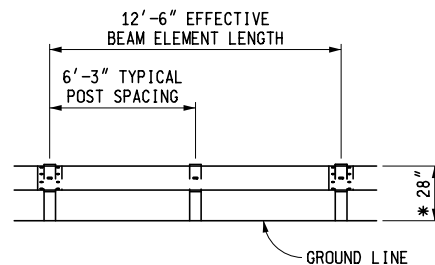
ELEVATION SHOWING POST SPACING

\* SEE NOTES FOR GUARDRAIL IN CONJUNCTION WITH CURB

## GUARDRAIL, TYPE A



\*\* FOR PAVED SHOULDER WIDTHS OF AT LEAST 12', USE 3'-0".



ELEVATION SHOWING POST SPACING

\* SEE NOTES FOR GUARDRAIL IN CONJUNCTION WITH CURB

## GUARDRAIL, TYPE B ( WOOD POST )



PREPARED  
BY  
DESIGN DIVISION

DRAWN BY: B.L.T.

CHECKED BY: W.K.P.

DEPARTMENT DIRECTOR  
Paul C. Ajegba

APPROVED BY: \_\_\_\_\_  
DIRECTOR, BUREAU OF FIELD SERVICES

APPROVED BY: \_\_\_\_\_  
DIRECTOR, BUREAU OF DEVELOPMENT

MICHIGAN DEPARTMENT OF TRANSPORTATION  
BUREAU OF DEVELOPMENT STANDARD PLAN FOR

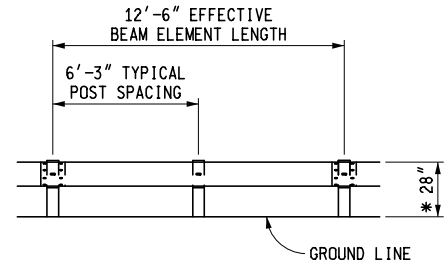
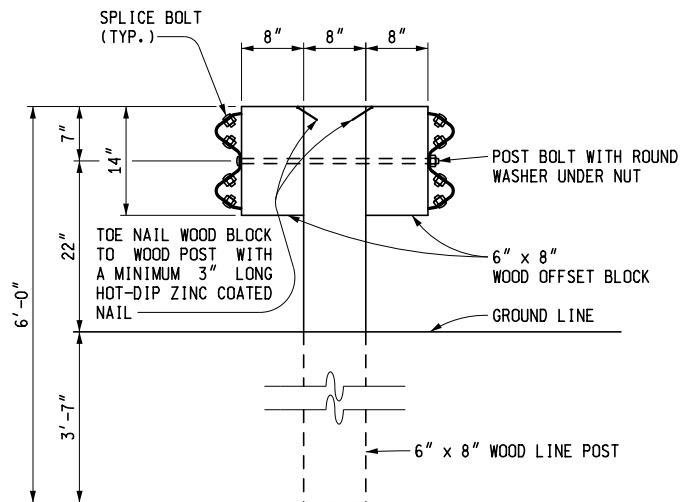
## GUARDRAIL, TYPES A, B, BD, T, TD, MGS-8, & MGS-8D

F.H.W.A. APPROVAL

8-6-2020  
PLAN DATE

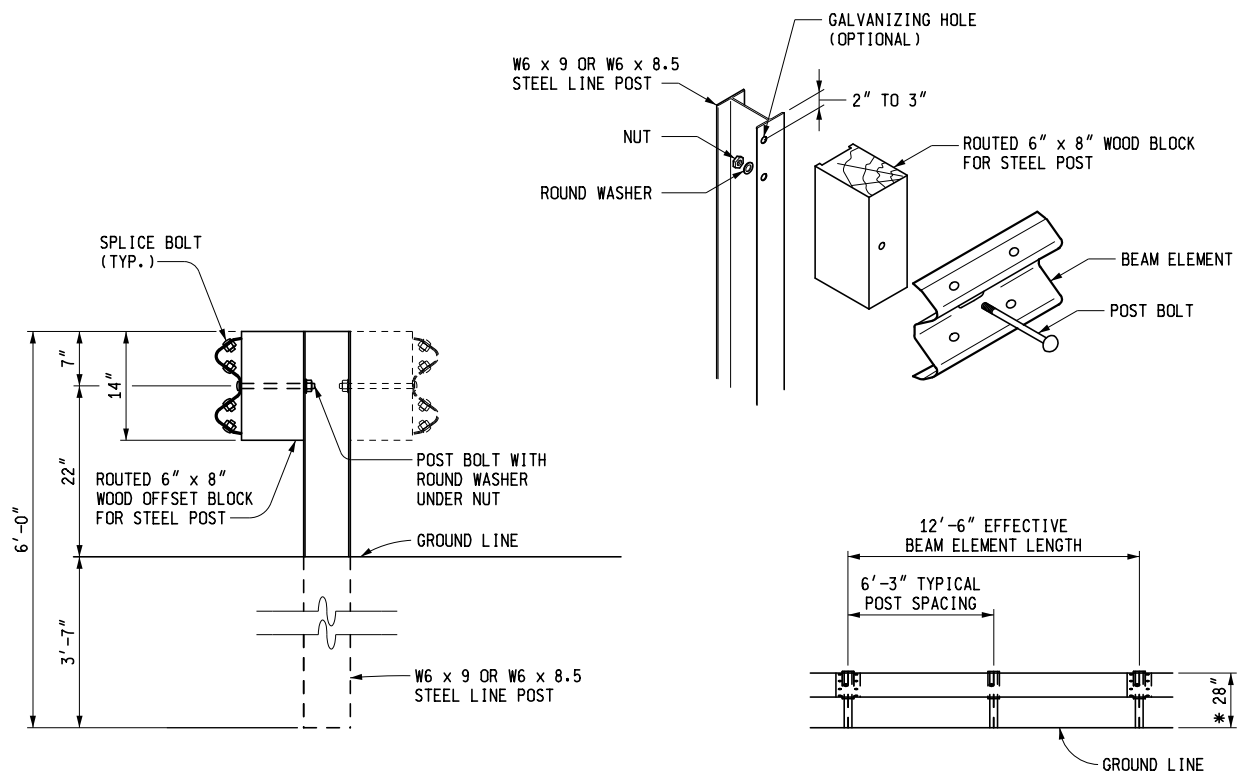
R-60-J

SHEET  
1 OF 17



ELEVATION SHOWING POST SPACING  
\* SEE NOTES FOR GUARDRAIL IN CONJUNCTION WITH CURB

GUARDRAIL, TYPE BD  
( WOOD POST )



ELEVATION SHOWING POST SPACING  
\* SEE NOTES FOR GUARDRAIL IN CONJUNCTION WITH CURB

GUARDRAIL, TYPE B (OR BD)  
( STEEL POST )

MICHIGAN DEPARTMENT OF TRANSPORTATION  
BUREAU OF DEVELOPMENT STANDARD PLAN FOR

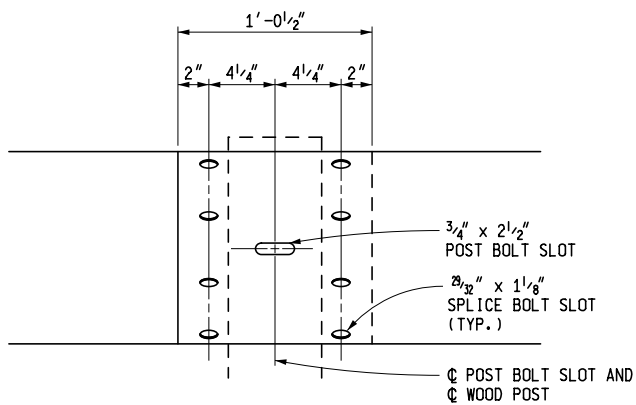
GUARDRAIL,  
TYPES A, B, BD, T, TD,  
MGS-8, & MGS-8D

F.H.W.A. APPROVAL

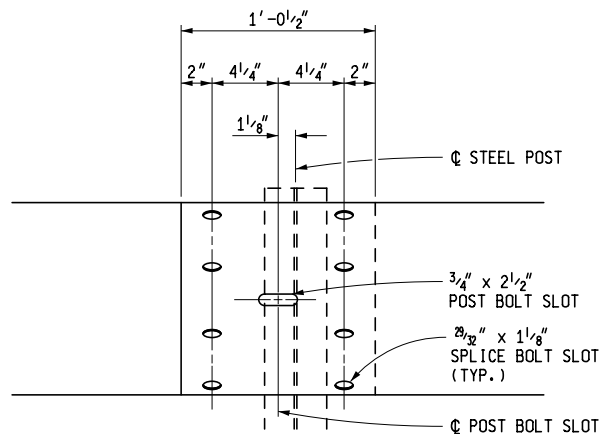
8-6-2020  
PLAN DATE

R-60-J

SHEET  
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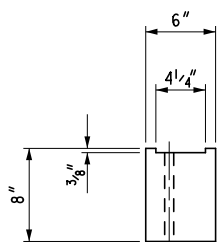


WOOD POST

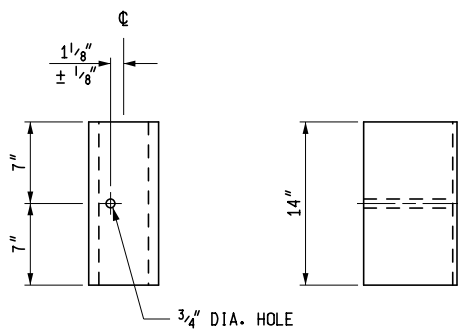


STEEL POST

### BEAM ELEMENT SPLICE DETAILS



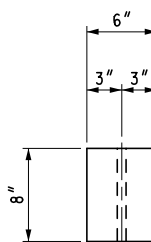
TOP



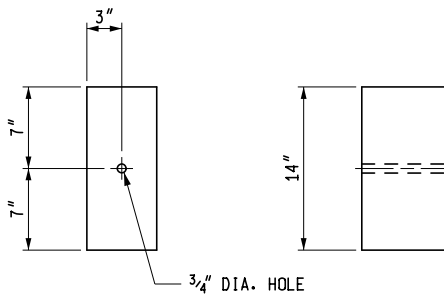
FRONT

SIDE

FOR USE ON STEEL POSTS



TOP



FRONT

SIDE

FOR USE ON WOOD POSTS

(SEE NOTES ON SHEET 16 OF 16)

### WOOD OFFSET BLOCKS FOR GUARDRAIL, TYPE B AND TYPE BD

MICHIGAN DEPARTMENT OF TRANSPORTATION  
BUREAU OF DEVELOPMENT STANDARD PLAN FOR

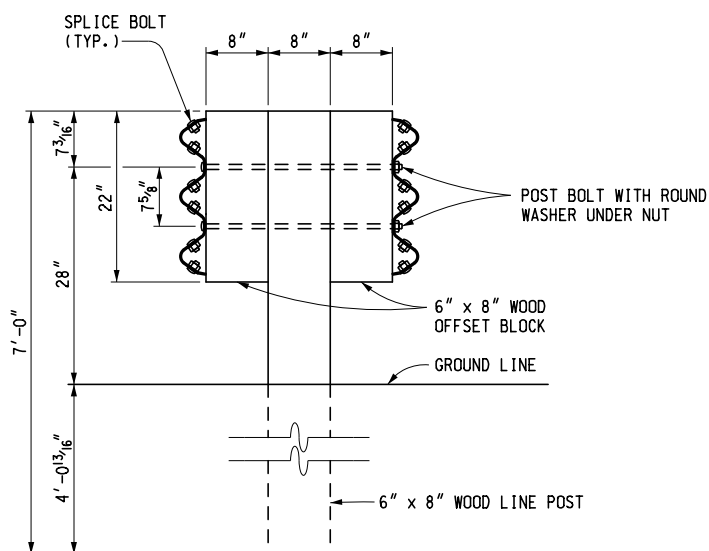
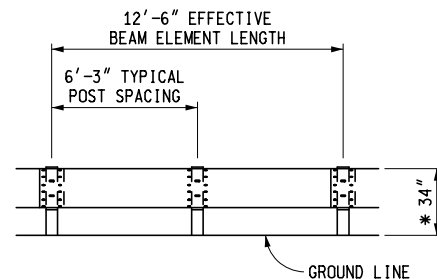
**GUARDRAIL,**  
**TYPES A, B, BD, T, TD,**  
**MGS-8, & MGS-8D**

