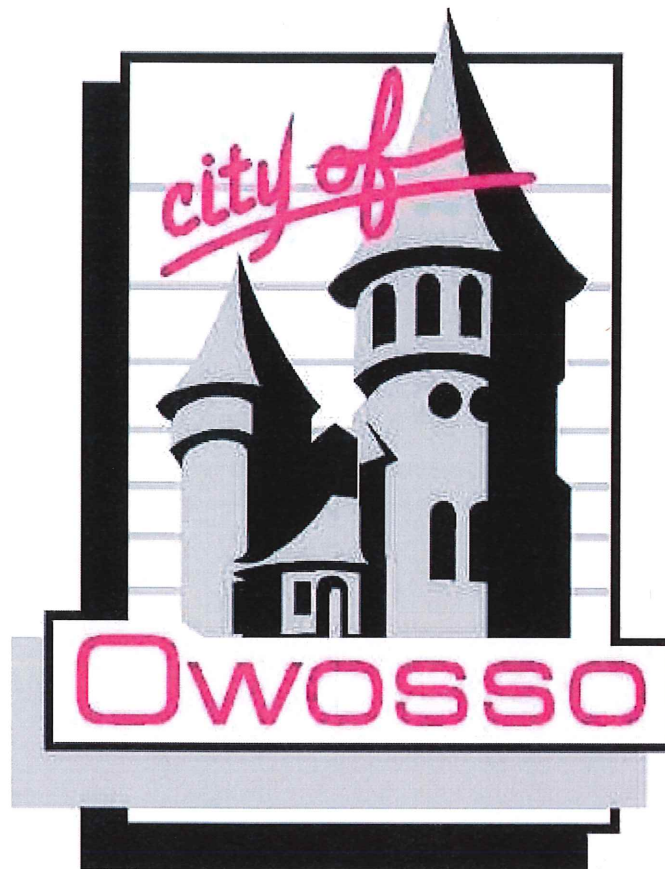


BID DOCUMENTS
FOR
CURWOOD CASTLE PARK RENOVATION PROJECT



CITY OF OWOSSO
301 W. MAIN STREET
OWOSSO, MICHIGAN 48867

July 26, 2017



A handwritten signature in black ink, appearing to read "Geric Rose", located below the professional engineer seal.

NOTICE TO BIDDERS

CURWOOD CASTLE PARK RENOVATION PROJECT FOR THE CITY OF OWOSSO, MICHIGAN

Sealed proposals will be received by the city of Owosso for the CURWOOD CASTLE PARK RENOVATION PROJECT and should be addressed to:

Bid Coordinator
City of Owosso
301 W. Main Street
Owosso, Michigan 48867

Major items include: Sidewalk and pavement improvements at Curwood Castle Park.

Bids will be accepted until **3:00 p.m. Tuesday August 15, 2017** for the **CURWOOD CASTLE PARK RENOVATION PROJECT** at which time bids will be publicly opened and read aloud.

All bids must be in writing and must contain an original signature by an authorized officer of the firm. Electronic bids (i.e., telephonic, fax, email, etc.) are **NOT** acceptable.

The bidder agrees that if the city accepts their proposal, the bidder will, within 10 consecutive calendar days after receiving notice of this acceptance, enter into a contract to furnish all labor, equipment and tools necessary to execute the work at the unit prices named in the bid proposal and will furnish the surety for performance, for one hundred percent (100%) of this bid, which shall be accepted and approved by the city.

All bids shall clearly contain on the outside of the **sealed** envelope in which they are submitted:

CURWOOD CASTLE PARK RENOVATION PROJECT

Hard copies of the proposal, contract forms and specifications are on file and may be obtained for a fee in accordance with the city's FOIA Policy at the office of the Bid Coordinator, City Hall, 301 West Main Street, Owosso, Michigan 48867. Bid documents are available at no charge on our website at www.ci.owosso.mi.us or on the MITN website at www.mitn.info.

The city reserves the right to accept any proposal; or to reject any proposal; to waive irregularities in a proposal; or to negotiate if it appears to be in the best interest of the city of Owosso.

No work can begin before August 28, 2017 and all work is to be completed by October 13, 2017.

INQUIRIES/ADDENDUMS

Addendums will be available on the city's website at www.ci.owosso.mi.us and on the MITN website at www.mitn.info.

All inquiries regarding this bid request must be received at least five (5) calendar days prior to the submission and shall be received in, and responded to, in writing, or via FAX at 989-723-8854 or by e-mail to jane.hunt@ci.owosso.mi.us,

INSTRUCTIONS TO BIDDERS

1. Each proposal must be signed by the bidder with his usual signature. Bids by partnerships should be signed with the partnership name by one of the members of the partnership or by an authorized representative, followed by the signature and title of the person signing. Proposals by corporations must be signed with the name of the corporation, followed by the signature and designation of the president, vice-president or person authorized to bind it in the matter. **Any paperwork not filled out properly or signed will cause the bid to be considered non-responsive and shall be rejected by the city.**
2. Proposals, to receive consideration, must be received prior to the specified time of opening and reading as designated in the invitation.
3. Bidders are requested to use the proposal form furnished by the city when submitting their proposals. Envelopes must be **sealed** when submitted and clearly marked on the outside indicating the name of the bid.
4. Proposals having and erasures or corrections thereon may be rejected unless explained or noted over the signature of the bidder.
5. References in the specifications or description of materials, supplies, equipment, or services to a particular trade name, manufacturer's catalog, or model number are made for descriptive purposes to guide the bidder in interpreting the type of materials or supplies, equipment, or nature of the work desired. They should not be construed as excluding proposals on equivalent types of materials, supplies, and equipment or for performing the work in a manner other than specified. However, the bidders' attention is called to General Condition seven (7).
6. Proposals should be mailed or delivered to: Bid Coordinator's Office, City Hall, 301 W. Main Street, Owosso, MI 48867.
7. Special conditions included in this inquiry shall take precedence over any conditions listed under General Conditions or Instructions to Bidders.
8. Insurance coverage – The winning bidder, prior to execution of the contract, shall file with the city copies of completed certificates of insurance naming the city of Owosso as an additional insured party, as evidence that the contractor carries adequate insurance satisfactory to the city.
9. State or federal funds are being used to assist in construction and relevant state or federal requirements will apply.
10. **The following items must be included with the bid response:**
 - a. **Vendor Proposal**
 - b. **W-9 Request for Taxpayer ID No. and Certification**
 - c. **Signature Page & Legal Status/ Acknowledgement of Addendum(s)**
 - d. **Insurance Endorsement**

BID Proposal

CURWOOD CASTLE PARK RENOVATION PROJECT (RECREATION PASSPORT GRANT)

TO: THE CITY OF OWOSSO (HEREINAFTER CALLED THE "CITY")

Bidder must provide pricing for each item listed. If additional pricing elements are being offered by the bidder, they are to be listed under "other services/items offered."

The undersigned, having examined the bid proposal forms and specifications, does hereby offer to Curwood Castle Park Renovation Project from **August 28, 2017** through **October 13, 2017** listed below at the following prices to wit:

Item	Description	Approx. Quantity	Unit	Unit Price 2017	Total 2017
1	Mobilization, Max \$4,050.00	1	LSUM		
2	Curb and Gutter, Rem	150	Ft		
3	Pavt, Rem	50	Syd		
4	Sidewalk, Rem	600	Syd		
5	Excavation, Earth	180	Cyd		
6	Subgrade Undercutting, Type II	20	Cyd		
7	Erosion Control, Inlet Protection, Fabric Drop	3	Ea		
8	Aggregate Base, 6 inch, Modified	270	Syd		
9	Subbase, CIP, 12 inch	270	Syd		
10	Geotextile, Separator	270	Syd		

Bidder's Initial _____

Item	Description	Approx. Quantity	Unit	Unit Price 2017	Total 2017
11	Sewer, SDR-26, 12 inch, Tr Det B, Modified	158	Ft		
12	Cap, 12 inch	1	Ea		
13	Dr Structure, Tap, 12 inch	1	Ea		
14	Dr Structure Cover, EJ 7000	2	Ea		
15	Dr Structure, 48 inch dia, Modified	2	Ea		
16	HMA, 13A	65	Ton		
17	Curb and Gutter, Conc, Det F4	170	Ft		
18	Sidewalk, Conc, 4 inch, Modified	6,500	Sft		
19	Sidewalk Ramp, Conc, 4 inch, Modified	150	Sft		
20	Detectable Warning Surface	6	Ft		
21	Remove and Reinstall Commemorative Brick Pavers	1	LSUM		
22	Barricade, Type III, High Intensity, Double Sided, Furn & Oper	4	Ea		
23	Pedestrian Type II Barricade, Temp	6	Ea		
24	Plastic Drum, High Intensity, Furn & Oper	10	Ea		

Bidder's Initial _____

Item	Description	Approx. Quantity	Unit	Unit Price 2017	Total 2017
25	Sign, Type B, Temp, Prismatic, Furn & Oper	12	Sft		
26	Pavement Markings	1	LSUM		
27	Turf Establishment, Performance	400	Syd		

Bidder's Initial _____

Total Bid:

_____ (use words)

\$ _____ (use figures)

VARIANCE FROM SPECIFICATIONS: If the bidder is unable to comply with the specifications as outlined, the bidder shall clearly note these variations from the specifications. The bidder may also propose additions to these specifications for the city to consider, but the costs associated with these additions shall be stated separately.

If the work is not complete on or before the date set for completion or any extension, the Contractor shall pay the city liquidated damages of **five hundred dollars (\$500.00)** a calendar day until the work is satisfactorily completed. Liquidated damages for delay may be deducted from payments due the contractor or may be collected from the Contractor or the Contractor's surety.

The undersigned agrees that if the city accepts this proposal, Contractor will, within 10 consecutive calendar days after receiving notice of this acceptance, enter into a contract to furnish all labor, equipment and tools necessary to execute the work at the unit prices named in the bid proposal. Contractor will furnish the surety for performance, for 100% of this bid, which shall be accepted and approved by the city.

The undersigned agrees that if the city accepts this proposal, Contractor will start this project no sooner than **August 28, 2017** and will substantially complete the entire work under this contract by **October 13, 2017**. This schedule may be extended for rain days or cold weather for calendar days after **October 13, 2017**, only as approved by the city of Owosso.

On behalf of _____, I hereby submit this proposal for **Curwood Castle Park Renovation Project** for your consideration. The undersigned acknowledges that this proposal is subject to the General Conditions and the General Specifications included in the contract documents. In submitting this proposal, it is understood that the right is reserved by the CITY to reject any and all proposals, and waive any irregularities in the bidding process. The CITY may award this contract based on any combination of the total bid and/or alternates.

Dated and signed at _____ State of _____

This _____ day of _____, 20____.

Bidder

Witness:

By/s/

Business Address

Signature

Printed Name

Title

Telephone Number

E-Mail Address

GENERAL CONDITIONS

1. BID ACCEPTANCE

The city reserves the right to reject any or all proposals. Unless otherwise specified, the city reserves the right to accept any item in the proposal. In case of error in extending the total amount of the bid, the unit prices shall govern.

2. PAYMENT

Unless otherwise stated by the bidder, time, concerning discount offered, will be computed from date of delivery and acceptance at destination or from date correct bill or claim voucher properly certified by the contractor is received. When so stated herein, partial payments, based on a certified approved estimate by the city of materials, supplies or equipment delivered or work done, may be made upon presentation of a properly-executed claim voucher. The final payment will be made by the city when materials, supplies, equipment or the work done have been fully delivered or completed to the full satisfaction of the city.

3. BID DEFAULT

In case of default by the bidder or contractor, the city of Owosso may procure the articles or services from other sources and hold the bidder or contractor responsible for any excess cost occasioned thereby.

4. UNIT PRICES

Prices should be stated in units of quantity specified.

5. QUOTED PRICES

Unless otherwise stated by the bidder, prices quoted will be considered as being based on delivery to a designated destination and to include all charges for packing, crating, containers, shipping, etc., and being in strict accordance with specifications and standards as shown.

6. SUBSTITUTIONS

Wherever a reference is made in the specifications or description of the materials, supplies, equipment, or services required, to a particular trade name, manufacturer's catalog, or model number, the bidder, if awarded a contract or order, will be required to furnish the particular item referred to in strict accordance with the specifications or description unless a departure or substitution is clearly noted and described in the proposal.

7. HOLD CITY HARMLESS

The bidder, if awarded an order or contract, agrees to protect, defend, and save the city harmless against any demand for payment for the use of any patented material, process, article, or device that may enter into the manufacture, construction, or form a part of the work covered by either order or contract. Bidder further agrees to indemnify and save the city harmless from suits or action of every nature and description brought against it, for or on account of any injuries or damages received or sustained by any party or parties, by or from any of the acts of the contractor, his employees, subcontractors, or agents.

8. COMPETITIVE BIDDING STATUTES

The laws of the state of Michigan, the charter and ordinances of the city of Owosso, as far as they apply to the laws of competitive bidding, contracts and purchases, are made a part hereof.

9. SAMPLES

Samples, when requested, must be furnished free of expense to the city and, if not destroyed, will upon request be returned at the bidders expense.

10. BONDS

A certified check or bid bond may be required, payable to the City of Owosso. If so required in the bid documents, a performance bond and labor and material bond in the amounts stated in the bid documents, shall be on file with the city before work commences. The city will determine the amount and sufficiency of the sureties.

11. PROPOSAL GUARANTEE

All checks or bid bonds, except those of the three lowest bidders, will be returned when the bids have been opened and tabulated. The certified checks or bid bonds of the three lowest bidders will be held until the contract documents have been signed, after which remaining certified checks or bid bonds will be returned to the respective bidders.

12. BIDDERS

The city may demand that the contractor file a sworn experience and financial statement setting forth the financial resources, adequacy of plant and equipment, organization, experience and other pertinent and material facts as may be desirable.

13. DAMAGE LIABILITY AND INSURANCE

The contractor shall save harmless and indemnify the city and its employees against all claims for damages to public or private property and for injuries to persons arising during the progress and because of the work.

- a. Workers' compensation insurance - The contractor, before the execution of the contract, shall file a certification that the contractor carries workers' compensation insurance.
- b. Bodily injury and property damage - The contractor, before execution of the contract, shall file with the city copies of completed certificates, of insurance acceptable to the city naming the city as an insured party. The coverage shall afford protection against damage claims to public or private property, and injuries to persons, arising out of and during the progress of the work, and to its completion and, where specified in the proposal, similar insurance to protect the owners of premises on or near which construction operations take place.
- c. Bodily injury and property damages other than automobile - Unless otherwise specifically required by special provisions in the proposal, the minimum limits of property damage and bodily injury liability covering each contract shall be:

Bodily injury and property damage liability:

Each occurrence: \$1,000,000

Aggregate: \$2,000,000

Such insurance shall include, but not be limited to, coverage for: a) underground damage to facilities due to drilling and excavating with mechanical equipment and b) collapse or structural injury to structures due to blasting or explosion, excavation, tunneling, pile driving, cofferdam work, or building moving or demolition.