F.H.W.A. APPROVAL

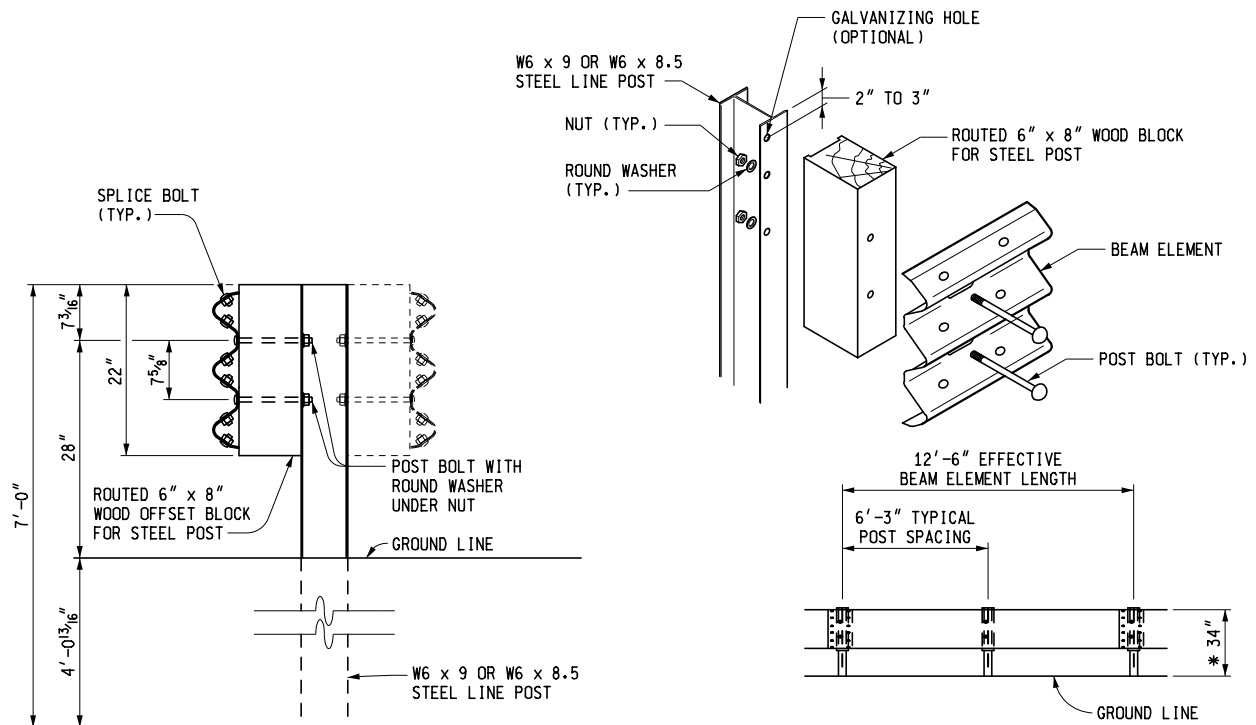
8-6-2020  
PLAN DATE

**R-60-J**

SHEET  
3 OF 17

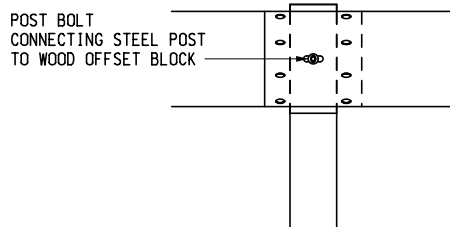


SHEET  
4 OF 17

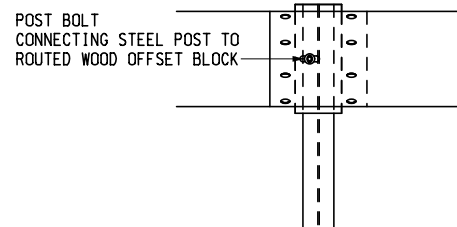


ELEVATION SHOWING POST SPACING  
\* SEE NOTES FOR GUARDRAIL IN CONJUNCTION WITH CURB

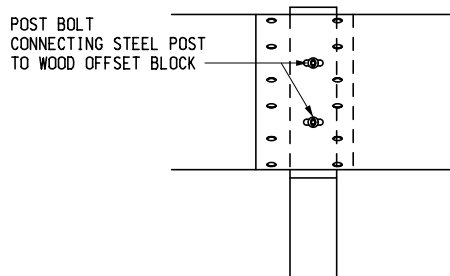
### GUARDRAIL, TYPE T OR TD (STEEL POST)



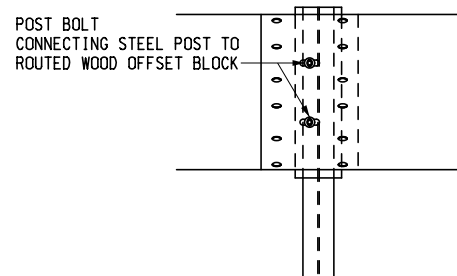
GUARDRAIL, TYPE B  
WOOD POST



GUARDRAIL, TYPE B  
STEEL POST



GUARDRAIL, TYPE T  
WOOD POST



GUARDRAIL, TYPE T  
STEEL POST

### BLOCK AND POST CONNECTION DETAILS

MICHIGAN DEPARTMENT OF TRANSPORTATION  
BUREAU OF DEVELOPMENT STANDARD PLAN FOR

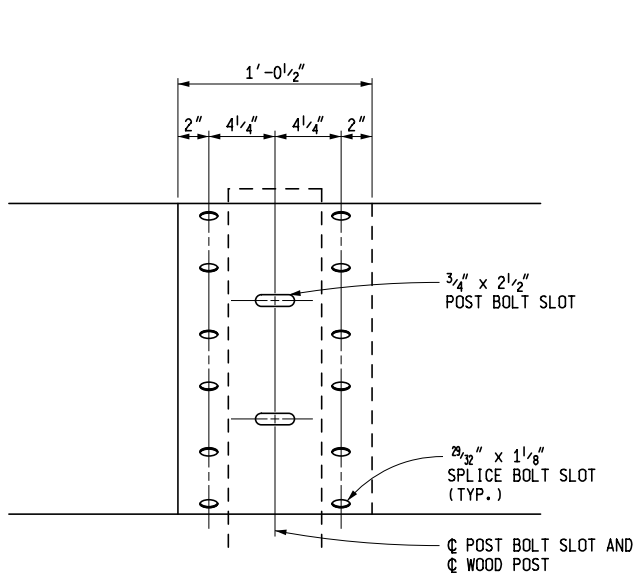
## GUARDRAIL, TYPES A, B, BD, T, TD, MGS-8, & MGS-8D

F.H.W.A. APPROVAL

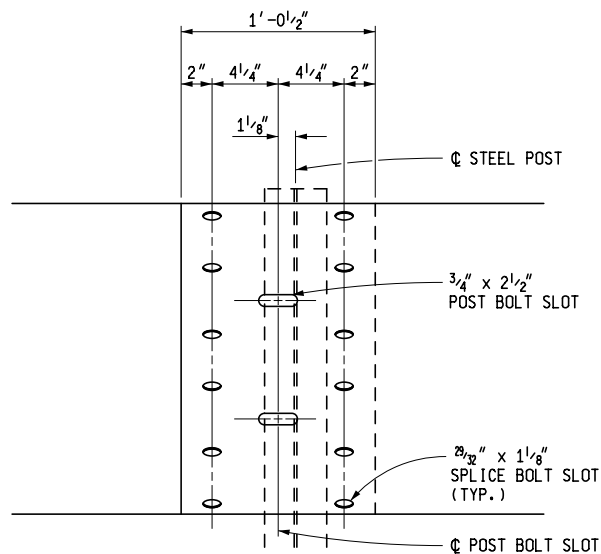
8-6-2020  
PLAN DATE

R-60-J

SHEET  
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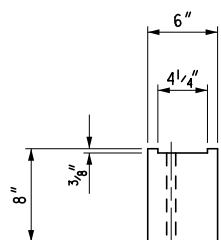


WOOD POST

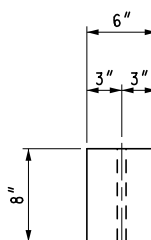


STEEL POST

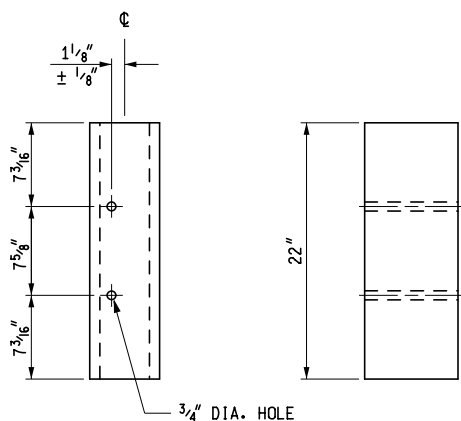
THREE BEAM ELEMENT SPLICE DETAILS



TOP



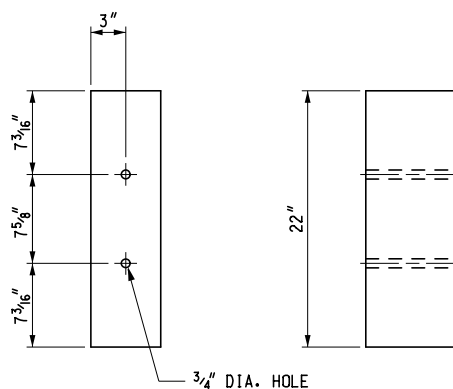
TOP



FRONT

SIDE

FOR USE ON STEEL POSTS



FRONT

SIDE

FOR USE ON WOOD POSTS

(SEE NOTES ON SHEET 16 OF 16)

WOOD OFFSET BLOCKS FOR GUARDRAIL, TYPE T AND TYPE TD

MICHIGAN DEPARTMENT OF TRANSPORTATION  
BUREAU OF DEVELOPMENT STANDARD PLAN FOR

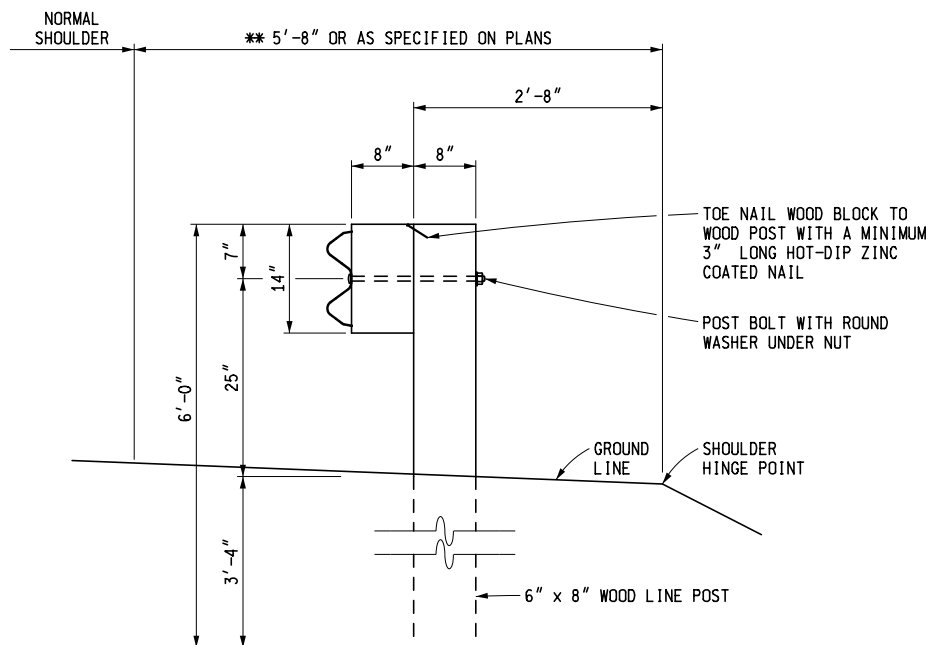
**GUARDRAIL,**  
**TYPES A, B, BD, T, TD,**  
**MGS-8, & MGS-8D**

F.H.W.A. APPROVAL

8-6-2020  
PLAN DATE

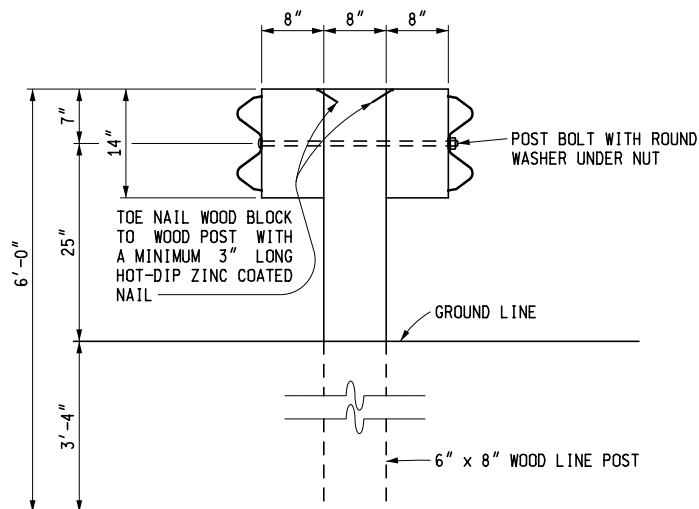
**R-60-J**

SHEET  
6 OF 17



\*\* FOR PAVED SHOULDER WIDTHS OF AT LEAST 12', USE 3'-8".

GUARDRAIL, TYPE MGS-8  
( WOOD POST )



GUARDRAIL, TYPE MGS-8D  
( WOOD POST )

MICHIGAN DEPARTMENT OF TRANSPORTATION  
BUREAU OF DEVELOPMENT STANDARD PLAN FOR

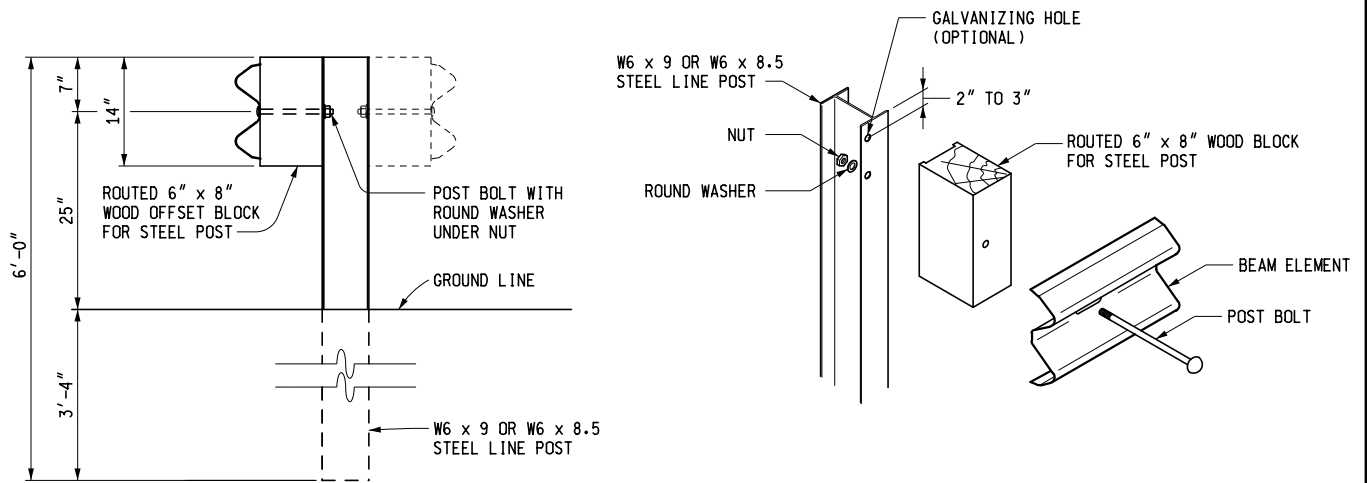
**GUARDRAIL,  
TYPES A, B, BD, T, TD,  
MGS-8, & MGS-8D**

F.H.W.A. APPROVAL

8-6-2020  
PLAN DATE

**R-60-J**

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GUARDRAIL, TYPE MGS-8 (OR MGS-8D)  
( STEEL POST )

MICHIGAN DEPARTMENT OF TRANSPORTATION  
BUREAU OF DEVELOPMENT STANDARD PLAN FOR

**GUARDRAIL,  
TYPES A, B, BD, T, TD,  
MGS-8, & MGS-8D**

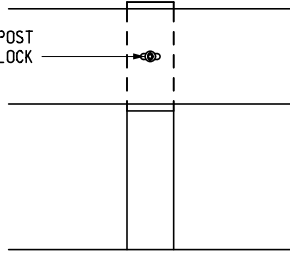
F.H.W.A. APPROVAL

8-6-2020  
PLAN DATE

**R-60-J**

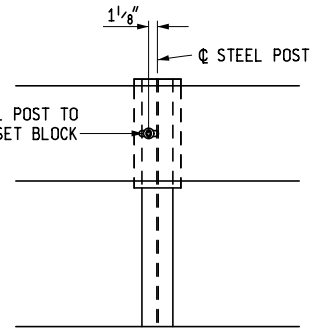
SHEET  
8 OF 17

POST BOLT  
CONNECTING WOOD POST  
TO WOOD OFFSET BLOCK



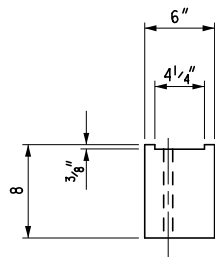
WOOD POST

POST BOLT  
CONNECTING STEEL POST TO  
ROUTED WOOD OFFSET BLOCK

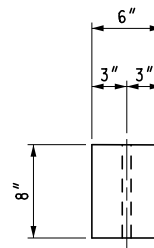


STEEL POST

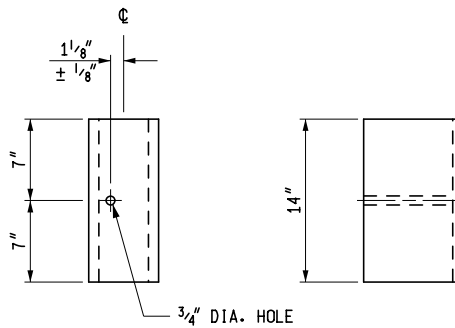
## BLOCK AND POST CONNECTION DETAILS



TOP



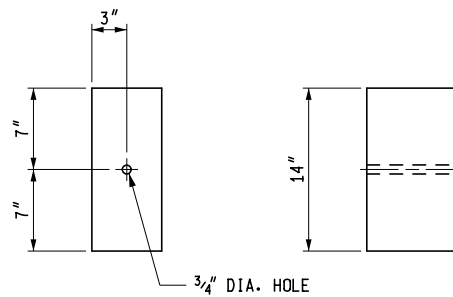
TOP



FRONT

SIDE

FOR USE ON STEEL POSTS



FRONT

SIDE

FOR USE ON WOOD POSTS  
(SEE NOTES ON SHEET 16 OF 16)

WOOD OFFSET BLOCKS FOR GUARDRAIL, TYPE MGS-8 AND TYPE MGS-8D

MICHIGAN DEPARTMENT OF TRANSPORTATION  
BUREAU OF DEVELOPMENT STANDARD PLAN FOR

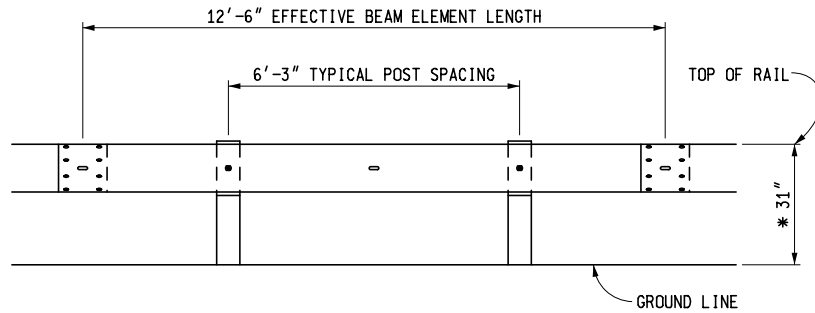
**GUARDRAIL,  
TYPES A, B, BD, T, TD,  
MGS-8, & MGS-8D**

F.H.W.A. APPROVAL

8-6-2020  
PLAN DATE

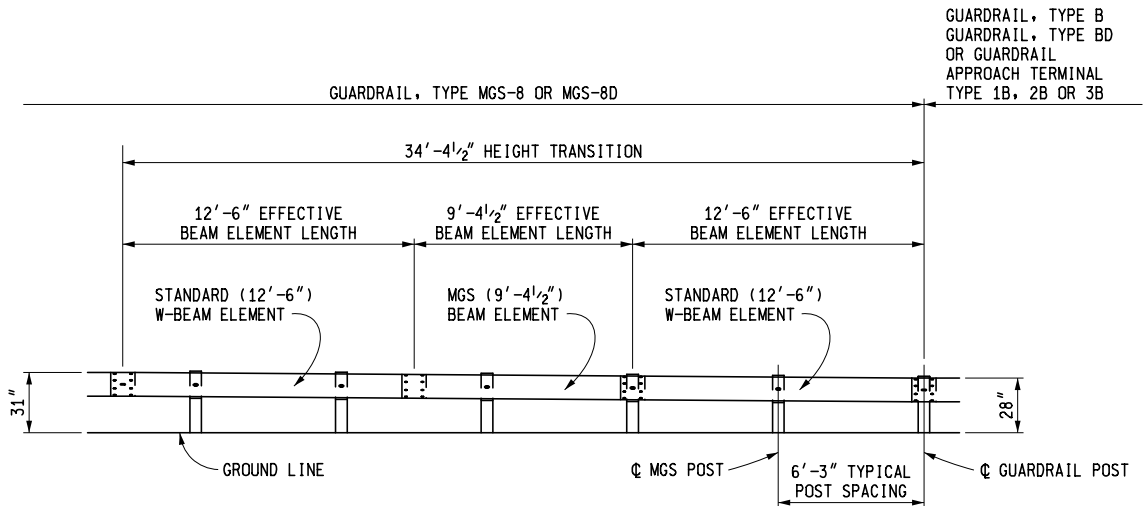
**R-60-J**

SHEET  
9 OF 17

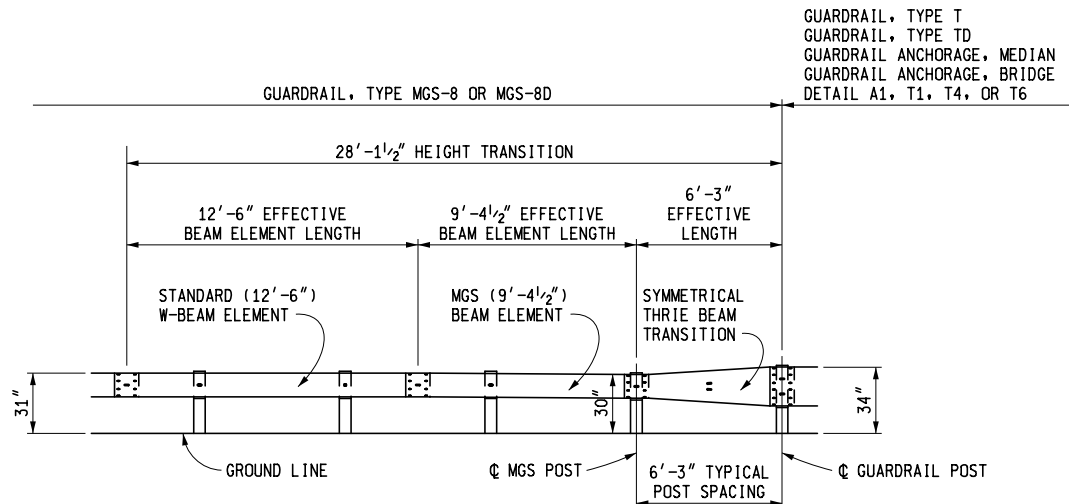


ELEVATION SHOWING POST SPACING FOR  
GUARDRAIL, TYPE MGS-8 OR MGS-8D

\* SEE NOTES FOR GUARDRAIL IN CONJUNCTION WITH CURB



ELEVATION SHOWING TRANSITION DETAIL FOR CONNECTING  
GUARDRAIL, TYPE MGS-8 OR MGS-8D TO  
GUARDRAIL, TYPE B, GUARDRAIL, TYPE BD, OR  
GUARDRAIL APPROACH TERMINAL TYPE 1B, 2B, OR 3B



ELEVATION SHOWING TRANSITION DETAIL FOR CONNECTING  
GUARDRAIL, TYPE MGS-8 OR MGS-8D TO  
GUARDRAIL, TYPE T, GUARDRAIL, TYPE TD,  
GUARDRAIL ANCHORAGE, MEDIAN,  
GUARDRAIL ANCHORAGE, BRIDGE DETAIL A1, T1, T4 OR T6