- d. Owners' protective liability - Bodily injury and property damage protection shall be extended to the city.
- e. Bodily injury liability and property damage liability automobiles - Unless otherwise specifically required by special provisions in the proposal, the minimum limits of bodily injury liability and property damage liability shall be:

Bodily injury liability:

Each person: \$ 500,000

Each occurrence: \$1,000,000

Property damage liability:

Each occurrence: \$1,000,000

Combined single limit for bodily injury and property damage liability:

Each occurrence: \$2,000,000

- f. Notice - The contractor shall not cancel or reduce the coverage of any insurance required by this section without providing 30-day prior written notice to the city. All such insurance must include an endorsement under which the insurer shall agree to notify the city immediately of any reduction by the contractor. The contractor shall cease operations on the occurrence of any such cancellation or reduction, and shall not resume operations until new insurance is in force.
- g. Reports - At the request of the city, the contractor or the contractor's insurance carrier shall report claims received, inspections made, and disposition of claims.

14. PROTECTION OF LAND MONUMENTS AND PROPERTY STAKES

Land monuments or stakes marking property corners shall not be moved or otherwise disturbed except as directed by the city. If any land monuments or lot stakes are moved or disturbed by the contractor, the cost of replacing each land monument or lot stake so moved or disturbed shall be deducted from any money due the contractor, as payment to the city for the cost of replacing said land monument or lot stakes.

15. CONTRACTOR'S RESPONSIBILITY FOR WORK

The contractor shall be responsible for any damages that the work may sustain before its acceptance, and shall rebuild, repair, restore and make good, at its own expense, all injuries and damages to any portion of the work by the action of the elements or from any cause whatsoever before its acceptance. Neither the final payment nor any provision in the contract documents shall relieve the contractor of the responsibility for negligence or faulty materials or workmanship within the extent and period provided by law, and, upon written notice, the contractor shall remove any defects due therefrom and pay for any damaged due to other work resulting therefrom, which shall appear within one year after the date of completion and acceptance.

16. PAYMENT

At monthly intervals commencing after construction has been started, the city will make partial payment to the contractor based on a duly-certified estimate prepared by the city of the work done by the contractor during the preceding four-week period. Each estimate will be submitted to the city council for approval on either the first or third Monday of each month. The city will retain ten percent (10%) of the amount of each such estimate until final completion and acceptance of all work covered by this contract.

Before the contractor shall demand final estimates or payment, contractor will furnish to the city, supported by sworn statements, satisfactory evidence that all persons that have supplied labor, materials, or equipment for the work embraced under this contract have been fully paid for the same; and that, in case such evidence be not furnished as aforesaid, such sums as the city may deem necessary to meet the lawful claims of such persons may be retained by the city from any monies that may be due or become due to the contractor under this contract until such liabilities shall be fully discharged and the evidence thereof be furnished to the city.

17. CITY'S RIGHT TO WITHHOLD CERTAIN AMOUNTS AND MAKE APPLICATION THEREOF

Besides the payment to be retained by the city under the preceding provisions of these general conditions, the city may withhold a sufficient amount of any payment otherwise due to the contractor to cover a) payments earned or due for just claims for furnish labor or materials on the project under this contract, b) for defective work not remedied and c) for failure of the contractor to make proper payments to subcontractors. The city shall disburse and shall have the right to act as agent for the contractor in

disbursing such funds as have been previously withheld pursuant to this paragraph to the party or parties who are entitled to payment from it. The city will pay to the contractor a proper accounting of all such funds disbursed for the contractor.

18. OWNER'S RIGHT TO DO WORK

If the contractor should neglect to prosecute the work properly or fail to perform any provisions of this contract, the city, after three (3) days' written notice to the contractor and contractor's surety, may without prejudice to any other remedy he may have, make good such deficiencies and may deduct the cost of it from the payment due the contractor.

19. DEFINITION OF NOTICE

Where in any of the contract documents there is any provision in respect to the giving of notice, such notice shall be deemed given to the owner, when written notice is delivered to the city manager, or placed in the United States mail addressed to the city clerk; as to the contractor, when a written notice shall be delivered to contractor's representative at the project site or by mailing such written notice in the United States mail addressed to the contractor at the place stated in the bid proposal as the business address; as to the surety on the performance bond, when a written notice is placed in the United States mail addressed to the surety at the surety's home office or to its agent or agents who executed such performance bond on behalf of the surety.

20. SUBCONTRACTS

The contractor shall not subcontract any work in the execution of this contract without the written consent of the city. The contractor shall be responsible for the acts or omissions of any subcontractor and of anyone employed directly or indirectly by such subcontractor.

21. ASSIGNMENT OF CONTRACT

The contractor shall not assign this contract or any part hereof without the written consent of the city. No assignment shall be valid unless it shall contain a provision that any funds to be paid to the assignee under this agreement are subject to a prior lien for services rendered or materials or supplies for the performance of the work specified in the contract in favor of all persons, firms, or corporations rendering such services or supplying such materials.

22. MAINTAINING TRAFFIC

The contractor shall provide flares, signs, barricades, traffic regulators, etc., to conform to the current *Michigan Manual of Uniform Traffic Control Devices* or as directed by the city. The contractor shall not close any road or street without the permission of the city. If any street or road is to be closed by the contractor, it shall be the responsibility of the contractor to notify the Owosso fire department when the street will be closed and again when the street is open to traffic. Traffic control devices for any detours deemed necessary by the city shall be provided by the contractor. Cost of maintaining shall be incidental to the cost of the project unless otherwise provided.

23. ORDER OF COMPLETION

The contractor shall submit, whenever requested by the city, a schedule of the work showing completion dates. The city may request that certain portions of the work be done before other portions. If so requested, the contractor shall arrange to schedule to meet the request by the owner.

24. USE OF COMPLETED PORTIONS

The city shall have the right to take possession and use any completed or partially completed portions of the work; but such taking possession and use shall not be deemed acceptance. Pending final completion and acceptance of the work, all necessary repairs and adjustments on any section of the work due to defective material, workmanship, natural causes, or other operations of the contractor, other than normal wear and tear, shall be done by and at the expense of the contractor.

25. WATER SUPPLY

The contractor shall secure an adequate water supply for use in construction and for drinking water for his employees. If the city's water is used on the work, the contractor shall make the necessary application and shall pay all costs involved. Connections, piping and fittings for conveying water shall be furnished and maintained by the contractor. Contractor shall pay for water according to the city's established rates.

26. CLEANUP

The contractor shall keep the project free from waste materials or rubbish caused by its employees or work. This includes as a minimum excess excavation or backfill material, broken or rejected materials, empty containers or general debris. The owner may require complete cleanup of certain areas as construction is completed.

27. SUPERVISION

The contractor shall have a superintendent on the job site to coordinate and expedite the various construction activities for the duration of this contract.

28. EQUAL EMPLOYMENT OPPORTUNITY AND OTHER CLAUSES

The contractor shall agree not to discriminate against any employee or applicant for employment because of age, race, religion, color, handicap, sex, physical condition, developmental disability as defined by Michigan Compiled Statutes, or national origin. This provision shall include but not be limited to the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rate of pay or other forms of compensation, and selection for training including apprenticeship. The contractor further agrees to take affirmative action to ensure equal employment opportunities for persons with disabilities. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provision of the non-discrimination clause.

SIGNATURE PAGE AND LEGAL STATUS

The undersigned certifies that he is an official legally authorized to bind his firm and to enter into a contract should the city accept this proposal.

Bid proposal by _____
(Name of Firm)

Legal status of bidder. Please check the appropriate box and **USE CORRECT LEGAL NAME.**

A. Corporation ____ ; State of Incorporation _____

B. Partnership ____ ; List of names _____

C. DBA ____ ; State full name _____ DBA

D. Other ____ ; Explain _____

Signature of Bidder _____ Title _____
(Authorized Signature)

Printed name _____

Signature of Bidder _____ Title _____
(Authorized Signature)

Printed name _____

Address _____ City _____ Zip _____

Telephone () _____

Signed this _____ day of _____ 20____.

Bidder acknowledges receipt of the following Addenda:

ADDENDUM NO.	BIDDER'S INITIALS
_____	_____
_____	_____
_____	_____

W-9 INFORMATION FOR LEGAL STATUS

Sole proprietor. Enter your individual name as shown on your income tax return on the "Name" line. You may enter your business, trade, or "doing business as (DBA)" name on the "Business name/disregarded entity name" line.

Partnership, C Corporation, or S Corporation. Enter the entity's name on the "Name" line and any business, trade, or "doing business as (DBA) name" on the "Business name/disregarded entity name" line.

Disregarded entity. Enter the owner's name on the "Name" line. The name of the entity entered on the "Name" line should never be a disregarded entity. The name on the "Name" line must be the name shown on the income tax return on which the income will be reported. For example, if a foreign LLC that is treated as a disregarded entity for U.S. federal tax purposes has a domestic owner, the domestic owner's name is required to be provided on the "Name" line. If the direct owner of the entity is also a disregarded entity, enter the first owner that is not disregarded for federal tax purposes. Enter the disregarded entity's name on the "Business name/disregarded entity name" line. If the owner of the disregarded entity is a foreign person, you must complete an appropriate Form W-8.

Note. Check the appropriate box for the federal tax classification of the person whose name is entered on the "Name" line (Individual/sole proprietor, Partnership, C Corporation, S Corporation, Trust/estate).

Limited Liability Company (LLC). If the person identified on the "Name" line is an LLC, check the "Limited liability company" box only and enter the appropriate code for the tax classification in the space provided. If you are an LLC that is treated as a partnership for federal tax purposes, enter "P" for partnership. If you are an LLC that has filed a Form 8832 or a Form 2553 to be taxed as a corporation, enter "C" for C corporation or "S" for S corporation. If you are an LLC that is disregarded as an entity separate from its owner under Regulation section 301.7701-3 (except for employment and excise tax), do not check the LLC box unless the owner of the LLC (required to be identified on the "Name" line) is another LLC that is not disregarded for federal tax purposes. If the LLC is disregarded as an entity separate from its owner, enter the appropriate tax classification of the owner identified on the "Name" line.

Other entities. Enter your business name as shown on required federal tax documents on the "Name" line. This name should match the name shown on the charter or other legal document creating the entity. You may enter any business, trade, or DBA name on the "Business name/disregarded entity name" line.

Please see attached W-9 Request for Taxpayer Identification Number and Certification form for a detailed explanation on filling out the W-9 form.

Request for Taxpayer Identification Number and Certification

**Give Form to the
requester. Do not
send to the IRS.**

Print or type See Specific Instructions on page 2.	1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.	
	2 Business name/disregarded entity name, if different from above	
	3 Check appropriate box for federal tax classification; check only one of the following seven boxes: <input type="checkbox"/> Individual/sole proprietor or single-member LLC <input type="checkbox"/> Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=partnership) ▶ _____ Note. For a single-member LLC that is disregarded, do not check LLC; check the appropriate box in the line above for the tax classification of the single-member owner. <input type="checkbox"/> Other (see instructions) ▶ _____	4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3): Exempt payee code (if any) _____ Exemption from FATCA reporting code (if any) _____ <i>(Applies to accounts maintained outside the U.S.)</i>
	5 Address (number, street, and apt. or suite no.)	Requester's name and address (optional)
	6 City, state, and ZIP code	
	7 List account number(s) here (optional)	

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN* on page 3.

Note. If the account is in more than one name, see the instructions for line 1 and the chart on page 4 for guidelines on whose number to enter.

Social security number									
				-			-		
OR									
Employer identification number									
				-					

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
3. I am a U.S. citizen or other U.S. person (defined below); and
4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions on page 3.

Sign Here	Signature of U.S. person ▶	Date ▶
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General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.
Future developments. Information about developments affecting Form W-9 (such as legislation enacted after we release it) is at www.irs.gov/fw9.

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following:

- Form 1099-INT (interest earned or paid)
- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)
- Form 1099-K (merchant card and third party network transactions)

- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
 - Form 1099-C (canceled debt)
 - Form 1099-A (acquisition or abandonment of secured property)
- Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.
- If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding? on page 2.*
- By signing the filled-out form, you:
1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
 2. Certify that you are not subject to backup withholding, or
 3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income, and
 4. Certify that FATCA code(s) entered on this form (if any) indicating that you are exempt from the FATCA reporting, is correct. See *What is FATCA reporting?* on page 2 for further information.

Note. If you are a U.S. person and a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

Definition of a U.S. person. For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien;
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States;
- An estate (other than a foreign estate); or
- A domestic trust (as defined in Regulations section 301.7701-7).

Special rules for partnerships. Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax under section 1446 on any foreign partners' share of effectively connected taxable income from such business. Further, in certain cases where a Form W-9 has not been received, the rules under section 1446 require a partnership to presume that a partner is a foreign person, and pay the section 1446 withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid section 1446 withholding on your share of partnership income.

In the cases below, the following person must give Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States:

- In the case of a disregarded entity with a U.S. owner, the U.S. owner of the disregarded entity and not the entity;
- In the case of a grantor trust with a U.S. grantor or other U.S. owner, generally, the U.S. grantor or other U.S. owner of the grantor trust and not the trust; and
- In the case of a U.S. trust (other than a grantor trust), the U.S. trust (other than a grantor trust) and not the beneficiaries of the trust.

Foreign person. If you are a foreign person or the U.S. branch of a foreign bank that has elected to be treated as a U.S. person, do not use Form W-9. Instead, use the appropriate Form W-8 or Form 8233 (see Publication 515, Withholding of Tax on Nonresident Aliens and Foreign Entities).

Nonresident alien who becomes a resident alien. Generally, only a nonresident alien individual may use the terms of a tax treaty to reduce or eliminate U.S. tax on certain types of income. However, most tax treaties contain a provision known as a "saving clause." Exceptions specified in the saving clause may permit an exemption from tax to continue for certain types of income even after the payee has otherwise become a U.S. resident alien for tax purposes.

If you are a U.S. resident alien who is relying on an exception contained in the saving clause of a tax treaty to claim an exemption from U.S. tax on certain types of income, you must attach a statement to Form W-9 that specifies the following five items:

1. The treaty country. Generally, this must be the same treaty under which you claimed exemption from tax as a nonresident alien.
2. The treaty article addressing the income.
3. The article number (or location) in the tax treaty that contains the saving clause and its exceptions.
4. The type and amount of income that qualifies for the exemption from tax.
5. Sufficient facts to justify the exemption from tax under the terms of the treaty article.

Example. Article 20 of the U.S.-China income tax treaty allows an exemption from tax for scholarship income received by a Chinese student temporarily present in the United States. Under U.S. law, this student will become a resident alien for tax purposes if his or her stay in the United States exceeds 5 calendar years. However, paragraph 2 of the first Protocol to the U.S.-China treaty (dated April 30, 1984) allows the provisions of Article 20 to continue to apply even after the Chinese student becomes a resident alien of the United States. A Chinese student who qualifies for this exception (under paragraph 2 of the first protocol) and is relying on this exception to claim an exemption from tax on his or her scholarship or fellowship income would attach to Form W-9 a statement that includes the information described above to support that exemption.

If you are a nonresident alien or a foreign entity, give the requester the appropriate completed Form W-8 or Form 8233.

Backup Withholding

What is backup withholding? Persons making certain payments to you must under certain conditions withhold and pay to the IRS 28% of such payments. This is called "backup withholding." Payments that may be subject to backup withholding include interest, tax-exempt interest, dividends, broker and barter exchange transactions, rents, royalties, nonemployee pay, payments made in settlement of payment card and third party network transactions, and certain payments from fishing boat operators. Real estate transactions are not subject to backup withholding.

You will not be subject to backup withholding on payments you receive if you give the requester your correct TIN, make the proper certifications, and report all your taxable interest and dividends on your tax return.

Payments you receive will be subject to backup withholding if:

1. You do not furnish your TIN to the requester,
2. You do not certify your TIN when required (see the Part II instructions on page 3 for details),

3. The IRS tells the requester that you furnished an incorrect TIN,

4. The IRS tells you that you are subject to backup withholding because you did not report all your interest and dividends on your tax return (for reportable interest and dividends only), or

5. You do not certify to the requester that you are not subject to backup withholding under 4 above (for reportable interest and dividend accounts opened after 1983 only).

Certain payees and payments are exempt from backup withholding. See *Exempt payee code* on page 3 and the separate Instructions for the Requester of Form W-9 for more information.

Also see *Special rules for partnerships* above.

What is FATCA reporting?

The Foreign Account Tax Compliance Act (FATCA) requires a participating foreign financial institution to report all United States account holders that are specified United States persons. Certain payees are exempt from FATCA reporting. See *Exemption from FATCA reporting code* on page 3 and the Instructions for the Requester of Form W-9 for more information.

Updating Your Information

You must provide updated information to any person to whom you claimed to be an exempt payee if you are no longer an exempt payee and anticipate receiving reportable payments in the future from this person. For example, you may need to provide updated information if you are a C corporation that elects to be an S corporation, or if you no longer are tax exempt. In addition, you must furnish a new Form W-9 if the name or TIN changes for the account; for example, if the grantor of a grantor trust dies.

Penalties

Failure to furnish TIN. If you fail to furnish your correct TIN to a requester, you are subject to a penalty of \$50 for each such failure unless your failure is due to reasonable cause and not to willful neglect.

Civil penalty for false information with respect to withholding. If you make a false statement with no reasonable basis that results in no backup withholding, you are subject to a \$500 penalty.

Criminal penalty for falsifying information. Willfully falsifying certifications or affirmations may subject you to criminal penalties including fines and/or imprisonment.

Misuse of TINs. If the requester discloses or uses TINs in violation of federal law, the requester may be subject to civil and criminal penalties.

Specific Instructions

Line 1

You must enter one of the following on this line; **do not** leave this line blank. The name should match the name on your tax return.

If this Form W-9 is for a joint account, list first, and then circle, the name of the person or entity whose number you entered in Part I of Form W-9.

a. **Individual.** Generally, enter the name shown on your tax return. If you have changed your last name without informing the Social Security Administration (SSA) of the name change, enter your first name, the last name as shown on your social security card, and your new last name.

Note. ITIN applicant: Enter your individual name as it was entered on your Form W-7 application, line 1a. This should also be the same as the name you entered on the Form 1040/1040A/1040EZ you filed with your application.

b. **Sole proprietor or single-member LLC.** Enter your individual name as shown on your 1040/1040A/1040EZ on line 1. You may enter your business, trade, or "doing business as" (DBA) name on line 2.

c. **Partnership, LLC that is not a single-member LLC, C Corporation, or S Corporation.** Enter the entity's name as shown on the entity's tax return on line 1 and any business, trade, or DBA name on line 2.

d. **Other entities.** Enter your name as shown on required U.S. federal tax documents on line 1. This name should match the name shown on the charter or other legal document creating the entity. You may enter any business, trade, or DBA name on line 2.

e. **Disregarded entity.** For U.S. federal tax purposes, an entity that is disregarded as an entity separate from its owner is treated as a "disregarded entity." See Regulations section 301.7701-2(c)(2)(iii). Enter the owner's name on line 1. The name of the entity entered on line 1 should never be a disregarded entity. The name on line 1 should be the name shown on the income tax return on which the income should be reported. For example, if a foreign LLC that is treated as a disregarded entity for U.S. federal tax purposes has a single owner that is a U.S. person, the U.S. owner's name is required to be provided on line 1. If the direct owner of the entity is also a disregarded entity, enter the first owner that is not disregarded for federal tax purposes. Enter the disregarded entity's name on line 2, "Business name/disregarded entity name." If the owner of the disregarded entity is a foreign person, the owner must complete an appropriate Form W-8 instead of a Form W-9. This is the case even if the foreign person has a U.S. TIN.

Line 2

If you have a business name, trade name, DBA name, or disregarded entity name, you may enter it on line 2.

Line 3

Check the appropriate box in line 3 for the U.S. federal tax classification of the person whose name is entered on line 1. Check only one box in line 3.

Limited Liability Company (LLC). If the name on line 1 is an LLC treated as a partnership for U.S. federal tax purposes, check the "Limited Liability Company" box and enter "P" in the space provided. If the LLC has filed Form 8832 or 2553 to be taxed as a corporation, check the "Limited Liability Company" box and in the space provided enter "C" for C corporation or "S" for S corporation. If it is a single-member LLC that is a disregarded entity, do not check the "Limited Liability Company" box; instead check the first box in line 3 "Individual/sole proprietor or single-member LLC."

Line 4, Exemptions

If you are exempt from backup withholding and/or FATCA reporting, enter in the appropriate space in line 4 any code(s) that may apply to you.

Exempt payee code.

- Generally, individuals (including sole proprietors) are not exempt from backup withholding.
- Except as provided below, corporations are exempt from backup withholding for certain payments, including interest and dividends.
- Corporations are not exempt from backup withholding for payments made in settlement of payment card or third party network transactions.
- Corporations are not exempt from backup withholding with respect to attorneys' fees or gross proceeds paid to attorneys, and corporations that provide medical or health care services are not exempt with respect to payments reportable on Form 1099-MISC.

The following codes identify payees that are exempt from backup withholding. Enter the appropriate code in the space in line 4.

- 1—An organization exempt from tax under section 501(a), any IRA, or a custodial account under section 403(b)(7) if the account satisfies the requirements of section 401(f)(2)
- 2—The United States or any of its agencies or instrumentalities
- 3—A state, the District of Columbia, a U.S. commonwealth or possession, or any of their political subdivisions or instrumentalities
- 4—A foreign government or any of its political subdivisions, agencies, or instrumentalities
- 5—A corporation
- 6—A dealer in securities or commodities required to register in the United States, the District of Columbia, or a U.S. commonwealth or possession
- 7—A futures commission merchant registered with the Commodity Futures Trading Commission
- 8—A real estate investment trust
- 9—An entity registered at all times during the tax year under the Investment Company Act of 1940
- 10—A common trust fund operated by a bank under section 584(a) 11— A financial institution
- 12—A middleman known in the investment community as a nominee or custodian
- 13—A trust exempt from tax under section 664 or described in section 4947

The following chart shows types of payments that may be exempt from backup withholding. The chart applies to the exempt payees listed above, 1 through 13.

IF the payment is for . . .	THEN the payment is exempt for . . .
Interest and dividend payments	All exempt payees except for 7
Broker transactions	Exempt payees 1 through 4 and 6 through 11 and all C corporations. S corporations must not enter an exempt payee code because they are exempt only for sales of noncovered securities acquired prior to 2012.
Barter exchange transactions and patronage dividends	Exempt payees 1 through 4
Payments over \$600 required to be reported and direct sales over \$5,000 ¹	Generally, exempt payees 1 through 5 ²
Payments made in settlement of payment card or third party network transactions	Exempt payees 1 through 4

¹ See Form 1099-MISC, Miscellaneous Income, and its instructions.

² However, the following payments made to a corporation and reportable on Form 1099-MISC are not exempt from backup withholding: medical and health

care payments, attorneys' fees, gross proceeds paid to an attorney reportable under section 6045(f), and payments for services paid by a federal executive agency.

Exemption from FATCA reporting code. The following codes identify payees that are exempt from reporting under FATCA. These codes apply to persons submitting this form for accounts maintained outside of the United States by certain foreign financial institutions. Therefore, if you are only submitting this form for an account you hold in the United States, you may leave this field blank. Consult with the person requesting this form if you are uncertain if the financial institution is subject to these requirements. A requester may indicate that a code is not required by providing you with a Form W-9 with "Not Applicable" (or any similar indication) written or printed on the line for a FATCA exemption code.

A—An organization exempt from tax under section 501(a) or any individual retirement plan as defined in section 7701(a)(37)

B—The United States or any of its agencies or instrumentalities

C—A state, the District of Columbia, a U.S. commonwealth or possession, or any of their political subdivisions or instrumentalities

D—A corporation the stock of which is regularly traded on one or more established securities markets, as described in Regulations section 1.1472-1(c)(1)(i)

E—A corporation that is a member of the same expanded affiliated group as a corporation described in Regulations section 1.1472-1(c)(1)(i)

F—A dealer in securities, commodities, or derivative financial instruments (including notional principal contracts, futures, forwards, and options) that is registered as such under the laws of the United States or any state

G—A real estate investment trust

H—A regulated investment company as defined in section 851 or an entity registered at all times during the tax year under the Investment Company Act of 1940

I—A common trust fund as defined in section 584(a) J—

A bank as defined in section 581

K—A broker

L—A trust exempt from tax under section 664 or described in section 4947(a)(1)

M—A tax exempt trust under a section 403(b) plan or section 457(g) plan

Note. You may wish to consult with the financial institution requesting this form to determine whether the FATCA code and/or exempt payee code should be completed.

Line 5

Enter your address (number, street, and apartment or suite number). This is where the requester of this Form W-9 will mail your information returns.

Line 6

Enter your city, state, and ZIP code.

Part I. Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. If you are a resident alien and you do not have and are not eligible to get an SSN, your TIN is your IRS individual taxpayer identification number (ITIN). Enter it in the social security number box. If you do not have an ITIN, see *How to get a TIN* below.

If you are a sole proprietor and you have an EIN, you may enter either your SSN or EIN. However, the IRS prefers that you use your SSN.

If you are a single-member LLC that is disregarded as an entity separate from its owner (see *Limited Liability Company (LLC)* on this page), enter the owner's SSN (or EIN, if the owner has one). Do not enter the disregarded entity's EIN. If the LLC is classified as a corporation or partnership, enter the entity's EIN.

Note. See the chart on page 4 for further clarification of name and TIN combinations.

How to get a TIN. If you do not have a TIN, apply for one immediately. To apply for an SSN, get Form SS-5, Application for a Social Security Card, from your local SSA office or get this form online at www.ssa.gov. You may also get this form by calling 1-800-772-1213. Use Form W-7, Application for IRS Individual Taxpayer Identification Number, to apply for an ITIN, or Form SS-4, Application for Employer Identification Number, to apply for an EIN. You can apply for an EIN online by accessing the IRS website at www.irs.gov/businesses and clicking on Employer Identification Number (EIN) under Starting a Business. You can get Forms W-7 and SS-4 from the IRS by visiting IRS.gov or by calling 1-800-TAX-FORM (1-800-829-3676).

If you are asked to complete Form W-9 but do not have a TIN, apply for a TIN and write "Applied For" in the space for the TIN, sign and date the form, and give it to the requester. For interest and dividend payments, and certain payments made with respect to readily tradable instruments, generally you will have 60 days to get a TIN and give it to the requester before you are subject to backup withholding on payments. The 60-day rule does not apply to other types of payments. You will be subject to backup withholding on all such payments until you provide your TIN to the requester.

Note. Entering "Applied For" means that you have already applied for a TIN or that you intend to apply for one soon.

Caution: A disregarded U.S. entity that has a foreign owner must use the appropriate Form W-8.

Part II. Certification

To establish to the withholding agent that you are a U.S. person, or resident alien, sign Form W-9. You may be requested to sign by the withholding agent even if items 1, 4, or 5 below indicate otherwise.

For a joint account, only the person whose TIN is shown in Part I should sign (when required). In the case of a disregarded entity, the person identified on line 1 must sign. Exempt payees, see *Exempt payee code* earlier.

Signature requirements. Complete the certification as indicated in items 1 through 5 below.

1. Interest, dividend, and barter exchange accounts opened before 1984 and broker accounts considered active during 1983. You must give your correct TIN, but you do not have to sign the certification.

2. Interest, dividend, broker, and barter exchange accounts opened after 1983 and broker accounts considered inactive during 1983. You must sign the certification or backup withholding will apply. If you are subject to backup withholding and you are merely providing your correct TIN to the requester, you must cross out item 2 in the certification before signing the form.

3. Real estate transactions. You must sign the certification. You may cross out item 2 of the certification.

4. Other payments. You must give your correct TIN, but you do not have to sign the certification unless you have been notified that you have previously given an incorrect TIN. "Other payments" include payments made in the course of the requester's trade or business for rents, royalties, goods (other than bills for merchandise), medical and health care services (including payments to corporations), payments to a nonemployee for services, payments made in settlement of payment card and third party network transactions, payments to certain fishing boat crew members and fishermen, and gross proceeds paid to attorneys (including payments to corporations).

5. Mortgage interest paid by you, acquisition or abandonment of secured property, cancellation of debt, qualified tuition program payments (under section 529), IRA, Coverdell ESA, Archer MSA or HSA contributions or distributions, and pension distributions. You must give your correct TIN, but you do not have to sign the certification.

What Name and Number To Give the Requester

For this type of account:	Give name and SSN of:
1. Individual	The individual
2. Two or more individuals (joint account)	The actual owner of the account or, if combined funds, the first individual on the account ¹
3. Custodian account of a minor (Uniform Gift to Minors Act)	The minor ²
4. a. The usual revocable savings trust (grantor is also trustee) b. So-called trust account that is not a legal or valid trust under state law	The grantor-trustee ¹ The actual owner ¹
5. Sole proprietorship or disregarded entity owned by an individual	The owner ³
6. Grantor trust filing under Optional Form 1099 Filing Method 1 (see Regulations section 1.671-4(b)(2)(i)(A))	The grantor*
For this type of account:	Give name and EIN of:
7. Disregarded entity not owned by an individual	The owner
8. A valid trust, estate, or pension trust	Legal entity ⁴
9. Corporation or LLC electing corporate status on Form 8832 or Form 2553	The corporation
10. Association, club, religious, charitable, educational, or other tax-exempt organization	The organization
11. Partnership or multi-member LLC	The partnership
12. A broker or registered nominee	The broker or nominee
13. Account with the Department of Agriculture in the name of a public entity (such as a state or local government, school district, or prison) that receives agricultural program payments	The public entity
14. Grantor trust filing under the Form 1041 Filing Method or the Optional Form 1099 Filing Method 2 (see Regulations section 1.671-4(b)(2)(i)(B))	The trust

List first and circle the name of the person whose number you furnish. If only one person on a joint account has an SSN, that person's number must be furnished.

² Circle the minor's name and furnish the minor's SSN.

³ You must show your individual name and you may also enter your business or DBA name on the "Business name/disregarded entity" name line. You may use either your SSN or EIN (if you have one), but the IRS encourages you to use your SSN.

⁴ List first and circle the name of the trust, estate, or pension trust. (Do not furnish the TIN of the personal representative or trustee unless the legal entity itself is not designated in the account title.) Also see *Special rules for partnerships* on page 2.

*Note. Grantor also must provide a Form W-9 to trustee of trust.