MICHIGAN DEPARTMENT OF TRANSPORTATION  
BUREAU OF DEVELOPMENT STANDARD PLAN FOR

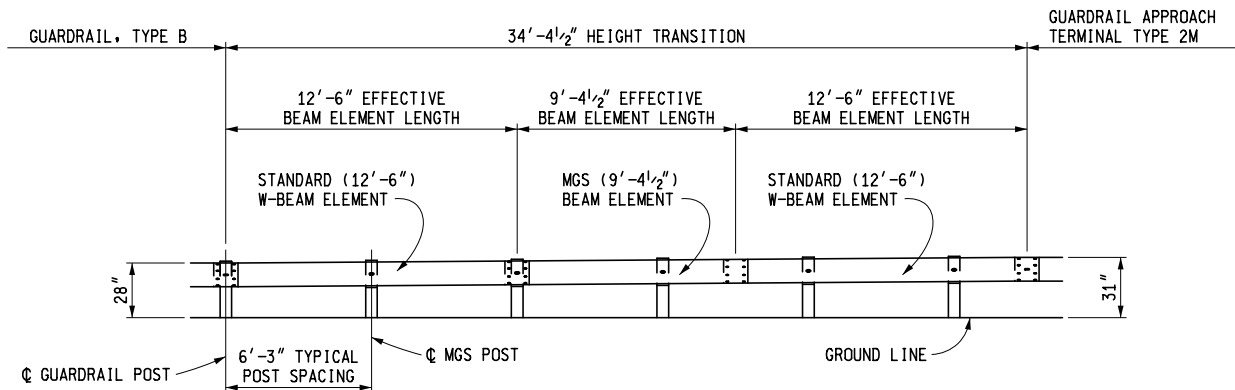
**GUARDRAIL,  
TYPES A, B, BD, T, TD,  
MGS-8, & MGS-8D**

F.H.W.A. APPROVAL

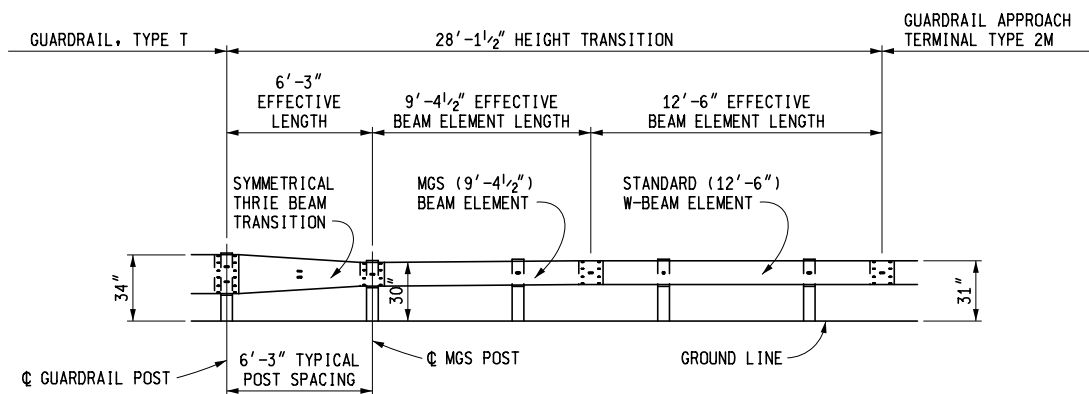
8-6-2020  
PLAN DATE

**R-60-J**

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ELEVATION SHOWING TRANSITION DETAIL FOR CONNECTING  
GUARDRAIL, TYPE B TO  
GUARDRAIL APPROACH TERMINAL TYPE 2M



ELEVATION SHOWING TRANSITION DETAIL FOR CONNECTING  
GUARDRAIL, TYPE T TO  
GUARDRAIL APPROACH TERMINAL TYPE 2M

MICHIGAN DEPARTMENT OF TRANSPORTATION  
BUREAU OF DEVELOPMENT STANDARD PLAN FOR

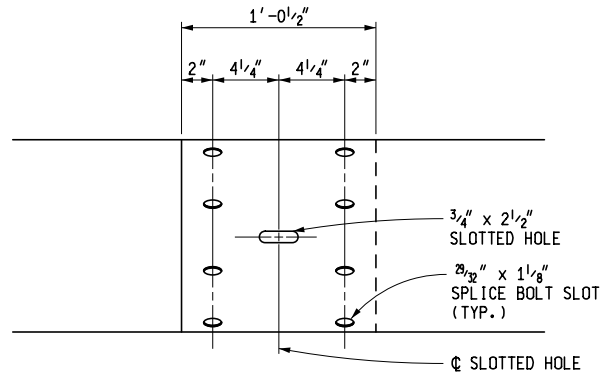
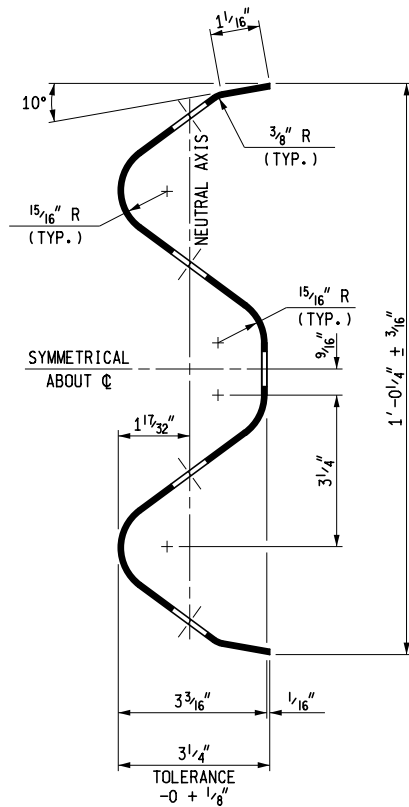
**GUARDRAIL,  
TYPES A, B, BD, T, TD,  
MGS-8, & MGS-8D**

F.H.W.A. APPROVAL

8-6-2020  
PLAN DATE

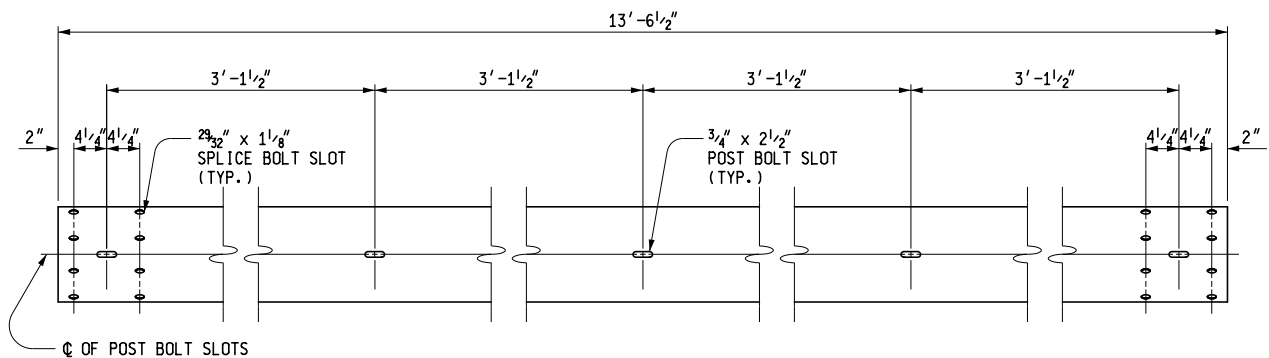
**R-60-J**

SHEET  
11 OF 17

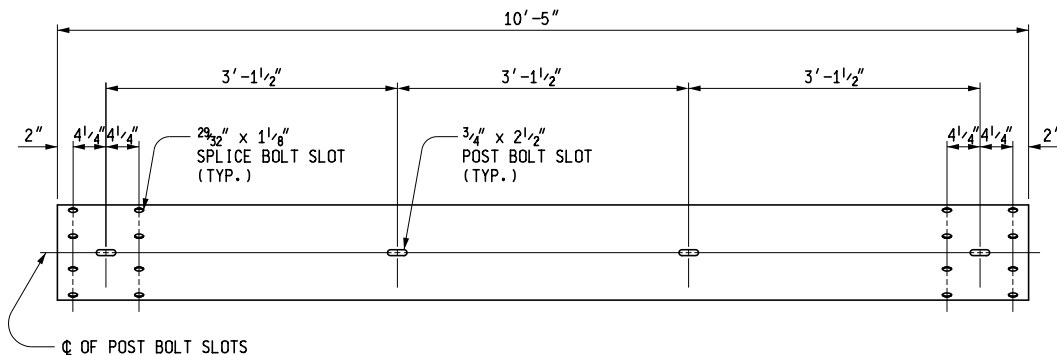


BEAM ELEMENT SPLICE DETAILS

SECTION THROUGH BEAM ELEMENT



FRONT ELEVATION OF BEAM ELEMENT



FRONT ELEVATION OF MGS (9'-4 1/2") BEAM ELEMENT

MICHIGAN DEPARTMENT OF TRANSPORTATION  
BUREAU OF DEVELOPMENT STANDARD PLAN FOR

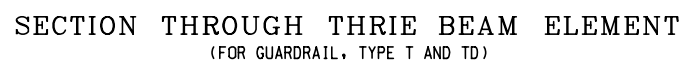
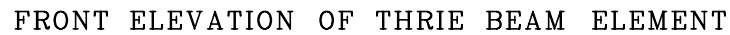
**GUARDRAIL,  
TYPES A, B, BD, T, TD,  
MGS-8, & MGS-8D**