Note. If no name is circled when more than one name is listed, the number will be considered to be that of the first name listed.

Secure Your Tax Records from Identity Theft

Identity theft occurs when someone uses your personal information such as your name, SSN, or other identifying information, without your permission, to commit fraud or other crimes. An identity thief may use your SSN to get a job or may file a tax return using your SSN to receive a refund.

To reduce your risk:

- Protect your SSN,
- Ensure your employer is protecting your SSN, and
- Be careful when choosing a tax preparer.

If your tax records are affected by identity theft and you receive a notice from the IRS, respond right away to the name and phone number printed on the IRS notice or letter.

If your tax records are not currently affected by identity theft but you think you are at risk due to a lost or stolen purse or wallet, questionable credit card activity or credit report, contact the IRS Identity Theft Hotline at 1-800-908-4490 or submit Form 14039.

For more information, see Publication 4535, Identity Theft Prevention and Victim Assistance.

Victims of identity theft who are experiencing economic harm or a system problem, or are seeking help in resolving tax problems that have not been resolved through normal channels, may be eligible for Taxpayer Advocate Service (TAS) assistance. You can reach TAS by calling the TAS toll-free case intake line at 1-877-777-4778 or TTY/TDD 1-800-829-4059.

Protect yourself from suspicious emails or phishing schemes. Phishing is the creation and use of email and websites designed to mimic legitimate business emails and websites. The most common act is sending an email to a user falsely claiming to be an established legitimate enterprise in an attempt to scam the user into surrendering private information that will be used for identity theft.

The IRS does not initiate contacts with taxpayers via emails. Also, the IRS does not request personal detailed information through email or ask taxpayers for the PIN numbers, passwords, or similar secret access information for their credit card, bank, or other financial accounts.

If you receive an unsolicited email claiming to be from the IRS, forward this message to phishing@irs.gov. You may also report misuse of the IRS name, logo, or other IRS property to the Treasury Inspector General for Tax Administration (TIGTA) at 1-800-366-4484. You can forward suspicious emails to the Federal Trade Commission at: spam@uce.gov or contact them at www.ftc.gov/idtheft or 1-877-IDTHEFT (1-877-438-4338).

Visit IRS.gov to learn more about identity theft and how to reduce your risk.

Privacy Act Notice

Section 6109 of the Internal Revenue Code requires you to provide your correct TIN to persons (including federal agencies) who are required to file information returns with the IRS to report interest, dividends, or certain other income paid to you; mortgage interest you paid; the acquisition or abandonment of secured property; the cancellation of debt; or contributions you made to an IRA, Archer MSA, or HSA. The person collecting this form uses the information on the form to file information returns with the IRS, reporting the above information. Routine uses of this information include giving it to the Department of Justice for civil and criminal litigation and to cities, states, the District of Columbia, and U.S. commonwealths and possessions for use in administering their laws. The information also may be disclosed to other countries under a treaty, to federal and state agencies to enforce civil and criminal laws, or to federal law enforcement and intelligence agencies to combat terrorism. You must provide your TIN whether or not you are required to file a tax return. Under section 3406, payers must generally withhold a percentage of taxable interest, dividend, and certain other payments to a payee who does not give a TIN to the payer. Certain penalties may also apply for providing false or fraudulent information.

PROOF OF INSURANCE

This is to certify that the following endorsement is part of the policy(ies) described below:

NAMED INSURED (CONTRACTOR)

COMPANIES AFFORDING COVERAGE

ADDRESS

- A.
- B.
- C.

It is hereby understood and agreed that the city of Owosso, its city council and each member thereof and every officer and employee of the city shall be named as joint and several assureds with respect to claims arising out of the following project:

CURWOOD CASTLE PARK RENOVATION PROJECT

It is further agreed that the following indemnity agreement between the city of Owosso and the named insured is covered under this policy: Contractor agrees to indemnify, hold harmless and defend city, its city council and each member thereof and every officer and employee of city from any and all liability or financial loss resulting from any suits, claims, losses or actions brought against and from all costs and expenses of litigation brought against city, its city council and each member thereof and any officer or employee of city which results directly or indirectly from the wrongful or negligent actions of contractor's officers, employees, agents or others employed by Contractor while engaged by contractor in the (performance of this agreement) construction of this project.

It is further agreed that the inclusion of more than one assured shall not operate to increase the limit of the company's liability and that insurer waives any right on contribution with insurance which may be available to the city of Owosso.

The contractor, or any of their subcontractors, shall not commence work under this contract until they have attained the insurance required below, and shall keep such insurance in force during the entire life of this contract. All coverage shall be with insurance companies licensed and admitted to do business in the State of Michigan and acceptable to the city of Owosso. The requirements below should not be interpreted to limit the liability of the Contractor. All deductibles and SIR's are the responsibility of the Contractor.

The Contractor shall procure and maintain the following insurance coverage:

- 1. Worker's Compensation Insurance** including Employers' Liability Coverage, in accordance with all applicable statutes of the State of Michigan.
- 2. Commercial General Liability Insurance** on an "Occurrence Basis" with limits of liability not less than \$1,000,000 per occurrence and aggregate. Coverage shall include the following extensions: (A) Contractual Liability; (B) Products and Completed Operations; (C) Independent Contractors Coverage; (D) Broad Form General Liability Extensions or equivalent, if not already included.
- 3. Automobile Liability** including Michigan No-Fault Coverages, with limits of liability not less than \$1,000,000 per occurrence, combined single limit for Bodily Injury, and Property Damage. Coverage shall include all owned vehicles, all non-owned vehicles, and all hired vehicles.
- 4. Additional Insured:** Commercial General Liability and Automobile Liability, as described above, shall include an endorsement stating the following shall be **Additional Insureds:** City of Owosso, all elected and appointed officials, all employees and volunteers, all boards, commissions, and/or authorities and board members, including employees and volunteers thereof. It is understood and agreed by naming City of Owosso as additional insured, coverage afforded is considered to be primary and any other insurance the city of Owosso may have in effect shall be considered secondary and/or excess.
- 5. Cancellation Notice:** All policies, as described above, shall include an endorsement stating that it is understood and agreed that a Ten (10) days notice for non-payment of premium is required and a Thirty (30) days notice is required for Non-Renewal, Reduction, and/or Material Change, shall be sent to: City of Owosso, Bid Coordinator, 301 W. Main Street, Owosso, Michigan 48867.

6. **Proof of Insurance Coverage:** The Contractor shall provide the city of Owosso, at the time that the contracts are returned by him/her for execution, a Certificate of Insurance as well as the required endorsements. In lieu of required endorsements, if applicable, a copy of the policy sections where coverage is provided for additional insured and cancellation notice would be acceptable. Copies or certified copies of all policies mentioned above shall be furnished, if so requested.

If any of the above coverages expire during the term of this contract, the Contractor shall deliver renewal certificates and endorsements to the city of Owosso at least ten (10) days prior to the expiration date.

Please include a copy of insurance declaration verifying amounts of coverage. The verification of insurance is not an insurance policy and does not amend, extend or alter the coverage afforded by the policies listed herein. Notwithstanding any requirement, term, or condition of any contract or other document with respect to which this certificate or verification of insurance may be issued or may pertain, the insurance afforded by the policies described herein is subject to all the terms, exclusions and conditions of such policies.

DATE _____

BY _____
Authorized Insurance Agent

AGENCY _____

TITLE _____

ADDRESS _____

**SPECIAL PROVISION
FOR
TECHNICAL SPECIFICATIONS**

RC/City of Owosso

1 OF 1

Feb, 2017

GENERAL REQUIREMENT

The MDOT 2012 STANDARD SPECIFICATIONS FOR CONSTRUCTION shall govern all technical specifications for this project. The following parts of the Contract will prevail over all other parts in the following order:

1. Special Provisions.
2. Supplemental Specifications.
3. Project Plans and Drawings.
4. MDOT Standard Plans.
5. 2012 Standard Specifications
6. City of Owosso Standard Specifications.

The Contractor shall not take advantage of any apparent error or omission in the contract documents. If any uncertainty, inconsistency, omission, or conflict is discovered within the contract documents, the Engineer will solely decide as to the true intent of the language.

**SPECIAL PROVISION
FOR
AGGREGATE BASE, ___ INCH, MODIFIED**

City of Owosso/ RC

1 OF 1

Feb, 2017

DESCRIPTION

The work of Aggregate Base, ___ Inch, Modified shall be done in accordance with Section 302 of the MDOT 2012 Standard Specifications for Construction for furnishing, placing, and compacting aggregate, and as modified herein.

MATERIALS

The material shall meet gradation requirements of Section 902 of the MDOT 2012 Standard Specifications for Construction for 21AA aggregate, except all material shall be 100% crushed limestone. No substitutes will be allowed. The material shall be tested and certified in advance of delivery to the work site.

CONSTRUCTION METHODS

Aggregate material shall be properly placed and compacted in accordance with the project plans or as directed by the Engineer. Depth measures shall be taken at intervals not exceeding 100 lineal feet; locations will be as selected by the Engineer. Measured depth may be ½-inch less than specified thickness provided that the average of all measurements meet or exceed the specified thickness. Sections found deficient in thickness shall be corrected by the Contractor and retested by the Engineer.

MEASUREMENT AND PAYMENT

The completed work as measured for Aggregate Base, ___ Inch, Modified will be paid for at the Contract Unit Price for the following Contract Item (Pay Item):

Contract Item (Pay Item)	Pay Unit
Aggregate Base, ___ Inch, Modified	Square Yard

Aggregate Base, ___ Inch, Modified will be measured in area by square yard; and will be paid for at the contract unit price per square yard, which price shall be payment in full for all labor, material, and equipment needed to accomplish this work.

**SPECIAL PROVISION
FOR
CONCRETE PAY ITEMS**

City of Owosso/RC

1 OF 1

Feb, 2017

DESCRIPTION

This work shall be done in accordance with sections 601 and 701 of the MDOT 2012 Standard Specifications for Construction, except as modified herein. This special provision indicates the type of concrete mixture to be used for pay items related to curb and gutter, drive approaches, and sidewalks.

MATERIALS

Cement content for Concrete, Grades S2 and P1, shall be 564 pounds per cubic yard (6 Sack) for all concrete items, in accordance with Sections 601 and 701 of the MDOT 2012 Standard Specifications for Construction. Concrete mix shall not include fly ash or water reducing agents.

CONSTRUCTION

Construction of concrete related items including but not limited to curb and gutter, driveways, sidewalks, ADA ramps shall be done in accordance with the MDOT 2012 Standard Specifications for Construction, or as directed by the Engineer.

MEASUREMENT AND PAYMENT

Payment for the completed work for the various concrete pay items in this contract using a six full sack mix shall be included as part of their individual unit prices.

**SPECIAL PROVISION
FOR
DRAINAGE STRUCTURE COVER EJ _____**

City of Owosso

1 OF 1

Feb, 2017

GENERAL DESCRIPTION

Drainage Structure Cover EJ _____, shall consist of materials and work meeting requirements of Section 403 of the MDOT 2012 Standard Specifications for Construction, and as modified herein.

COVER DESCRIPTION

All covers will be manufactured and supplied by East Jordan Iron Works. Cover types shall match with the pay item cover number.

MEASUREMENT AND PAYMENT

The completed work as measured for Drainage Structure Cover EJ ____ will be paid for at the Contract Unit Price for the following Contract Item (Pay Item):

Contract Item (Pay Item)	Pay Unit
Drainage Structure Cover EJ 1030	Each
Drainage Structure Cover EJ 1060	Each
Drainage Structure Cover EJ 1020 W/Gasket Seal	Each
Drainage Structure Cover EJ 7000	Each

Drainage Structure Cover EJ ____ will be measured in place by count of Each; and will be paid for at the contract unit price per Each, which price shall be payment in full for all labor, material, and equipment needed to accomplish this work.

**SPECIAL PROVISION
FOR
DR STRUCTURE, ___ INCH DIA., MODIFIED**

City of Owosso/RC

1 OF 1

June, 2017

DESCRIPTION

The work of Dr. Structure, ___ Inch Dia., Modified, of varying diameters, shall be done in accordance with Sections 403 and 913 of the 2012 MDOT Standard Specifications for Construction, MDOT Standard Plans, and as modified herein. The Contractor shall construct **Dr. Structure, ___ Inch Dia., Modified** of the size and at locations as shown on the plans or as directed by the Engineer.

MATERIALS

Drainage structures shall be precast reinforced concrete units and manufactured in accordance with ASTM C-478 specifications and Section 913 of the 2012 MDOT Standard Specifications for Construction, with either a cast in place bottom or fitted precast concrete base as detailed on the plans. Precast reinforced concrete units shall be furnished with butyl rubber sealant that conforms to ASTM C 990; or as updated by MDOT design standard change.

Whenever conditions allow: provide 4" up to 12" adjustment area between top of cone to base of cover.

MEASUREMENT AND PAYMENT

The completed work of Dr. Structure, ___ Inch Dia., Modified will be paid for at the contract unit price for the following contract item (pay item):

Contract Item (Pay Item)	Pay Unit
Dr. Structure, ___ Inch Dia., Modified	Each

Dr. Structure, ___ Inch Dia., Modified will be measured in place by the unit Each; and will be paid for at the contract unit price per Each, which price shall be payment in full for all labor, material, and equipment needed to accomplish this work. The unit price for Dr. Structure, ___ Inch Dia., Modified shall include the cost of the concrete footing, and no greater than 8 feet of drainage structure depth. The unit price for Dr. Structure, ___ Inch Dia., Modified includes the cost of temporary and/or final grade adjustments of the structure.

In the event where it is necessary to modify connection holes in the field, or additional taps are required into the structure walls, then this work will be paid for separately as Dr. Structure, Tap, ___ Inch of the appropriate size required to complete that special work.

**SPECIAL PROVISION
FOR
GEOTEXTILE SEPARATOR**

RC/City of Owosso

1 of 1

February 2017

DESCRIPTION OF WORK

The work of Geotextile Separator shall consist of furnishing and placing geotextile in accordance with section 910 of the Michigan Department of Transportation 2012 Standard Specifications for Construction, and as noted herein:

MATERIALS

Geotextile Separator shall be mechanically bonded non-woven fabric, meeting or exceeding products manufactured as Mirafi 180N, US Fabrics 205NW, or Synthetic Industries 801 non-woven product, or approved equal.

CONSTRUCTION

Spread geotextiles smoothly on prepared grade and anchor firmly prior to placing backfill or other cover materials. Construction equipment shall not operate directly onto the geotextile. Wrinkles and waves shall be smoothed by hand before placing cover material. Concurrent transverse and longitudinal edges between blankets shall be either shingle-lapped (minimum 24 inches) or seamed. Seamed edges may be either factory sewn or made by overlapping in the field. Factory sewn seams must meet specified grab tensile strength requirements of the manufacturer. Finished seams must lie upward after installation. Any cutting and fitting of the geotextile must be done to requirements of the manufacturer.

MEASUREMENT AND PAYMENT

The completed work as measured for Geotextile Separator will be paid for at the contract unit price for the following contract item (Pay Item):

<u>PAY ITEM</u>	<u>PAY UNIT</u>
Geotextile Separator	Square Yard

Geotextile Separator will be measured in place by area in square yards and will be paid for at the contract unit price per square yard which price shall be payment in full for all labor, material and equipment necessary to accomplish this work. Overlaps, cutting and fitting of Geotextile Separator will not be measured and paid for separately, but are considered included as part of the in-place area measure of the Geotextile Separator.

**SPECIAL PROVISION
FOR
TURF ESTABLISHMENT, PERFORMANCE**

City of Owosso/RC

1 of 5

Feb, 2017

a. Description. For the work identified in this special provision paid for by the pay item Turf Establishment, Performance only, delete section 816 of the Standard Specifications for Construction and replace it with this special provision. The Contractor is responsible for the performance and quality of turf growth in the areas indicated on the plans and as identified by the Engineer. Comply with all local, state and federal laws when completing this work.

Establish a durable, permanent, weed-free, mature, perennial turf. The work consists of fundamental turf work, including but not limited to top soiling, seeding, mulching, erosion control, maintenance, watering and repair of turf as described herein during the life of the contract and during the life of any supplemental performance bond which may ensue.

Choose and implement proven turf establishment industry practices; provide all necessary labor and equipment; select and provide all turf establishment materials; and control erosion and any subsequent sedimentation at all times.

Perform a site analysis, interpret the results and implement a turf establishment program to ensure compliance with this specification. The site analysis must take into consideration topsoil needs, fertilizer and pH requirements, seed mix, existing and future soil moisture levels, slopes and grades, required erosion control items and devices, maintenance requirements, local highway snow removal and deicing practices, and any other characteristics that influence and affect turf establishment.

Subsection 107.11 of the Standard Specifications for Construction is revised relative to the Contractor's responsibility for the repair of turf establishment work as follows. The Contractor is responsible, at no additional cost to the contract, for the repair of turf establishment work occasioned by storm events up to 3 inches of rain in a 24 hour period as documented by local meteorological data submitted to the Engineer for review and approval. All other portions of subsection 107.11 remain unchanged.

1. Contractor Turf Establishment Experience Requirements. Ensure weed control is done by a commercial herbicide applicator, licensed by the State of Michigan and certified by the Michigan Department of Agriculture (MDA) in the appropriate category to apply herbicides. Use application procedures and materials according to federal, state and local regulations. Use of restricted use chemicals is prohibited. Provide appropriate documentation and secure approval from the Engineer before application of herbicides.

At least 10 work days prior to start of turf establishment, provide documentation to the Engineer, from the Contractor performing the turf establishment work, that they meet one or both of the following requirements.

A. At least one person employed by the Contractor performing the turf establishment work and assigned to the job site has a degree or certificate in Turf

Management, Horticulture or related field.

B. At least one person employed by the Contractor performing the turf establishment work and assigned to the job site has at least 5 years of experience in roadside turf establishment.

b. Materials. Provide topsoil, seed, mulch, pesticide, herbicide, mulch blankets and any other unique erosion control materials as necessary to fulfill this specification, as detailed on the plans. Use additional materials, as necessary, to meet the standards set forth for turf establishment in this special provision. The use of sod on the project requires the prior approval of the Engineer and if approved, may be used at limited site locations only.

Selection of all materials is the responsibility of the Contractor with the following minimum conditions.

1. Soil. Provide furnished or salvaged topsoil, which may be blended compost, that will support vigorous growth. Ensure topsoil is humus bearing and placed at least 4 inches deep. Ensure it is free of stones larger than 1/2 inch (2 inches on freeway projects) in diameter and other debris. Trim and grade the finished slope in accordance with subsection 205.03.N of the Standard Specifications for Construction.

2. Seed. Use a seeding mixture that is composed of four or more species of perennial grass. Use only species and their cultivars or varieties which are guaranteed hardy for Michigan.

Recommended species of perennial grasses include: Kentucky Bluegrass, Perennial Ryegrass, Hard Fescue, Creeping Red Fescue, Chewings Fescue, Turf-type Tall Fescue, Buffalo grass, and Alkaligrass-Fults Puccinellia distans. Select cultivars or varieties of grasses that are disease and insect resistant and of good color. Ensure that no one species in the mix is less than 5 percent, or more than 25 percent, of the mixture by weight. Do not select grass species considered noxious or objectionable, such as Quack Grass, Smooth Brome, Orchard Grass, Reed Canary Grass and others.

A. Ensure the seed is legally saleable in Michigan. Ensure the seed product does not contain more than 10 percent inert materials. Ensure the seed source is an MDOT approved certified vender.

B. Adapt the species and varieties of seed to the site conditions, to the site use, and to the soils, moisture and local climate. Site use may include, but is not limited to, detention pond, wildlife habitat, playground, wetlands, forested wetland, rural roadside, urban roadside and highly maintained front yard.

C. Ensure at least two of the species in the mixture proposed to be planted within 15 feet behind the curb or the shoulder are salt tolerant.

3. Mulch. Mulch seeded areas with the appropriate materials for the site conditions to promote germination and growth of seed and to mitigate soil erosion and sedimentation.

4. Herbicides. Comply with all federal, state and local laws. As part of the MDA weed control application, the Contractor is required to make proper notifications and/or postings as per label and MDA requirements for all locations that will be sprayed. Notify the Engineer at least 48 hours prior to any applications being made. Furnish and apply herbicide(s) as

needed. It is the Contractor's responsibility to select the herbicide(s) and the rate at which it is used. Obtain the Engineer's approval of work methods and herbicide(s) selected prior to the application of the herbicide(s). Complete a spray log and submit to the Engineer each day an application is made.

Do not draw water from any waterway (i.e. river, ditch, creek, lake etc.) located on state, county or municipal right-of-way, for mixing with herbicides.

5. Fertilizers. Furnish and apply fertilizer(s) as needed. It is the Contractor's responsibility to select the fertilizer(s) and the rate at which it is used. Phosphorus is allowed for use only at the time of planting and when required by soil conditions. Obtain the Engineer's approval of work methods and fertilizer(s) prior to the application of the fertilizer(s).

6. Water. Furnish and apply water from an approved source at a rate to promote healthy growth.

c. Construction. The Contractor is responsible for all work and all construction methods used in completing this work. Implementation of any part of the standard specifications or standard plans by the Contractor does not relieve the Contractor of responsibility for acceptability of the construction methods or for the quality of the work.

1. Inspection of the Work. The Contractor is responsible for all inspection of turf establishment work.

Use a Contractor's Daily Report, approved by the Engineer, to report inspections made and to document turf establishment work performed on this project. Complete and submit a Contractor's Daily Report to the Engineer when any work performed under this special provision is in progress.

Include all necessary materials documentation including tests slips, certifications, etc. with the associated Contractor's Daily Report.

The Engineer will determine the acceptability of the Contractor's Daily Report in terms of their completeness and accuracy. The Engineer reserves the right to verify all submitted measurements and computations. Failure by the Contractor to submit acceptable and timely reports to the Engineer may result in withholding of progress pay estimates on turf-related items until such time as reports are submitted and deemed acceptable.

The Engineer reserves the right to inspect the project for any reason in accordance with subsection 104.01 of the Standard Specifications for Construction, including the fulfillment of other inspection requirements such as Soil Erosion and Sedimentation Control, NPDES, etc. Inspections made by the Engineer do not relieve the Contractor of the responsibility for inspections required by this special provision or the Contractor's responsibilities for erosion control and turf establishment.

2. Erosion Control. Control erosion at all times according to section 208 of the Standard Specifications for Construction. Control of soil erosion is the responsibility of the Contractor. However, sedimentation controls must be placed as indicated on the plans or as directed by the Engineer. Continuously monitor the site for needed erosion repair from any cause as addressed in the contract. Return all eroded areas to original grade as detailed in the contract.

Take immediate corrective action if sedimentation occurs in drainage structures or any watercourse or water containment area and stabilize all disturbed areas contributing to this sedimentation within 24 hours after the erosion occurrence. Remove sediment deposited as a result of the Contractor's inability to control the soil erosion at the Contractor's expense.

Reimburse the Department for any costs levied against the Department, such as fines, environmental costs, costs for remedies required, or any other costs as a result of the Contractor's failure to comply with this special provision and with federal, state and local laws.

3. Erosion Repair. The Contractor is responsible for all repairs and liable for all consequences (legal, monetary or other) associated with erosion or sedimentation damage to finished or unfinished work.

Report all erosion occurrences and the repairs made by the Contractor to the Engineer in the format and at the frequency required by the Engineer. Repair any erosion, displacement or disturbance to ongoing or completed work by any cause at no additional cost to the contract unless otherwise noted herein.

The Contractor is responsible and liable for all traffic control and safety measures required to repair and protect damaged turf areas. Repair any eroded area that may affect the support of the roadbed or safety of the public within 24 hours of the erosion occurrence.

Place protective devices such as barriers, directional signs/signals, temporary fence, or any other safety measures immediately after any erosion damage occurs that has the potential of endangering the public. In these instances, provide the Engineer with a written summary of the immediate action taken describing the repairs made and the safety measures taken, within 24 hours of the occurrence of the damage.

4. Mowing and Weeding. Maintain turf to a visually appealing level, and not more than 8 inches in height at any time, prior to acceptance. Weeds must be controlled to less than 10 percent of the turf establishment area at all times during construction.

5. Final Acceptance and Supplemental Performance Bond.

A. Final Acceptance Parameters. Ensure before final acceptance of the turf establishment work, all of the following minimum parameters are met throughout all exposed areas of the project designated on the plans or identified by the Engineer as turf establishment areas: there must be no exposed bare soil and the turf must be fully germinated, erosion free, weed free, disease free, dark green in color and in a vigorous growing condition.

The Engineer will notify the Contractor of the dates and times of all acceptance inspections. The Contractor may accompany the Engineer during these inspections. If the Contractor does not agree with the decision made by the Engineer, the Contractor may request an inspection by a mutually agreed upon third party (Michigan State University Extension service or other). A joint inspection, to include the Engineer, the Contractor, and the third party, will be scheduled by the Engineer. Pay all expert fees and expenses charged by the third party.

B. Supplemental Performance Bond. In the event that all contract items of work are

completed, including the placement of all turf establishment items of work, and the final acceptance of the project is delayed because the final acceptance parameters for the turf establishment work have not been fully met; the Contractor may propose to the Engineer the use of a supplemental performance bond.

The bond serves to secure the successful completion of turf establishment work and fulfillment of all final acceptance parameters for the turf establishment work. Ensure the supplemental performance bond, in all respects, is satisfactory and acceptable to the Department and executed by a surety company authorized to do business with the State of Michigan.

Ensure the bond is in an amount equal to 50 percent of the turf establishment work items covered by this special provision. Ensure the bond remains in place for two growing seasons. At the discretion of the Engineer, the bond may be reduced on a prorated basis as portions of the areas designated for turf establishment on the project meet the final acceptance parameters.

Prior to commencement of any work necessary to meet the acceptance parameters during the bonded period, the Contractor must apply for a permit to work within MDOT right-of-way using Form 2205. The permit fee and an individual permit performance bond will not be required. The permit insurance requirements, however, will be required.

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

Pay Item	Pay Unit
Turf Establishment, Performance.....	Square Yard

Turf Establishment, Performance will include all labor, equipment and materials required or selected by the Contractor to install, maintain, inspect, repair and meet the acceptance parameters for turf establishment specified in this special provision, including preparation, updating and submittal of the Contractor’s Daily Reports.

Repairs made to damaged turf establishment areas as a result of a documented storm by local meteorological data resulting in rainfall amounts of more than 3 inches in a 24 hour period will be paid for as an increase to original quantities in accordance with subsection 109.05 of the Standard Specifications for Construction.

The following schedule of payment applies to work performed according to this special provision. Upon completion of topsoil surfacing stage, 50 percent of the authorized amount for **Turf Establishment, Performance** will be paid to the Contractor. The remaining 50 percent of the authorized amount will be paid upon completion of all other work necessary to comply with this special provision and to meet all final acceptance parameters for **Turf Establishment, Performance** or at such time as the supplemental performance bond is accepted by the Department.

The supplemental performance bond and all costs associated with turf establishment work performed during the duration of the performance bond will not be paid for separately. These costs which may include, but are not limited to, mobilization, traffic control devices, and the required permit insurance are included in the unit price bid for **Turf Establishment, Performance**.

PROGRESS CLAUSE

F&V/Curwood Castle Park

1 of 1

July 2017

The Contractor shall submit at the pre-construction meeting a complete Progress Schedule to the City Engineer. The Progress Schedule shall include, as a minimum, the controlling work items for the completion of the project and the planned dates that these work items will be the controlling operations; all for each of the two project work sites. The street shall be opened to traffic no later than the project completion date.

The Contractor is required to coordinate work with the following criteria:

1. No work shall begin prior to August 28, 2017.
2. All work must be complete and open to traffic by October 13, 2017.
3. The entire project must be complete and ready for final payment by November 10, 2017.
4. Local traffic must be maintained in accordance with the special provision for Maintaining Traffic.

The contractor must build sufficient work days into the schedule to ensure all necessary work is completed on or before the critical dates. The contract period is based upon 2012 Standard Specifications for Construction Section 108.08D (1) for a standard project.

The approved low bidder for the work covered by this proposal is required to participate in a pre-construction meeting with the city to review and work out a detailed progress schedule. The meeting will occur soon after the low bidder is determined. Any named sub-contractors should also attend the scheduled meeting.

Failure on the part of the Contractor to carry out the provisions of this Progress Schedule may be considered sufficient cause to prevent bidding future projects until a satisfactory rate of progress is again established.

**SPECIAL PROVISION
FOR
MAINTAINING TRAFFIC**

F&V/Curwood Castle Park

1 OF 2

July 2017

GENERAL REQUIREMENTS

All work shall be done in accordance with the requirements of Section 812 of the MDOT 2012 Standard Specifications for Construction and as modified herein. The Contractor is advised that the 2011 Michigan Manual of Uniform Traffic Control Devices, as amended, is hereby established as governing all work in connection with traffic control devices, barricading, signing, etc. as required for the project.

The Contractor shall furnish, erect, maintain, move and adjust, and-upon completion of work-remove all traffic control devices, barricades within the project limits and around the perimeter of the project, as part of the contract pay items listed within this special provision.

Walks, driveways, and entrances to buildings shall not be unnecessarily blocked. Vehicular access shall be maintained to all commercial properties as directed by the Engineer. Unless otherwise specified herein, construction shall be completed in such a manner as to maintain the required entrance width for traffic at all times.

The Contractor shall identify and coordinate any removal of permanent traffic control signs such as street name, stop, speed, etc. with the Engineer. The Contractor will carefully remove and salvage sign and post for pickup by City DPW crews. DPW crews will install temporary stop signs and install permanent signs after construction. Payment for Contractor to remove and salvage existing permanent signs will not be paid for separately, but will be considered as part of other work items.

Protection for and protection of pedestrian traffic shall be maintained at all times.

CONSTRUCTION INFLUENCE AREA (CIA)

The CIA of the project shall include the area within the right-of-way of Curwood Castle Drive and extends easterly to the banks of the Shiawassee River.

SPECIFIC REQUIREMENTS

The Contractor shall schedule work between the hours of 7:00 am and 7:00 pm, Monday through Saturday. No work is allowed outside these time periods. The Contractor shall coordinate work so that any necessary preliminary or closing operations are also done within these time periods.