F.H.W.A. APPROVAL

8-6-2020  
PLAN DATE

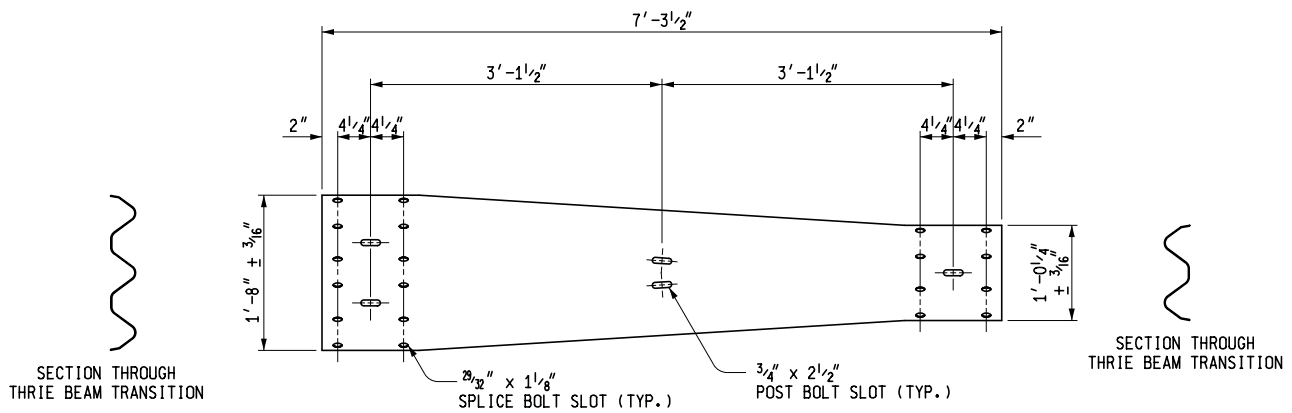
**R-60-J**

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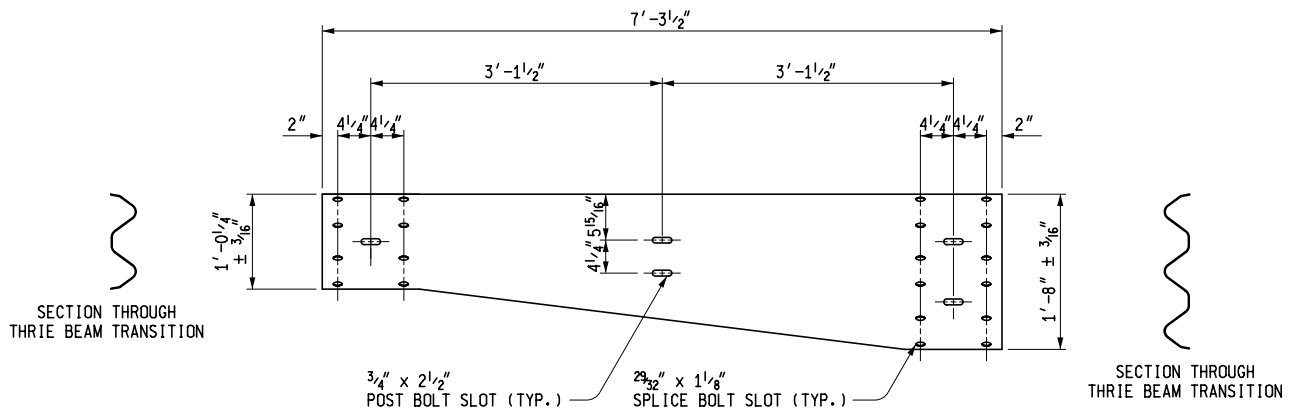
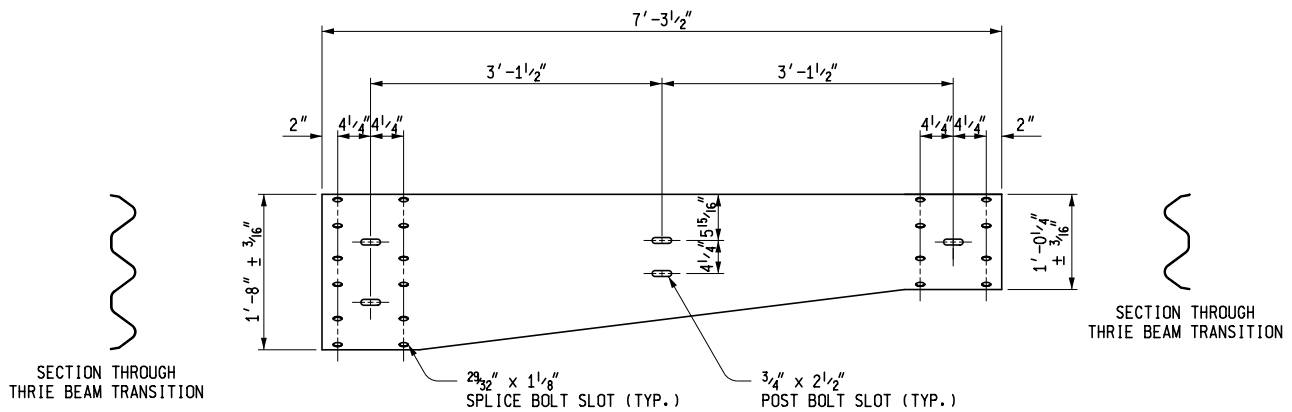


GUARDRAIL,  
TYPES A, B, BD, T, TD,  
MGS-8, & MGS-8D

SHEET  
13 OF 17



### SYMMETRICAL THRIE BEAM TRANSITIONS



### ASYMMETRICAL THRIE BEAM TRANSITIONS

NOTE: ASYMMETRICAL TRANSITION TYPE WILL VARY BY LOCATION DEPENDING ON GUARDRAIL LAYOUT

MICHIGAN DEPARTMENT OF TRANSPORTATION  
BUREAU OF DEVELOPMENT STANDARD PLAN FOR

**GUARDRAIL,  
TYPES A, B, BD, T, TD,  
MGS-8, & MGS-8D**

F.H.W.A. APPROVAL

8-6-2020  
PLAN DATE

**R-60-J**

SHEET  
14 OF 17



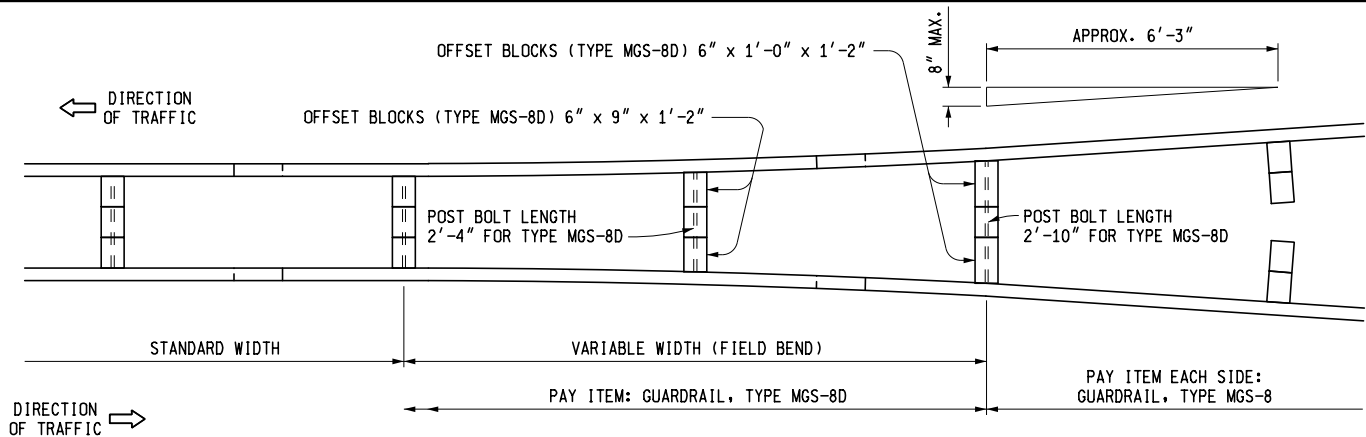
THREE BEAM TRANSITIONS REQUIRE 20 SPLICE BOLTS EACH (12 ON TYPE T END AND 8 ON TYPE B END).

## SPLICE BOLT AND POST BOLT



GUARDRAIL,  
TYPES A, B, BD, T, TD,  
MGS-8, & MGS-8D

SHEET  
15 OF 17



DETAIL SHOWING TRANSITION FROM  
GUARDRAIL, TYPE MGS-8 TO GUARDRAIL, TYPE MGS-8D

POST BOLTS, SPLICE BOLTS AND WASHERS AT BEAM ELEMENT SPLICE POSTS AND AT INTERMEDIATE POSTS					
GUARDRAIL TYPE	POST	OFFSET BLOCK	POST BOLTS		SPLICE BOLTS (1 1/4" LONG) (NO. REQ'D)
			NO. REQ'D	LENGTH	
MGS-8	WOOD	WOOD	1	18"	8
	STEEL	WOOD	1	9 1/2"	
MGS-8D	WOOD	WOOD	1	*26 1/2"	16
	STEEL	WOOD	2	9 1/2"	

THREE BEAM TRANSITIONS REQUIRE 20 SPLICE BOLTS EACH (12 ON TYPE T END AND 8 ON TYPE MGS END).

\* EXCEPT AS SPECIFIED ON DETAIL SHOWING TRANSITION FROM GUARDRAIL, TYPE MGS-8 TO GUARDRAIL, TYPE MGS-8D POST BOLTS SHALL NOT EXTEND MORE THAN 1/2" BEYOND NUT.

MINIMUM POST BOLT THREAD LENGTH	
BOLT LENGTH	MINIMUM THREAD LENGTH
9 1/2"	1 3/4"
18"	2 1/2"
26 1/2"	3"

MICHIGAN DEPARTMENT OF TRANSPORTATION  
BUREAU OF DEVELOPMENT STANDARD PLAN FOR

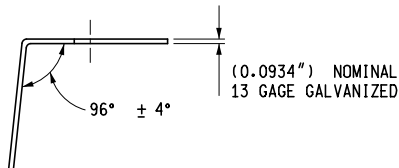
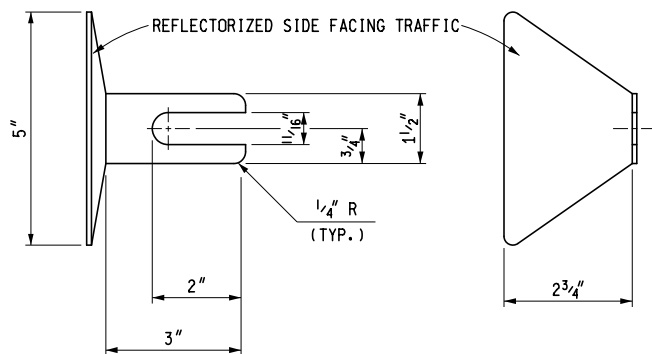
**GUARDRAIL,  
TYPES A, B, BD, T, TD,  
MGS-8, & MGS-8D**

F.H.W.A. APPROVAL

8-6-2020  
PLAN DATE

**R-60-J**

SHEET  
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GUARDRAIL REFLECTOR

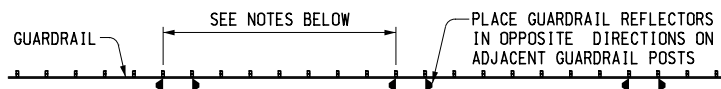


DIRECTION  
OF TRAFFIC

DIRECTION  
OF TRAFFIC



ONE-WAY TRAFFIC



DIRECTION  
OF TRAFFIC

DIRECTION  
OF TRAFFIC

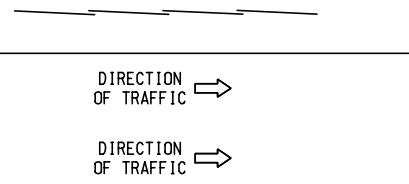


TWO-WAY TRAFFIC

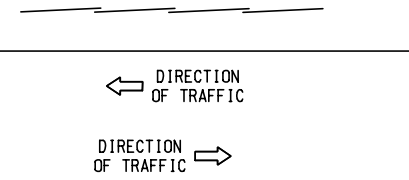
## PLACEMENT OF GUARDRAIL REFLECTORS

### NOTES GOVERNING THE USE OF GUARDRAIL REFLECTORS

- GUARDRAIL REFLECTORS SHALL BE USED ON ALL STANDARD GUARDRAIL RUNS, REGARDLESS OF ROADWAY LIGHTING.
- GUARDRAIL REFLECTORS ARE TO BE SPACED AT THE FOLLOWING INTERVALS:
  - 50'-0" ON TANGENT SECTIONS AND CURVES WITH A RADIUS OF 1150' OR MORE.
  - 25'-0" ON CURVES WITH A RADIUS LESS THAN 1150'.
- FOR GUARDRAIL REFLECTOR PLACEMENT ON APPROACH TERMINALS, SEE THE APPROPRIATE GUARDRAIL APPROACH TERMINAL STANDARD PLAN.
- A GUARDRAIL REFLECTOR IS TO BE PLACED ON THE SECOND POST FROM THE GUARDRAIL DEPARTING TERMINAL.
- ON GUARDRAIL, TYPE T AND TYPE TD GUARDRAIL REFLECTORS ARE TO BE PLACED ON THE UPPER POST BOLT.
- GUARDRAIL REFLECTORS SHALL MATCH COLOR OF EDGE LINE.



ONE-WAY TRAFFIC



TWO-WAY TRAFFIC  
DIRECTION OF RAIL LAP

### NOTES:

DETAILS SPECIFIED ON THIS STANDARD ARE ACCORDING TO THE AASHTO-AGC-ARTBA JOINT COMMITTEE, TASK FORCE 13 PUBLICATION TITLED "A GUIDE TO STANDARDIZED HIGHWAY BARRIER HARDWARE."

BEAM ELEMENTS SHALL BE SHOP BENT TO PLAN RADIUS FOR CURVE RADII 150' OR LESS. A TAG IDENTIFYING THE CURVATURE OF THE SHOP BENT SECTION WILL BE REQUIRED FOR EACH CURVED ELEMENT.

SEE STANDARD PLAN R-61-SERIES, R-62-SERIES OR R-63-SERIES FOR GUARDRAIL APPROACH TERMINALS, STANDARD PLAN R-66-SERIES FOR GUARDRAIL DEPARTING TERMINALS AND STANDARD PLAN R-67-SERIES FOR GUARDRAIL ANCHORAGE, BRIDGE.

WHEN THE PLANS SPECIFY GUARDRAIL (TYPE B OR T) TO BE PLACED ON THE SHOULDER HINGE POINT, RATHER THAN AS SPECIFIED ON THIS PLAN, 8'-0" POSTS SHALL BE PROVIDED, WITH THE ADDITIONAL LENGTH EMBEDDED FOR ADDED STABILITY. (NOT NECESSARY WHEN THE SLOPE IS REASONABLY LEVEL BEYOND THE SHOULDER HINGE POINT, AS DETERMINED BY THE ENGINEER.)

WHEN THE PLANS SPECIFY GUARDRAIL TYPE MGS-8 TO BE PLACED ON THE SHOULDER HINGE POINT, RATHER THAN AS SPECIFIED ON THIS PLAN, 9'-0" POSTS SHALL BE PROVIDED, WITH THE ADDITIONAL LENGTH EMBEDDED FOR ADDED STABILITY. (NOT NECESSARY WHEN THE SLOPE IS REASONABLY LEVEL BEYOND THE SHOULDER HINGE POINT, AS DETERMINED BY THE ENGINEER.)