No work will be allowed during the Labor Day holiday period commencing at 3:00 pm the Friday before and ending at 7:00 am on the Tuesday after the national holiday.

Regarding the sidewalk work within the part grounds area: All sidewalk shall be open and available for pedestrian traffic on September 16, 2017. No construction will be allowed on September 16, 2017.

Curwood Castle Drive may be temporarily closed to thru traffic during placement of concrete curb and gutter and HMA Paving. Traffic shall be restored and all lanes open for traffic at conclusion of work day.

MEASUREMENT AND PAYMENT

The completed work as measured for the following pay items will be paid for at the Contract Unit Price for the following Contract Items (Pay Item):

Contract Item (Pay Item)	Pay Unit
Barricade, Type III, High Intensity, Furn & Oper	Each
Pedestrian Type II Barricade, Temp	Each
Plastic Drum, High Intensity, Furn & Oper	Each
Sign, Type B, Temporary, Prismatic, Furn & Oper	Square Feet

Individual pay items will be measured in place by their respective pay unit measure; and will be paid for at the contract unit price per respective pay unit measure, which price shall be payment in full for all labor, material, and equipment needed to accomplish this work.

NOTICE TO BIDDERS

UTILITY COORDINATION

F&V/Curwood Castle Park

1 of 2

July 2017

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

For protection of underground utilities and in conformance with Public Act 53, the Contractor shall dial 1-800-482-7171 (or 811) a minimum of three full working days, excluding Saturdays, Sundays, and holidays prior to beginning each excavation in areas where public utilities have not been previously located. Members will thus be routinely notified. This does not relieve the Contractor of the responsibility of notifying utility owners who may not be a part of the "Miss Dig" alert system.

The following Public Utilities have facilities located in the road right-of-way or project area:

<u>NAME AND ADDRESS OF OWNER</u>	<u>KIND OF UTILITY</u>	<u>PHONE NUMBER</u>
Charter Communication 1480 S. Valley Center Dr Bay City, Michigan 48706	Cable Television	(989) 233-9404 Mark Kelly
Frontier 1943 W. M-21 Owosso, Michigan 48867	Fiber	(989) 723-0373 Mark Stevens
Consumers Energy 530 West Willow Street PO Box 30162 Lansing, Michigan 48909	Gas	(517) 374-2329 Tyler Lawrence
Consumers Energy 530 West Willow Street PO Box 30162 Lansing, Michigan 48906	Electric	(517) 374-2329 Jacob Chalut
City of Owosso 301 W. Main Street Owosso, Michigan 48867	Water	(989) 725-0555 Glenn Chinavare
City of Owosso 301 W. Main Street Owosso, Michigan 48867	Sanitary Sewer	(989) 725-0555 Glenn Chinavare
Daystarr Communications 307 N. Ball Street Owosso, MI 48867	Fiber	(989) 720-1000 Casey Rose

City Engineer
301 W. Main Street
Owosso, Michigan 48867

Road and Storm Drainage

(989) 725-0550
Randy Chesney, P.E.

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

The existing utilities shown on the plans represent the best information available as obtained from survey and existing records. This information does not relieve the Contractor of the responsibility of protecting all existing utilities, in case utilities have been constructed or removed since the survey date or if utilities are encountered in different locations or if any utilities are not shown on the plans.

All existing utilities shall be located as to both horizontal and vertical position prior to starting any utility construction or other excavation. Cost shall be included in the new utility or excavation pay item.

The Contractor's attention is directed to the requirements for cooperation with others, as covered in Section 104.08 of the MDOT 2012 Standard Specification for Construction.

UTILITY DAMAGE

The Contractor shall be responsible for the protection of all existing utilities during construction of this project. Any utilities damaged by the Contractor shall be repaired in accordance with the related utilities specifications at the Contractor's expense.

MEASUREMENT AND PAYMENT

PART 1 - GENERAL

1.01 SUMMARY:

- A. This Section includes, but is not necessarily limited to, descriptions of the method of measurement and basis of payment criteria applicable to the Work. It also includes the form of Application for Payment to be used by CONTRACTOR in requesting payment for Work performed under the Contract.

1.02 SUBMITTALS:

- A. Application for Payment: Submit three (3) copies to ENGINEER on the attached form or related format with supporting documentation as required by the Contract Documents.

1.03 MEASUREMENT OF QUANTITIES:

- A. Measurement devices:
 - 1. Weigh scales: Inspected, tested and certified.
 - 2. Platform scales: Of sufficient size and capacity to accommodate the conveying vehicle.
 - 3. Metering devices: Inspected, tested and certified.
- B. Measurement by weight: Concrete reinforcing steel, rolled or formed steel or other metal shapes will be measured by handbook weights. Welded assemblies will be measured by handbook weights.
- C. Measurement by volume: Measured by cubic dimension using mean length, width and height or thickness.
- D. Measurement by area: Measured by square dimension using mean length and width or radius.
- E. Linear measurement: Measured by linear dimension, at the item centerline.

1.04 MEASUREMENT AND PAYMENT SCHEDULE:

- A. The following schedule outlines the method of measurement and basis of payment to be used on the project. Requirements for materials and methods described under each item are included in the related specification SECTION.
 - 1. Inspection and testing fees: Payment by OWNER, unless specifically noted otherwise.
 - 2. General Conditions, Bonds, Insurance and Mobilization: Shall be paid for on a lump sum basis for the CONTRACTOR's costs to provide required bonds and insurances, mobilization and miscellaneous requirements stipulated in Section 00 72 00 – GENERAL CONDITIONS. This quantity shall not exceed 5% of the total contract amount. Fifty percent (50%) will be paid on the first Application for Payment and twenty five percent (25%) will be paid on the second and third Applications for Payment.
 - 3. Shoring: All shoring required for construction, safety and convenience will be considered temporary and included in construction items.
 - 4. Dewatering for Construction: Payment by CONTRACTOR and included in construction items.

5. Temporary soil erosion and sedimentation control: Included in construction items, unless otherwise noted as a pay item.
6. Sawcutting: Included in removal items and not paid separately.
7. Erosion Control, Inlet Protection, Fabric Drop: Counted and paid for by the unit, installed at locations as directed by the ENGINEER or shown on the plans.
8. Turf Establishment, Performance: Measured along the edge of the new sidewalk placed and paid for by the square yard in accordance with the special provision and sidewalk detail. Payment for Turf Establishment, Performance will be limited to a width of 2 feet adjacent to each side of the new sidewalk. Additional area(s) disturbed by Contractor shall be restored at the Contractor's expense. Grading, topsoil surface, seeding, fertilizing and mulch are included as part of this item.
9. Excavation, Earth: Measured and paid for by the cubic yard as measured. Excavation, Earth shall only be paid for the expansion of Curwood Castle Drive to facilitate the bus and vehicle parking. Excavation, Earth will not be paid for the sidewalk removal and placement.
10. Subgrade Undercutting, Type II: Measured and paid for by the cubic yard as measured for the material specified.
11. Subbase, CIP, 12 inch: Measured and paid for by the square yard, placed and compacted, as shown on the plans.
12. Aggregate Base, _ inch, Modified: Measured and paid for by the square yard, placed and compacted, in accordance with the special provision.
13. Geotextile, Separator: Measured and paid for by the square yard in place, to the limits shown on the plans, in accordance with the special provision.
14. HMA, ___: Measured by tallying load tickets and paid for by the ton, placed and compacted. Submit bituminous load tickets to ENGINEER at time of delivery.
15. Curb and Gutter, Conc, Det F4: Measured along the back of curb and paid for by the lineal foot for the type specified in accordance with the detail shown on the plans. All new sections of curb and gutter must be tied to the existing curb and gutter on both ends with epoxy coated #4 bars. Cost for this work, including the drilling into the existing curb, shall be included in this pay item.
16. Sidewalk, Conc, 4 inch, Modified: Measured and paid for by the square foot and in accordance with the special provision and the detail shown on the plans. Granular material, excavation, embankment, and compaction shall be included in this pay item.
17. Sidewalk Ramp, Conc, 4 inch, Modified: Measured and paid for by the square yard in accordance with the special provision. Granular material, excavation, embankment, and compaction shall be included in this pay item.
18. Detectable Warning Surface: Measured along the center of the 24-inch wide detectable warning surface and paid for by the lineal foot. Detectable warning surface shall be red in color.

19. Remove and Reinstall Commemorative Brick Pavers: Paid for by the lump sum basis. Pavers shall be removed, temporarily stored in a safe location, and reinstalled on an aggregate and granular base in accordance with the detail. Excavation, compaction, aggregate base, granular base, and weed barrier fabric shall be included in this pay item.
20. Curb and Gutter, Rem: Measured along the back of curb and paid for by the lineal foot. Sawcutting of existing curb and gutter shall be included in this pay item and will not be paid for separately.
21. Sidewalk, Rem: Measured and paid for by the square yard. Sawcutting shall be included in this pay item
22. Pavt, Rem: Measured and paid for by the square yard for the full depth removal of existing pavements, regardless of type or thickness. Sawcutting shall be included in this pay item.
23. Sewer, SDR-26, ___ inch, Tr Det B, Modified: Measured horizontally on the surface along the pipe centerline from center to center of structures and paid for by the linear foot by the pipe size, installed and backfilled, in accordance with the Trench Detail shown on the plans.
24. Dr Structure Cover, EJ ____: Counted and paid for by the each and in accordance with the special provision.
25. Dr Structure, ___ inch dia, Modified: Counted and paid for by the each for the structure diameter, installed and backfilled, and in accordance with the special provision.
26. Dr Structure, Tap, ___ inch: Counted and paid for by the each.
27. Cap, 12 inch: Counted and paid for by the each.
28. Traf Regulator Control: Include in other traffic control related items. Traf Regulator Control will not be paid for separately.
29. Minor Traf Devices: Include in other traffic control related items. Minor Traf Devices will not be paid for separately.
30. Construction signing, drums, lighted arrows, and barricades: Measured or counted and paid for by the unit, furnished, installed, maintained, moved and removed.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

Not Used

END OF SECTION

PROJECT LOG

CITY OF OWOSSO

SHIAWASSEE COUNTY, MICHIGAN

CURWOOD CASTLE PARK

RENOVATION PROJECT

RECREATION PASSPORT GRANT

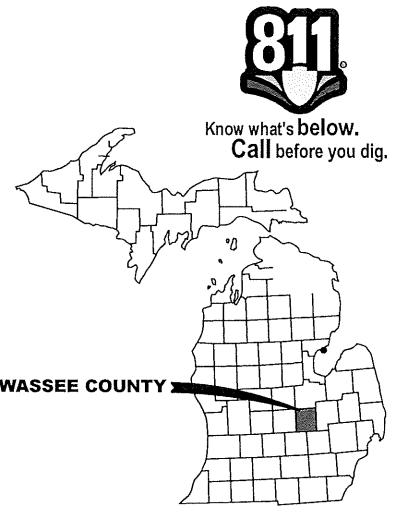
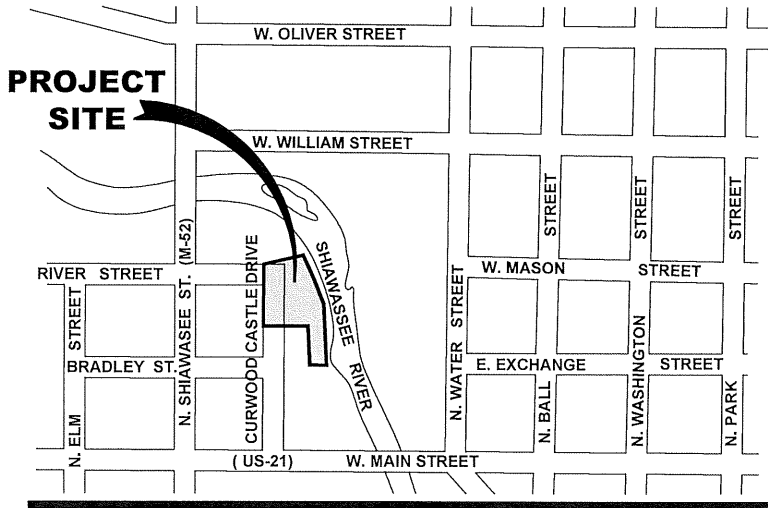
RP16-0089

WORK DESCRIPTION

SIDEWALK AND BUS PARKING IMPROVEMENTS
AT CURWOOD CASTLE PARK

SHEET INDEX

COVER SHEET	1
DETAILS	2-3
REMOVAL PLAN	4
STORM SEWER PLAN	5
CONSTRUCTION PLAN	6
SESC PLAN	7



UTILITY CONTACTS

TELEPHONE:
VERIZON
345 PINE AVENUE
ALMA, MI 48801
ATTENTION: JEFF JAMES
PHONE: 989-4630392

CITY MANAGER
DONALD CRAWFORD
301 WEST MAIN
OWOSSO, MI 48867
989-752-0568

GAS:
CONSUMERS ENERGY
530 WEST WILLOW STREET
LANSING, MI 48909
ATTENTION: TYLER LAWRENCE
PHONE: 517-374-2375

CITY ENGINEER
RANDY CHESNEY, PE
301 WEST MAIN
OWOSSO, MI 48867
989-725-0550

ELECTRIC:
CONSUMERS ENERGY
530 WEST WILLOW STREET
LANSING, MI 48909
ATTENTION: JACOB SHALUT
PHONE: 517-374-2329

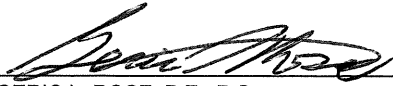
PUBLIC WORKS SUPERINTENDENT
MARK MITCHELL
522 MILWAUKEE ST.
OWOSSO, MI 48867
989-725-0550

CATV
CHARTER COMMUNICATIONS
1480 S. VALLEY CENTER DRIVE
BAY CITY, MI 48706
ATTENTION: MARK KELLY
PHONE: 989-233-9404

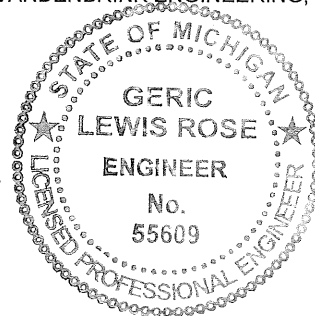
SOIL EROSION AND SEDIMENTATION CONTROL
SHIAWASSEE COUNTY HEALTH DEPARTMENT
ENVIRONMENTAL CONTROL
201 N. SHIAWASSEE ST., 3RD FLOOR
CORUNNA, MI 48817
ATTENTION: CASEY ELLIOTT, R.E.H.S.
PHONE: 989-743-2289
EMAIL: CELLIOTT@SHIAWASSECHD.NET

FIBER
FRONTIER COMMUNICATIONS
1943 W. M-21
OWOSSO, MI 48867
ATTENTION: MARK STEVENS
989-723-0373

PREPARED UNDER SUPERVISION OF:


GERIC L. ROSE, P.E., P.S.
REGISTERED PROFESSIONAL ENGINEER No. 55609
FLEIS & VANDENBRINK ENGINEERING, INC.

7/24/17
DATE

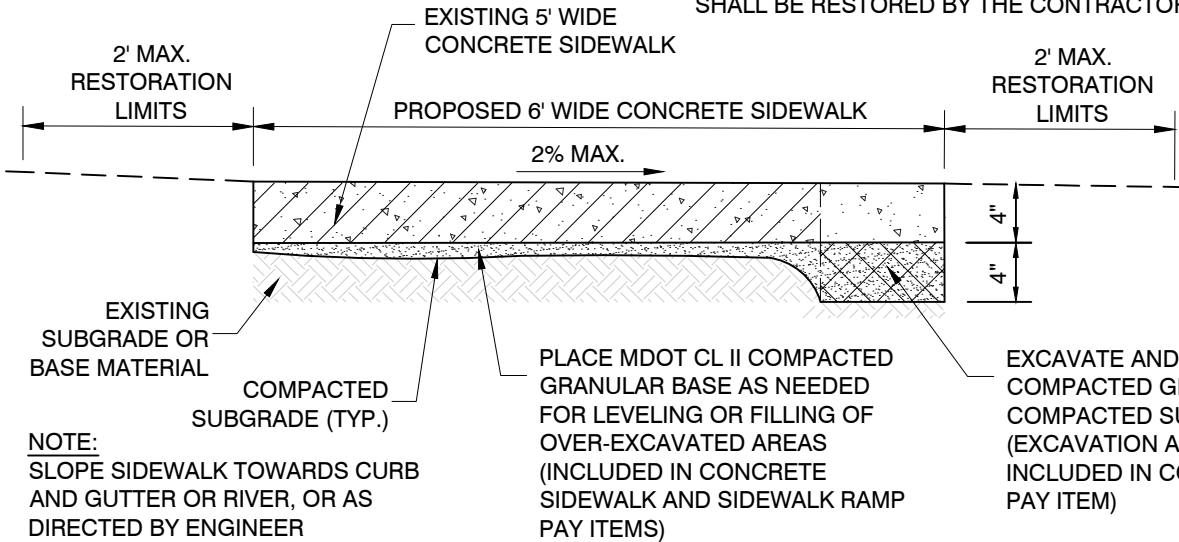


1
COVER SHEET

831310
F&V PROJECT NO.



NOTE:
AREAS DISTURBED OUTSIDE OF RESTORATION LIMITS SHOWN SHALL BE RESTORED BY THE CONTRACTOR AT HIS EXPENSE.

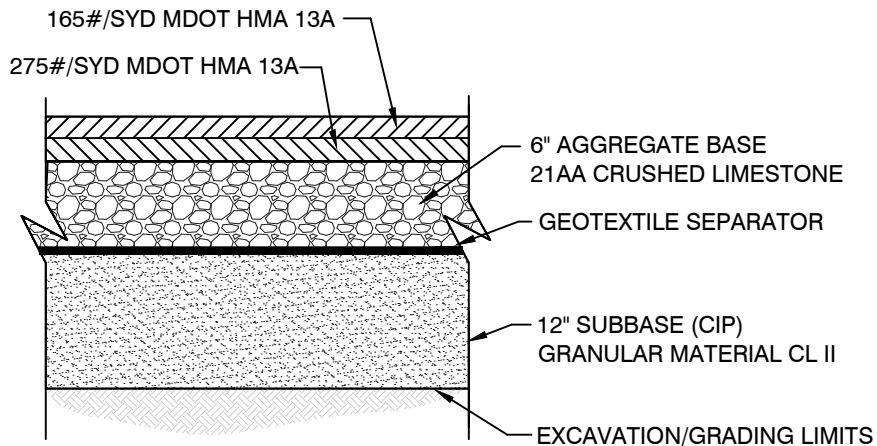


AS-DIRECTED UNDERCUTTING:
UNSUITABLE EXISTING BASE MATERIAL OR SUBGRADE SHALL BE EXCAVATED AND BACKFILLED WITH MDOT CL II MATERIAL AS DIRECTED BY THE ENGINEER. TO BE PAID FOR AS SUBGRADE UNDERCUTTING, TYPE II.

ONE FOOT WIDTH ADDITION MAY BE ON EITHER SIDE OF EXISTING WALK, OR A COMBINATION OF BOTH, AS DIRECTED BY THE ENGINEER

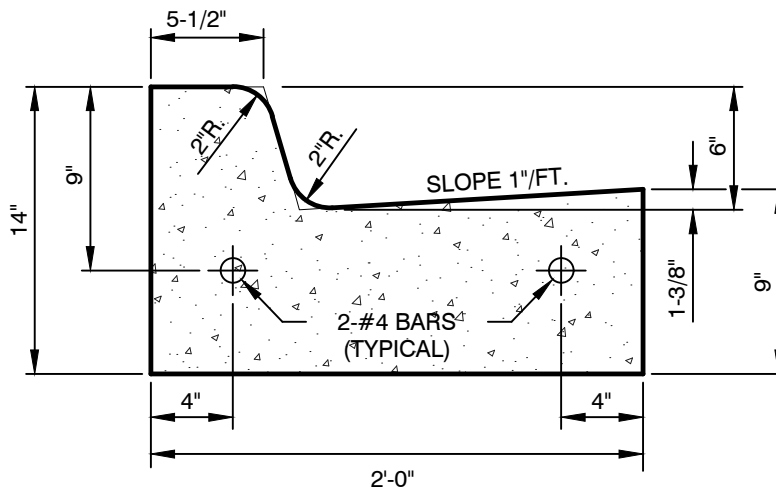
CONCRETE SIDEWALK DETAIL

NO SCALE



HMA PAVEMENT CROSS SECTION

NO SCALE



MDOT CURB DETAIL F-4

NO SCALE

2
DETAILS

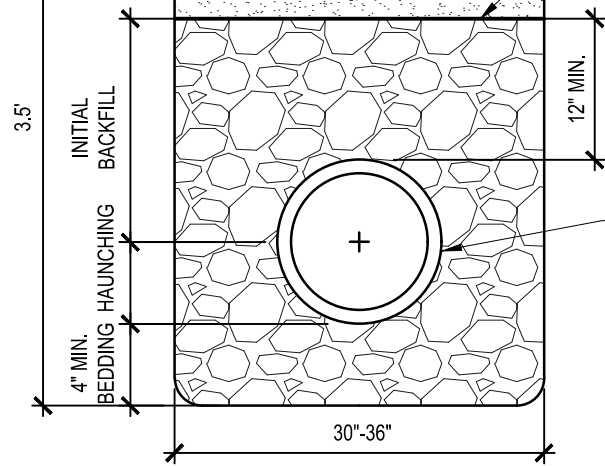
831310
F&V PROJECT NO.



TRENCH SLOPE SHALL BE PER OSHA AND MIOSHA REGULATIONS

100% MDOT CL II GRANULAR MATERIAL BACKFILL COMPACTED TO AT LEAST 95% OF MAX. DENSITY

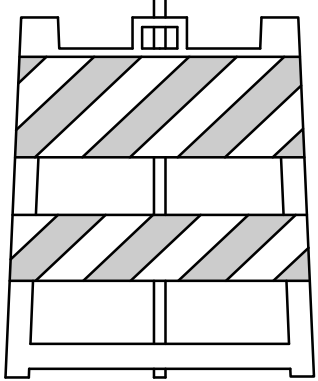
INSTALL GEOTEXTILE SEPARATOR OVER MDOT 6A COMPACTED CRUSHED STONE. COST TO BE INCLUDED IN PAY ITEM FOR LINEAL FOOT OF SEWER PIPE AS BID



PIPE SIZE AND CLASS PER PLAN OR SPECIFICATIONS

TRENCH DETAIL B - MODIFIED DETAIL
NO SCALE

SIDEWALK CLOSED R9-9 (24"x12")



SIDEWALK CLOSURE DETAIL
NO SCALE

PEDESTRIAN TYPE II BARRICADE, TEMP (SEE SPECIAL PROVISION FOR REQUIREMENTS. STYLE MAY VARY)

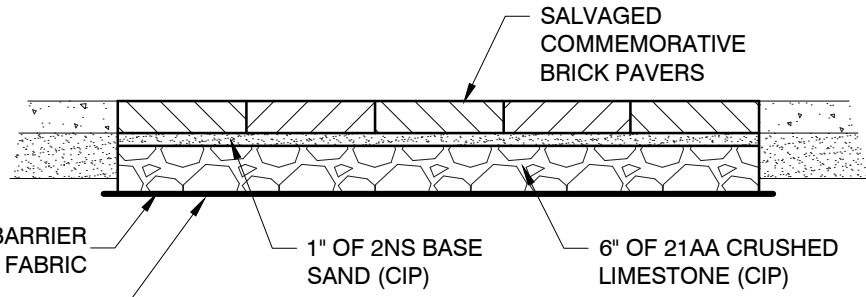
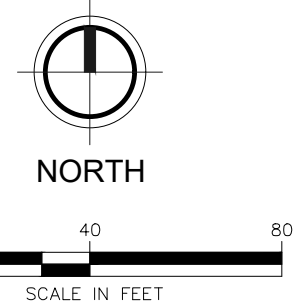
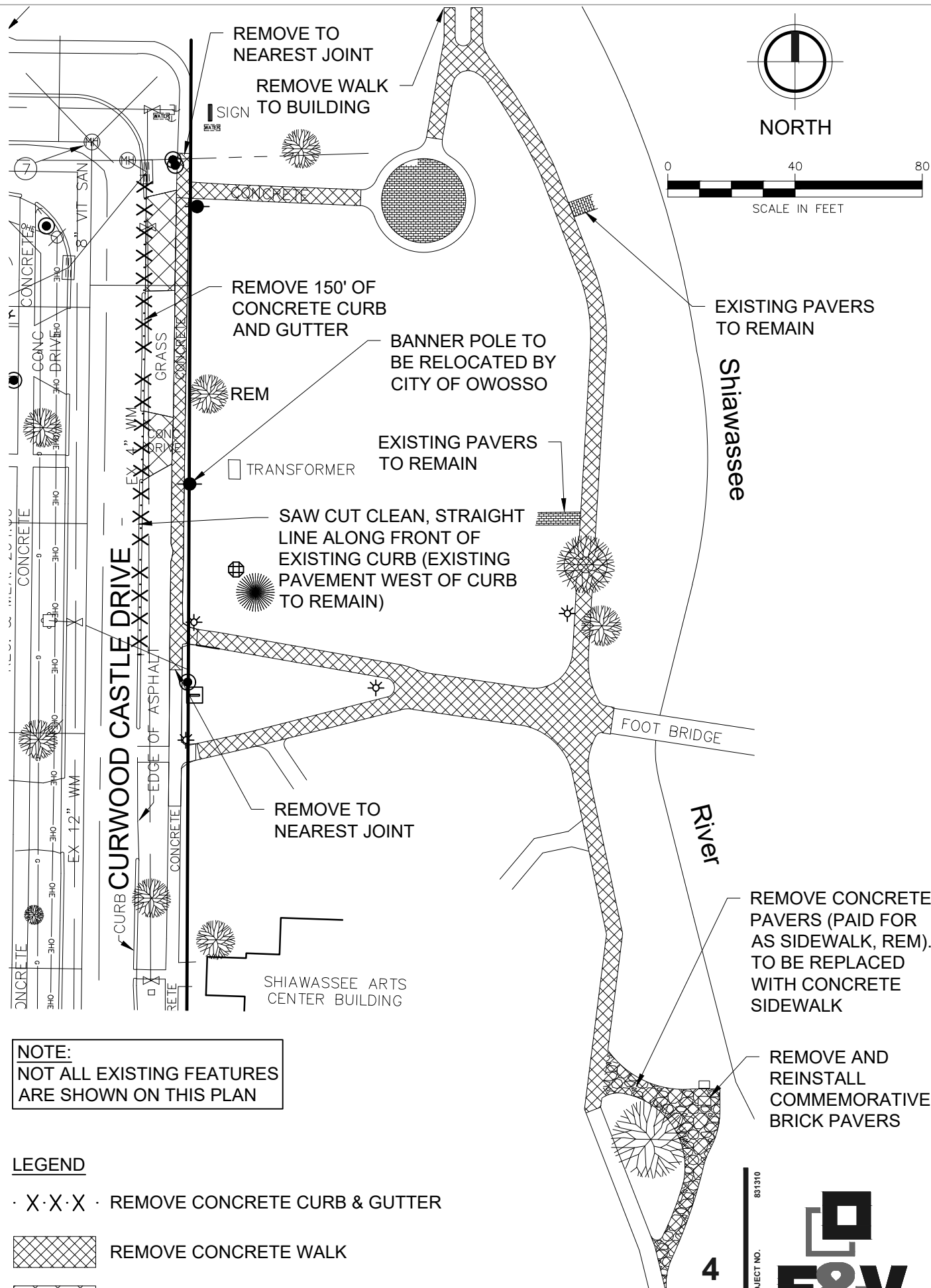


PHOTO OF COMMEMORATIVE BRICK PAVERS

COMMEMORATIVE BRICK PAVERS
INSTALLATION DETAIL
NO SCALE

gericr/M: \Proj\831001-833000\831310 Owosso Curwood Park RPG Design\Cad\Plns\831310-2-3 Details.dwg





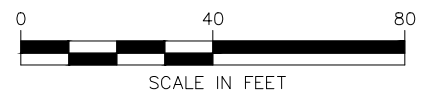
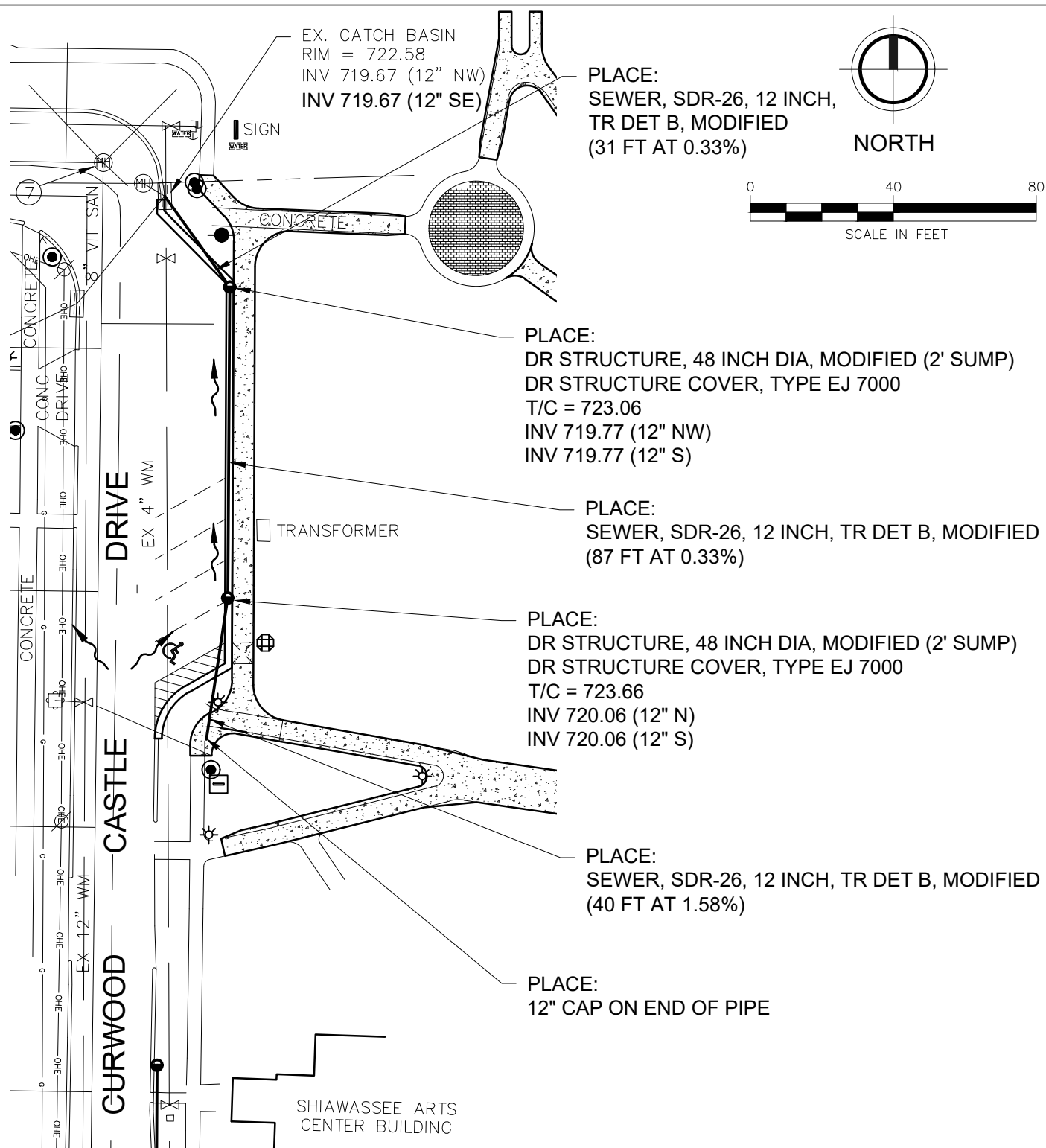
NOTE:
NOT ALL EXISTING FEATURES ARE SHOWN ON THIS PLAN