WOOD POSTS WITH 1/2" BEVELS AT THE TOP MAY BE USED IN LIEU OF WOOD POSTS WITHOUT BEVELS SPECIFIED. THE LENGTH, WIDTH AND DEPTH OF THE POST SHALL BE AS SPECIFIED ON THIS STANDARD AND THE POST BOLT HOLES SHALL BE LOCATED TO ENSURE PROPER RAIL HEIGHT.

WOOD OFFSET BLOCKS WITH 1/2" BEVELS AT THE TOP AND BOTTOM OR A 1" BEVELED TOP MAY BE USED IN LIEU OF WOOD BLOCKS WITHOUT BEVELS SPECIFIED. THE LENGTH (FRONT AND BACK FACE), WIDTH AND DEPTH OF THE BLOCK SHALL BE AS SPECIFIED ON THIS STANDARD AND THE POST BOLT HOLES SHALL BE LOCATED TO ENSURE PROPER RAIL HEIGHT AND COMPATIBILITY WITH POST HOLES.

WHEN THE FACE OF GUARDRAIL IS PLACED FLUSH WITH FACE OF CURB, THE RAIL HEIGHT SHOULD BE MEASURED FROM THE FRONT EDGE OF THE GUTTER PAN, WHICH IS THE POINT ON THE GUTTER PAN THAT IS CLOSEST TO THE EDGE OF THE TRAVELED LANE. WHEN THE FACE OF THE GUARDRAIL PANEL IS LOCATED BEHIND THE CURB THE RAIL HEIGHT SHOULD BE MEASURED FROM THE GROUND JUST IN FRONT OF THE GUARDRAIL.

MICHIGAN DEPARTMENT OF TRANSPORTATION  
BUREAU OF DEVELOPMENT STANDARD PLAN FOR

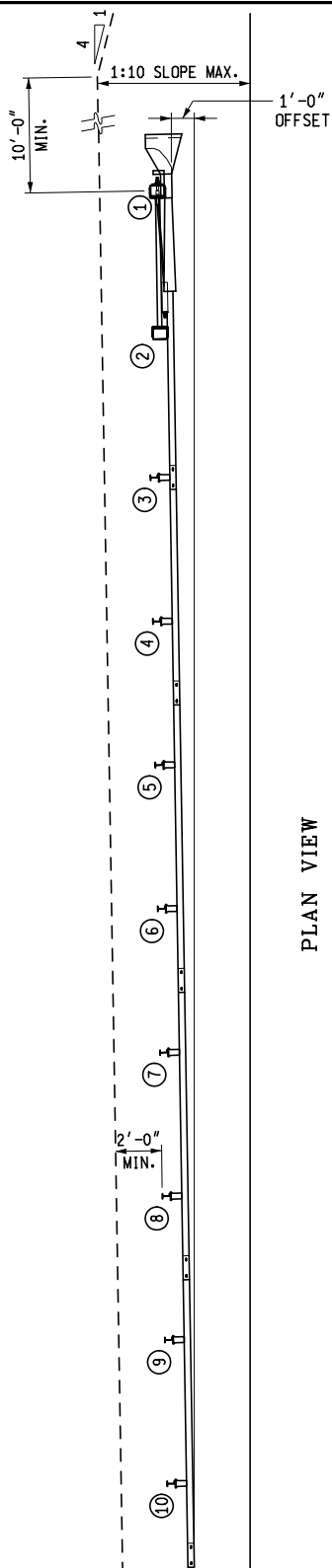
GUARDRAIL,  
TYPES A, B, BD, T, TD,  
MGS-8, & MGS-8D

F.H.W.A. APPROVAL

8-6-2020  
PLAN DATE

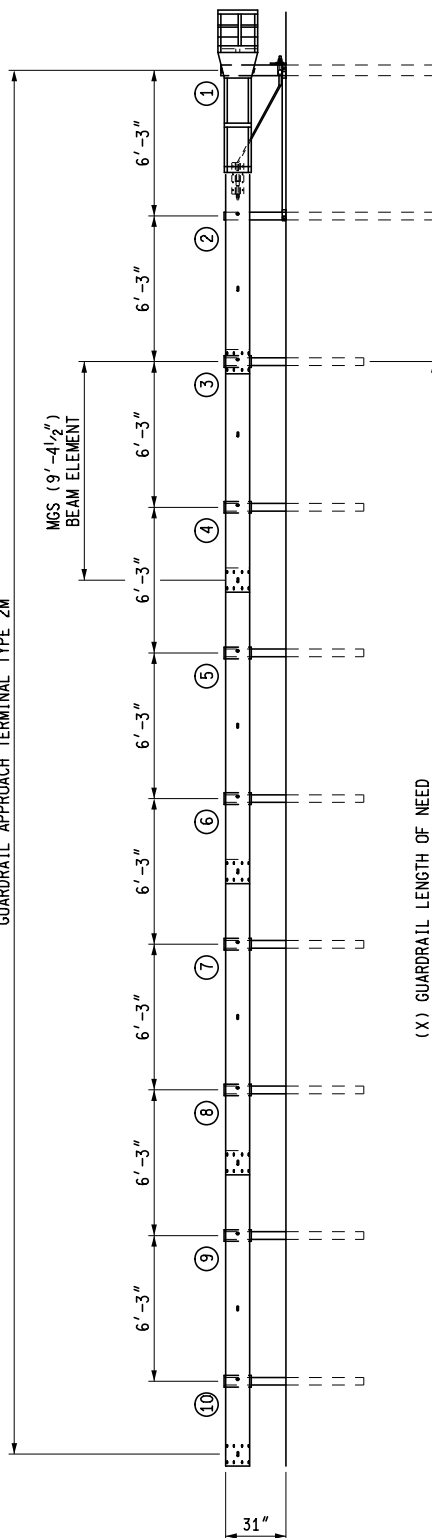
R-60-J

SHEET  
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PLAN VIEW

59' - 4 1/2"  
GUARDRAIL APPROACH TERMINAL TYPE 2M



ELEVATION  
GUARDRAIL APPROACH TERMINAL TYPE 2M  
"MSKT"

## OPTION 1



PREPARED  
BY  
DESIGN DIVISION

DRAWN BY: B.L.T.

CHECKED BY: W.K.P.

DEPARTMENT DIRECTOR  
Paul C. Ajegba

APPROVED BY: \_\_\_\_\_  
DIRECTOR, BUREAU OF FIELD SERVICES

APPROVED BY: \_\_\_\_\_  
DIRECTOR, BUREAU OF DEVELOPMENT

MICHIGAN DEPARTMENT OF TRANSPORTATION  
BUREAU OF DEVELOPMENT STANDARD PLAN FOR

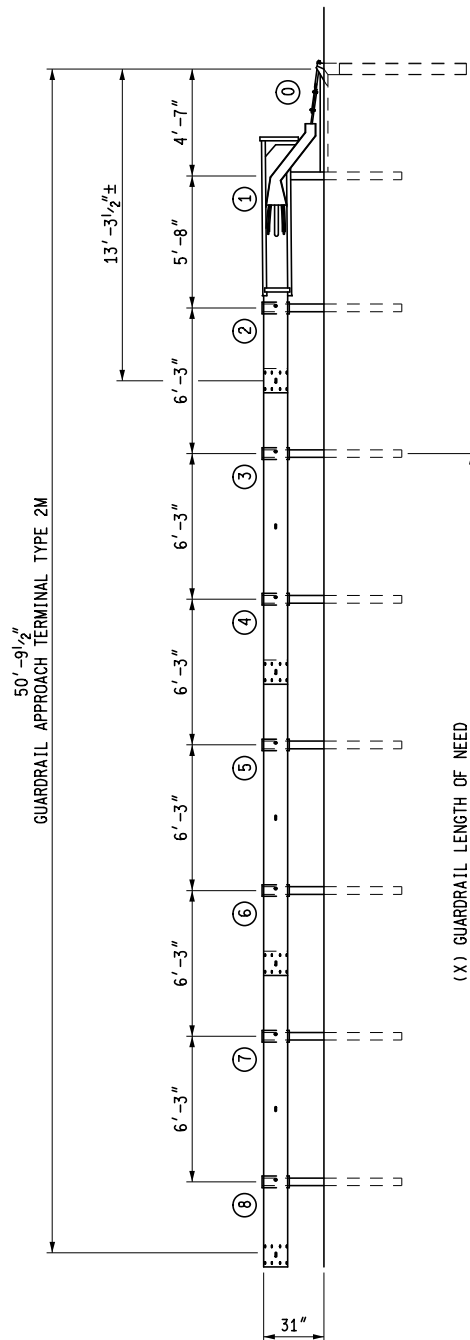
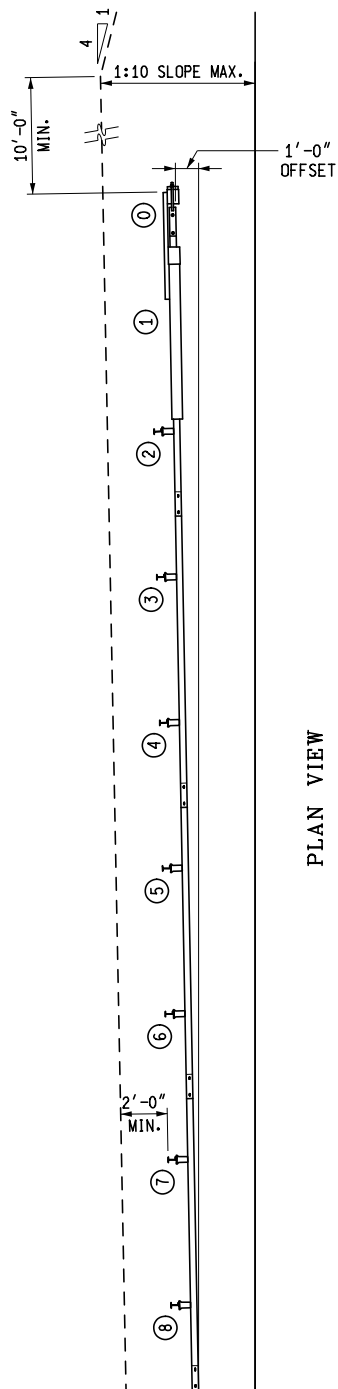
## GUARDRAIL APPROACH TERMINAL TYPE 2M

F.H.W.A. APPROVAL

9-22-2020  
PLAN DATE

R-62-H

SHEET  
1 OF 4



OPTION 2

MICHIGAN DEPARTMENT OF TRANSPORTATION  
BUREAU OF DEVELOPMENT STANDARD PLAN FOR

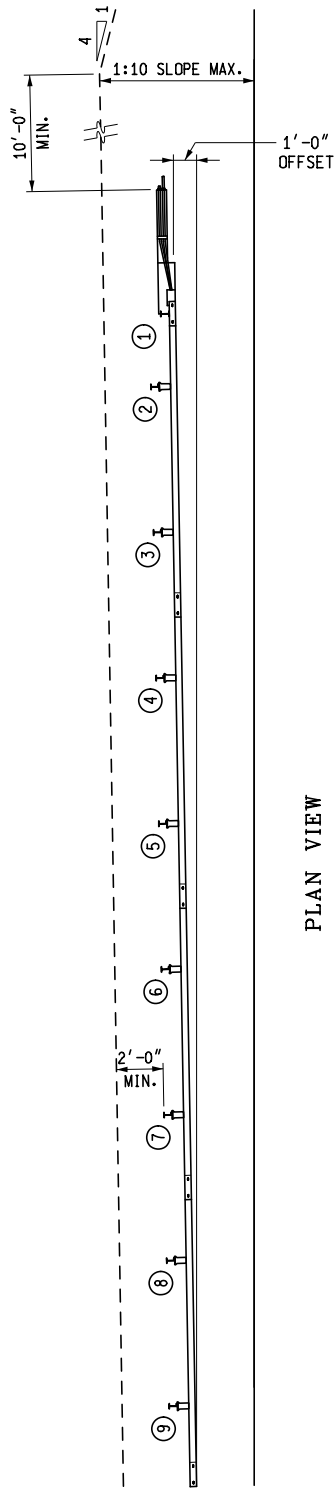
GUARDRAIL APPROACH  
TERMINAL TYPE 2M

F.H.W.A. APPROVAL

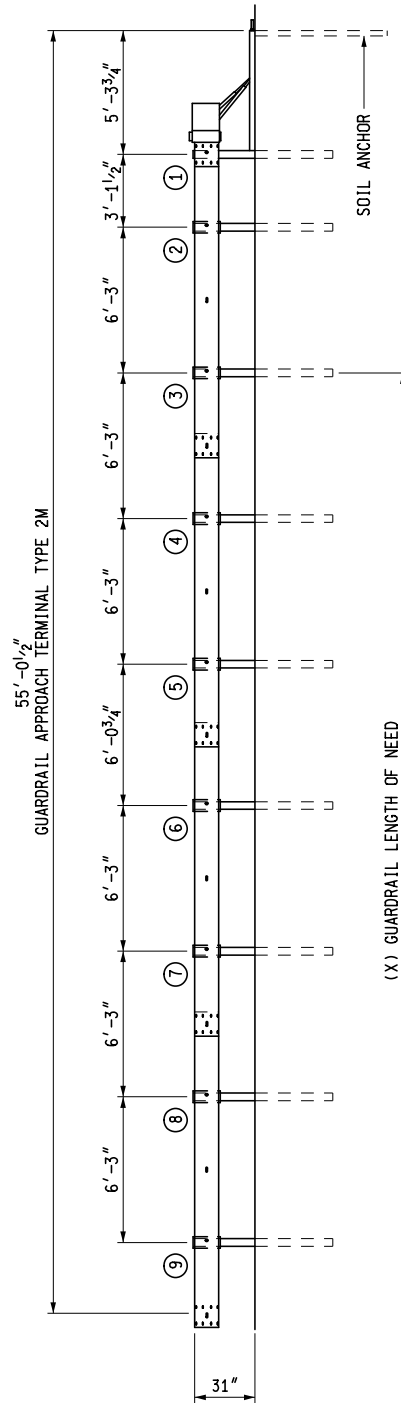
9-22-2020  
PLAN DATE

R-62-H

SHEET  
2 OF 4



PLAN VIEW



ELEVATION  
GUARDRAIL APPROACH TERMINAL TYPE 2M  
"MAX-TENSION"

OPTION 3

MICHIGAN DEPARTMENT OF TRANSPORTATION  
BUREAU OF DEVELOPMENT STANDARD PLAN FOR

# GUARDRAIL APPROACH TERMINAL TYPE 2M

F.H.W.A. APPROVAL

9-22-2020  
PLAN DATE

R-62-H

SHEET  
3 OF 4

NOTES:

ALL POSTS, OFFSET BLOCKS, BEAM ELEMENTS, AND HARDWARE (INCLUDING BOLTS, NUTS, AND WASHERS) SHALL CONFORM TO THE MANUFACTURER'S DETAILS AND SPECIFICATIONS.

ALL 1:10 SLOPES SHALL BE GRADED TO CLASS A SLOPE TOLERANCES.

WHEN SITE CONDITIONS WARRANT AND WITH THE APPROVAL OF THE ENGINEER, GUARDRAIL APPROACH TERMINAL TYPE 2M CAN BE INSTALLED STRAIGHT (WITHOUT THE 1'-0" OFFSET FROM THE TANGENT LINE TO THE TRAFFIC FACE OF POST 1).

GUARDRAIL REFLECTORS AND OTHER ATTACHMENTS ARE NOT TO BE USED ON THE GUARDRAIL APPROACH TERMINAL. PLACE REFLECTORS BEGINNING ON STANDARD RUN OF GUARDRAIL.

USE REFLECTIVE SHEETING ACCORDING TO THE FOLLOWING TRAFFIC CONDITIONS:  
(NOTE: ALTERNATE 3" BLACK AND 3" YELLOW STRIPES ON A 45° ANGLE)



TRAFFIC PASSING ON  
THE LEFT SIDE



TRAFFIC PASSING ON  
BOTH SIDES



TRAFFIC PASSING ON  
THE RIGHT SIDE

THE PORTION OF THE IMPACT HEAD ASSEMBLY FACING TRAFFIC SHALL BE COMPLETELY COVERED WITH HIGH INTENSITY ADHESIVE REFLECTIVE SHEETING.

MICHIGAN DEPARTMENT OF TRANSPORTATION  
BUREAU OF DEVELOPMENT STANDARD PLAN FOR

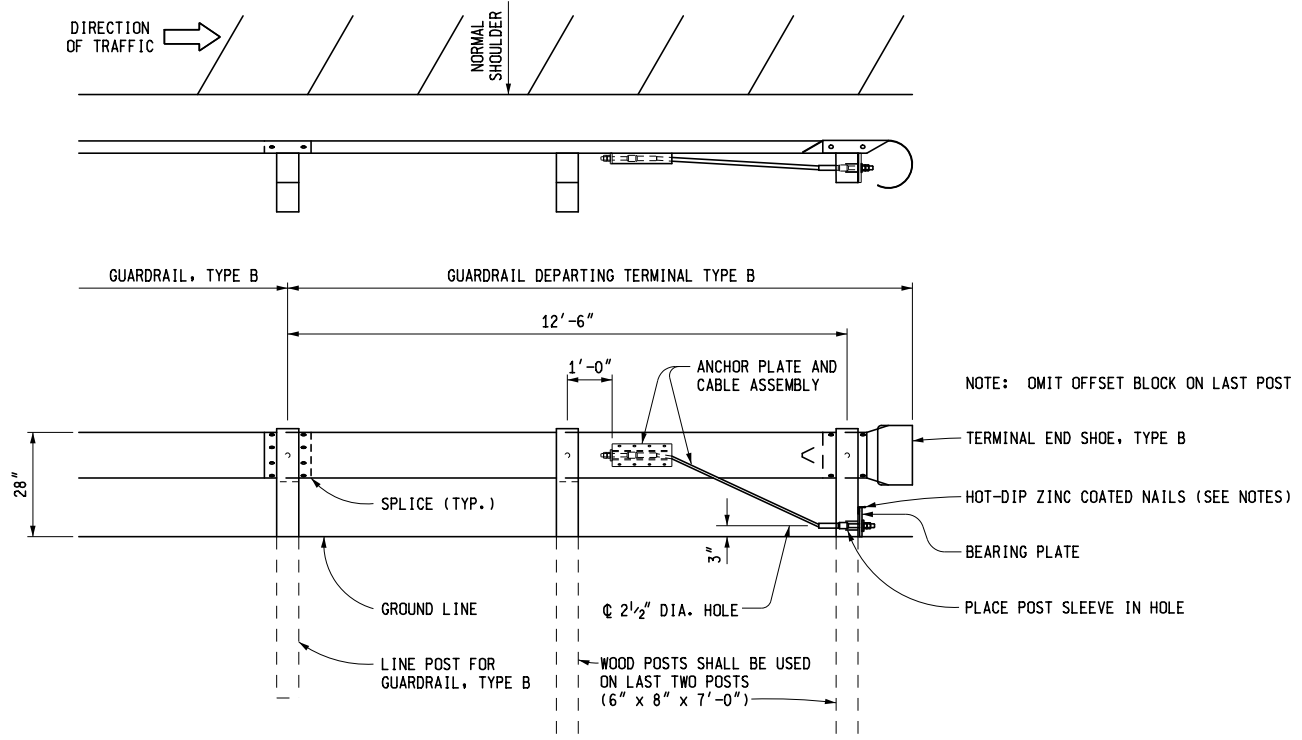
**GUARDRAIL APPROACH  
TERMINAL TYPE 2M**

F.H.W.A. APPROVAL

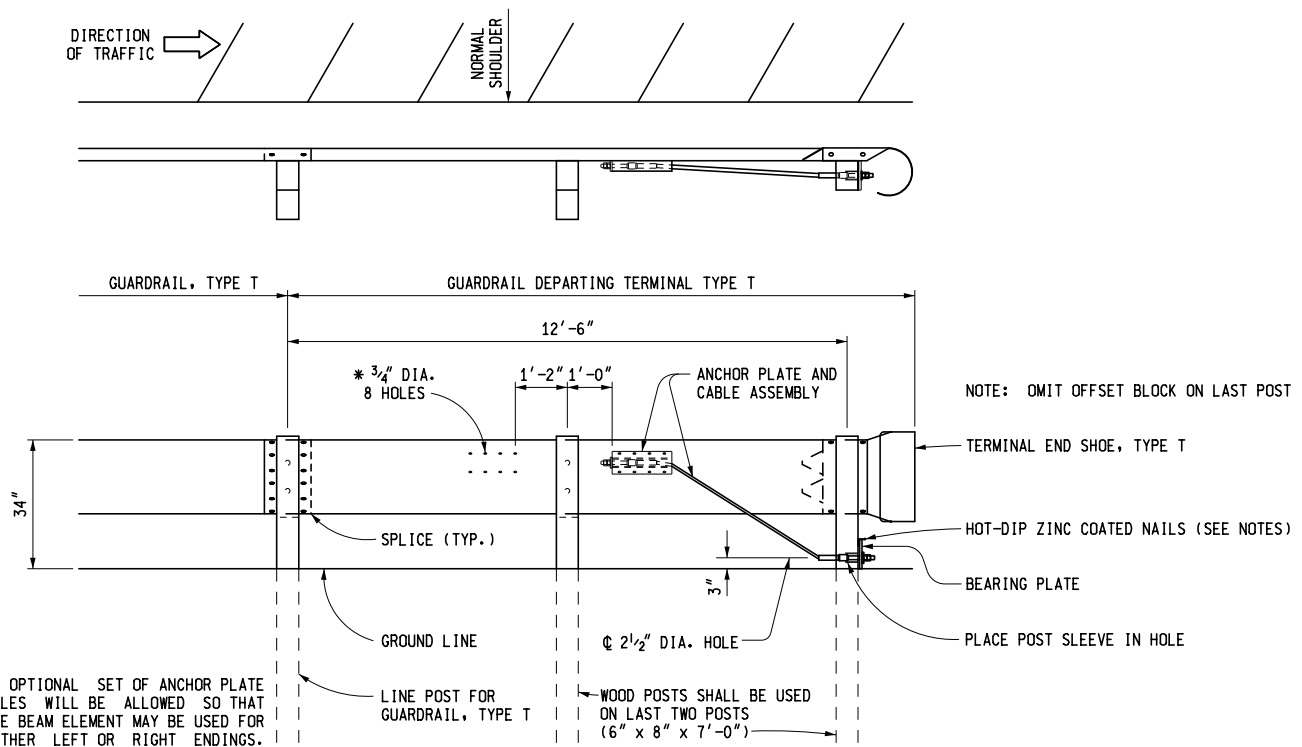
9-22-2020  
PLAN DATE

**R-62-H**

SHEET  
4 OF 4



**GUARDRAIL DEPARTING TERMINAL TYPE B**



\* AN OPTIONAL SET OF ANCHOR PLATE HOLES WILL BE ALLOWED SO THAT THE BEAM ELEMENT MAY BE USED FOR EITHER LEFT OR RIGHT ENDINGS. ANCHOR PLATE SHALL BE PLACED ON UPPER CORRUGATION ONLY.

**GUARDRAIL DEPARTING TERMINAL TYPE T**



PREPARED  
BY  
DESIGN DIVISION

DRAWN BY: B.L.T.

CHECKED BY: W.K.P.

DEPARTMENT DIRECTOR  
Kirk T. Steudle

APPROVED BY: \_\_\_\_\_  
DIRECTOR, BUREAU OF FIELD SERVICES

APPROVED BY: \_\_\_\_\_  
DIRECTOR, BUREAU OF DEVELOPMENT

MICHIGAN DEPARTMENT OF TRANSPORTATION  
BUREAU OF DEVELOPMENT STANDARD PLAN FOR

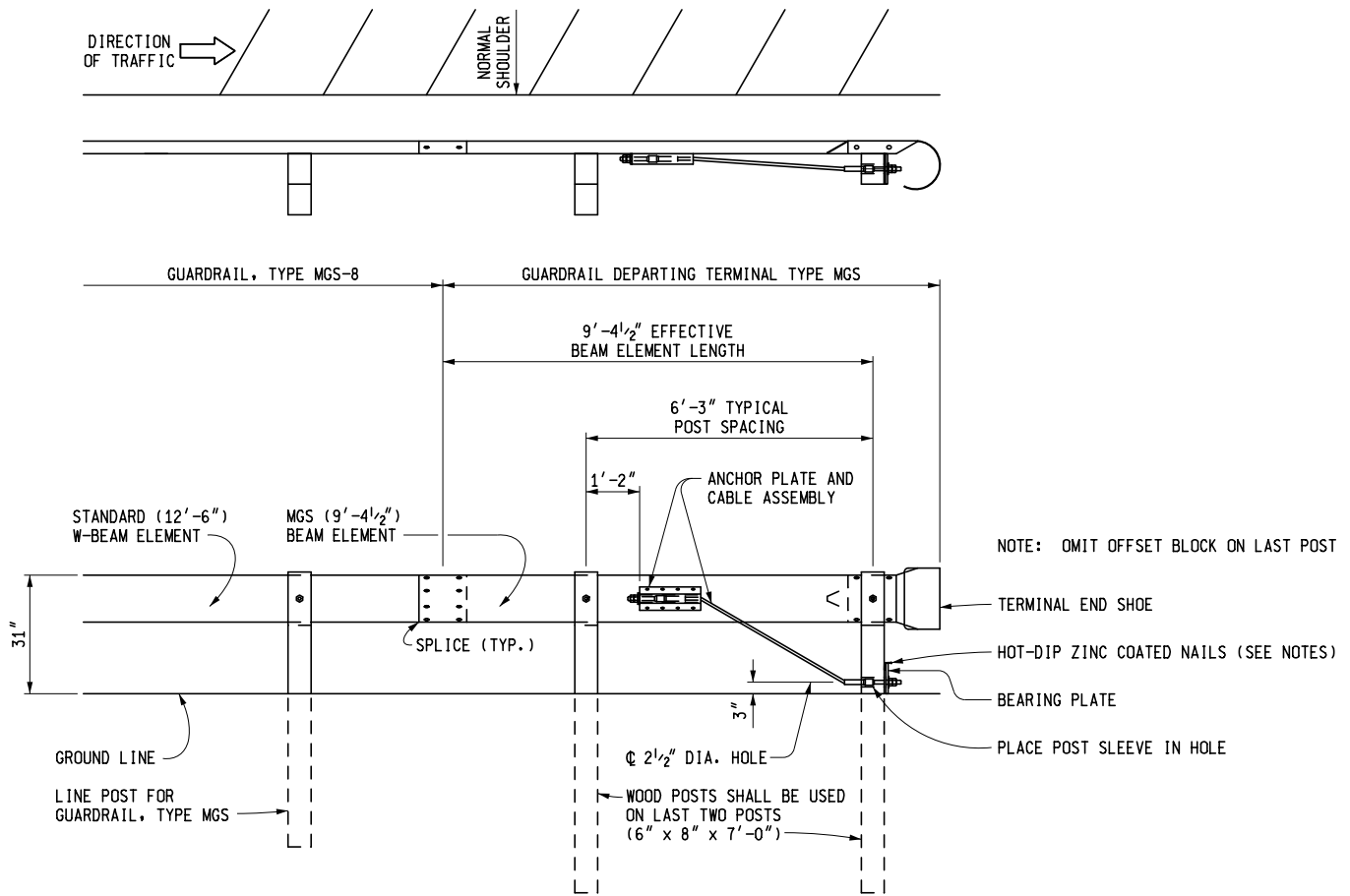
## GUARDRAIL DEPARTING TERMINAL TYPES B, T, & MGS

F.H.W.A. APPROVAL

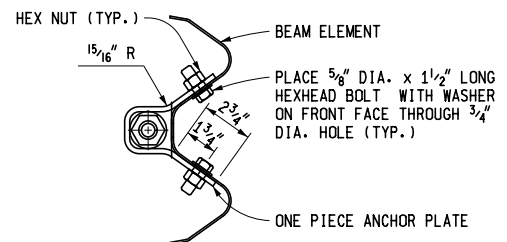
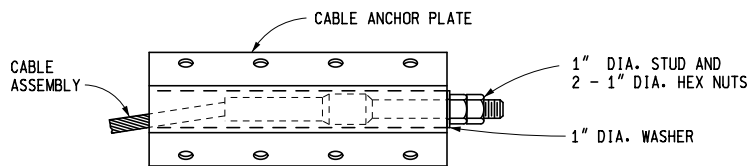
9-28-2018  
PLAN DATE

**R-66-E**

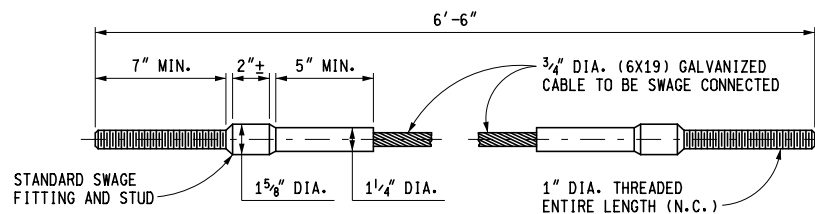
SHEET  
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## GUARDRAIL DEPARTING TERMINAL TYPE MGS



## CABLE ANCHOR PLATE DETAILS



## CABLE ASSEMBLY

MICHIGAN DEPARTMENT OF TRANSPORTATION  
BUREAU OF DEVELOPMENT STANDARD PLAN FOR

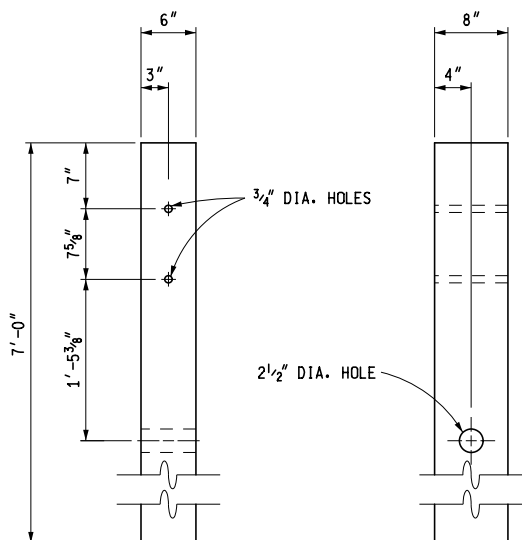
## GUARDRAIL DEPARTING TERMINAL TYPES B, T, & MGS

F.H.W.A. APPROVAL

9-28-2018  
PLAN DATE

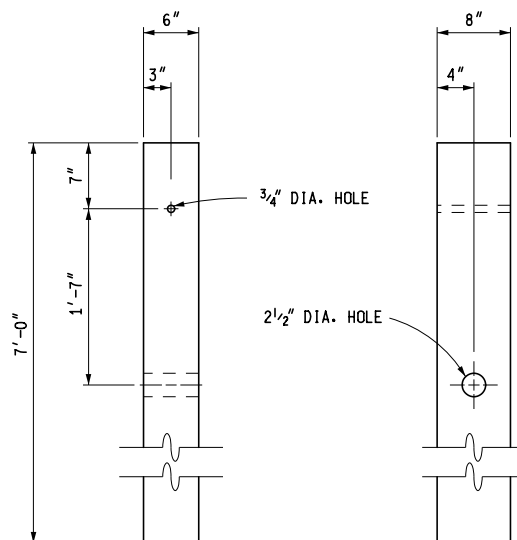
R-66-E

SHEET  
2 OF 4



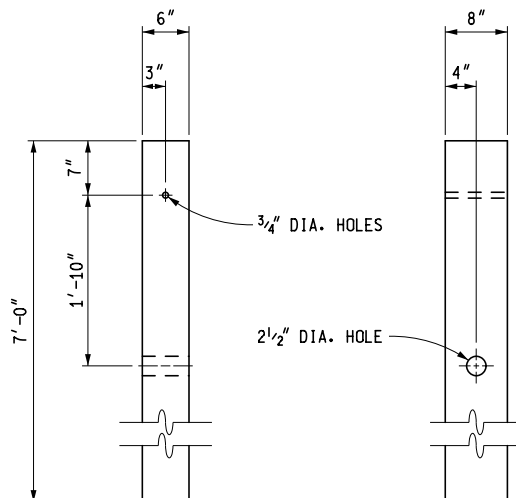
### WOOD POST DETAIL

( FOR LAST POST, GUARDRAIL DEPARTING TERMINAL TYPE T )



### WOOD POST DETAIL

( FOR LAST POST, GUARDRAIL DEPARTING TERMINAL TYPE B )



### WOOD POST DETAIL

( FOR LAST POST, GUARDRAIL DEPARTING TERMINAL TYPE MGS )

MICHIGAN DEPARTMENT OF TRANSPORTATION  
BUREAU OF DEVELOPMENT STANDARD PLAN FOR

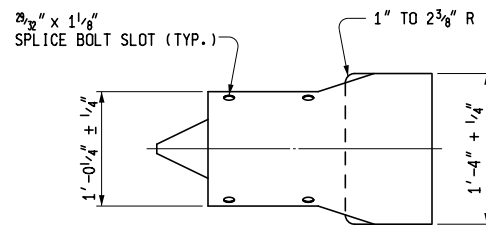
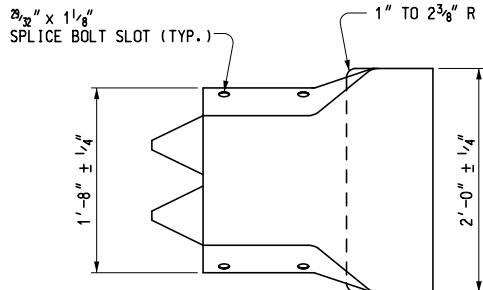
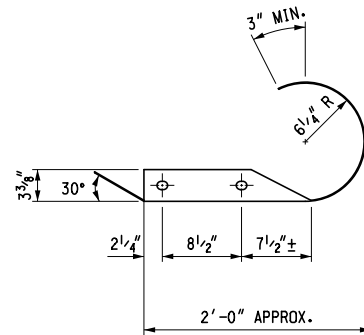
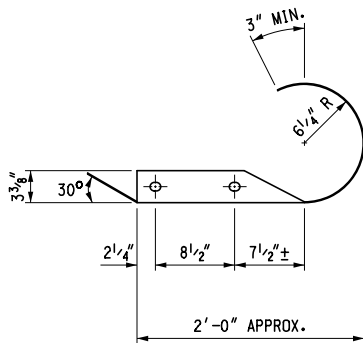
## GUARDRAIL DEPARTING TERMINAL TYPES B, T, & MGS

F.H.W.A. APPROVAL

9-28-2018  
PLAN DATE

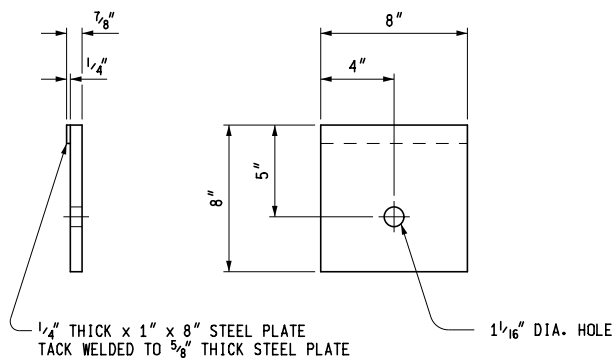
R-66-E

SHEET  
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TERMINAL END SHOE,  
TYPE B OR TYPE MGS

TERMINAL END SHOE, TYPE T



BEARING PLATE



POST SLEEVE

NOTES:

ALL POSTS, OFFSET BLOCKS, BEAM ELEMENTS, AND HARDWARE (INCLUDING BOLTS, NUTS, AND WASHERS) SHALL CONFORM TO THE CURRENT STANDARD SPECIFICATIONS AND TO THE CURRENT STANDARD PLAN R-60-SERIES, WHERE APPLICABLE, EXCEPT AS SPECIFIED ON THIS STANDARD.

ALL 1:10 SLOPES SHALL BE GRADED TO CLASS A SLOPE TOLERANCES.

FOR DETAILS OF GUARDRAIL PLACEMENT, SEE STANDARD PLAN R-59-SERIES.

AFTER THE CABLE ASSEMBLY HAS BEEN TIGHTENED, A SECOND NUT SHALL BE INSTALLED ON EACH END OF THE CABLE SO THAT THE CABLE WILL NOT LOOSEN.

TWO HOT-DIP ZINC COATED NAILS SHALL BE DRIVEN INTO THE WOOD POST AT THE TOP OF THE BEARING PLATE TO KEEP THE BEARING PLATE FROM ROTATING.

MICHIGAN DEPARTMENT OF TRANSPORTATION  
BUREAU OF DEVELOPMENT STANDARD PLAN FOR

GUARDRAIL DEPARTING  
TERMINAL TYPES B, T, & MGS

F.H.W.A. APPROVAL

9-28-2018  
PLAN DATE

R-66-E

SHEET  
4 OF 4