- LEGEND**
- X · X · X · REMOVE CONCRETE CURB & GUTTER
 - [Cross-hatch pattern] REMOVE CONCRETE WALK
 - [Diagonal-hatch pattern] REMOVE PAVEMENT

4
REMOVAL PLAN

831310
F&V PROJECT NO. **F&V**

g:\erick\M:\Proj\831001-833000\831310 Owosso Curwood Park RPG Design\Cad\Plns\831310-5 Storm Sewer Plan.dwg



NOTE:
 NOT ALL EXISTING FEATURES
 ARE SHOWN ON THIS PLAN

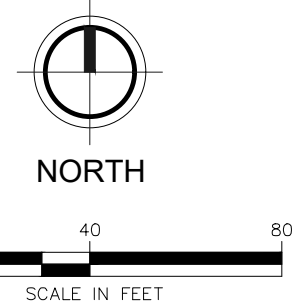
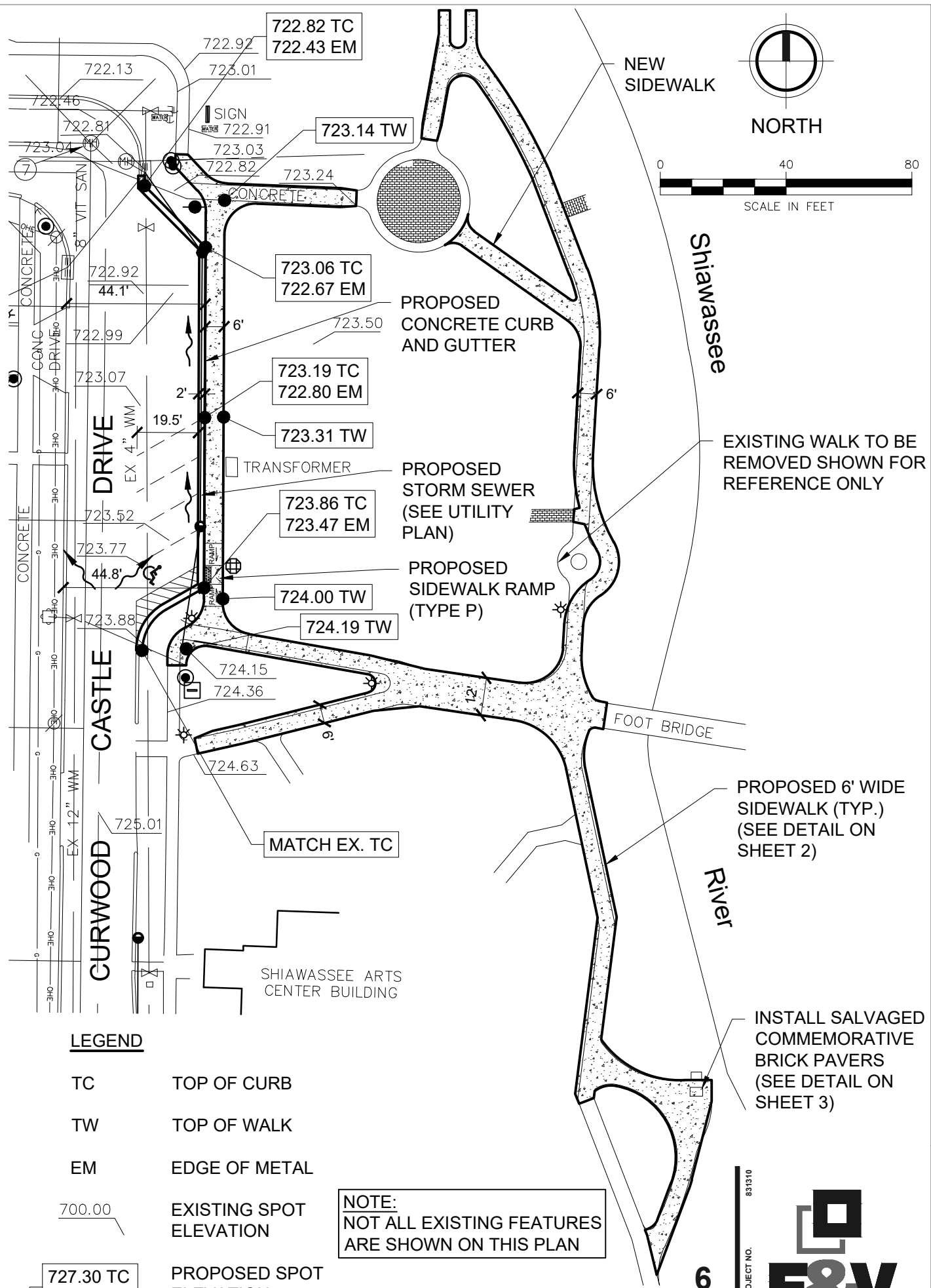


Know what's below.
Call before you dig.

831310
 F&V PROJECT NO.



g:\er\m:\proj\831001-833000\831310 Owosso Curwood Park RPG Design\Cad\Plns\831310-6 Construction Plan.dwg



LEGEND

- TC TOP OF CURB
- TW TOP OF WALK
- EM EDGE OF METAL
- 700.00 EXISTING SPOT ELEVATION
- 727.30 TC
726.91 EM PROPOSED SPOT ELEVATION

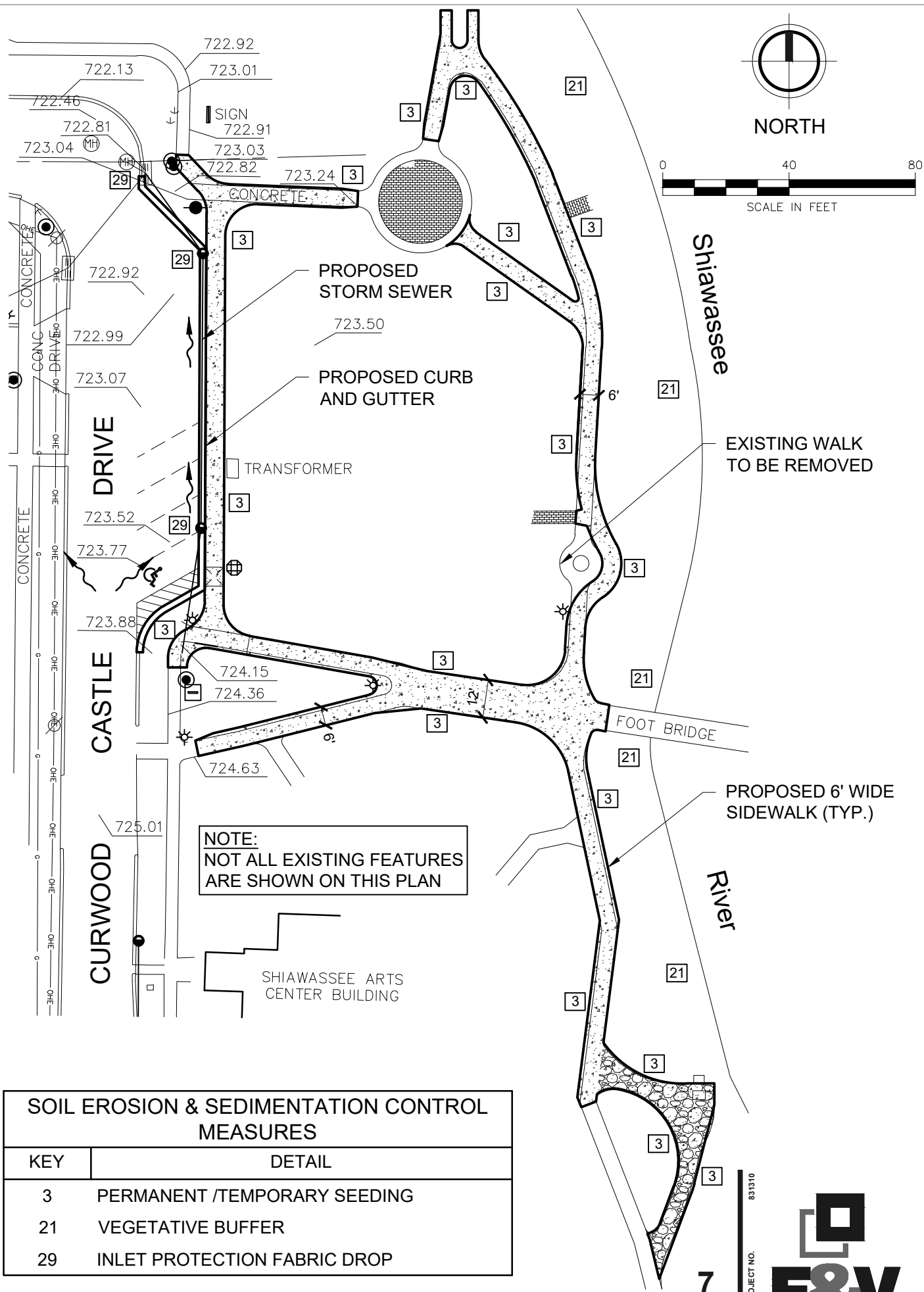
NOTE:
NOT ALL EXISTING FEATURES ARE SHOWN ON THIS PLAN

6 CONSTRUCTION PLAN

831310
F&V PROJECT NO.



geric/M:\Proj\831001-833000\831310 Owosso Curwood Park RPG Design\Cad\Plns\831310-7 SESS Plan.dwg



NOTE:
NOT ALL EXISTING FEATURES
ARE SHOWN ON THIS PLAN

SOIL EROSION & SEDIMENTATION CONTROL MEASURES	
KEY	DETAIL
3	PERMANENT /TEMPORARY SEEDING
21	VEGETATIVE BUFFER
29	INLET PROTECTION FABRIC DROP

7
SESS PLAN

831310

F&V PROJECT NO.



CITY OF OWOSSO
SPECIAL PROVISION
FOR
SIDEWALK, CONC, __ INCH, MODIFIED

F&V/Curwood Castle Park

1 of 1

July 2017

a. Description. This work shall consist of constructing concrete sidewalks of the thickness specified by the plans. This work shall be in accordance with the requirements of Section 803 of the 2012 MDOT Standard Specifications for Construction, except as herein modified.

Excavation and fill required to prepare base shall be included with this work. Base preparation shall include constructing a sand base compacted to 98 percent maximum density in accordance with the concrete sidewalk detail shown on the plans.

b. Materials. Fill shall be granular material, Class II.

c. Construction. Construct sidewalk in according to the details on the plans, standard plan R-29 series, and section 803 of the Standard Specifications for Construction.

d. Measurement and Payment. Concrete Sidewalk shall be measured in-place and paid for at the contract unit price per square feet, for the thickness placed and specified on the plans or as otherwise directed by the Engineer. The price shall be payment in full for furnishing all labor, material, and equipment needed to accomplish the work, including the compacted sand subbase.

The following pay item will apply to this section as listed in the contract documents unit price pay item list:

Pay Item	Pay Unit
Sidewalk, Conc, _ inch, Modified	Square Foot

CITY OF OWOSSO
SPECIAL PROVISION
FOR
SIDEWALK RAMP, CONC, __ INCH, MODIFIED

F&V/Curwood Castle Park

1 of 1

July 2017

a. Description. This work shall consist of constructing concrete sidewalk ramps of the thickness specified by the plans. This work shall be in accordance with the requirements of Section 803 of the 2012 MDOT Standard Specifications for Construction, except as herein modified.

Excavation and fill required to prepare base shall be included with this work. Base preparation shall include constructing a sand base compacted to 98 percent maximum density in accordance with the concrete sidewalk detail shown on the plans.

b. Materials. Fill shall be granular material, Class II.

c. Construction. Construct sidewalk ramps in according to the details on the plans, standard plan R-29 series, and section 803 of the Standard Specifications for Construction.

d. Measurement and Payment. Concrete sidewalk ramps shall be measured in-place and paid for at the contract unit price per square feet, for the thickness placed and specified on the plans or as otherwise directed by the Engineer. The price shall be payment in full for furnishing all labor, material, and equipment needed to accomplish the work, including the compacted sand subbase.

The following pay item will apply to this section as listed in the contract documents unit price pay item list:

Pay Item	Pay Unit
Sidewalk Ramp, Conc, _ inch, Modified	Square Foot

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
TEMPORARY PEDESTRIAN TYPE II BARRICADE

OFS:RAL

1 of 2

APPR:CAL:CT:08-02-16

a. Description. This work consists of furnishing, installing, maintaining, relocating, and removing a temporary pedestrian Type II barricade section as identified in the proposal or on the plans. Use temporary pedestrian Type II barricades to close non-motorized facilities including sidewalks, bicycle paths, pedestrian paths, and shared use paths that are not part of the roadway. One pedestrian Type II barricade is defined as a barricade section at least 43 inches wide, including all supports, ballast, and hardware.

b. Materials. Provide a temporary pedestrian Type II barricade that meets the requirements of *National Cooperative Highway Research Program Report 350 (NCHRP 350)* or *Manual for Assessing Safety Hardware (MASH)*, in addition to meeting the following requirements:

1. Provide barricade sections at least 43 inches wide, designed to interconnect to ensure a continuous *Americans with Disabilities Act (ADA)* compliant tactile barrier. Ensure the connection includes provisions to accommodate non-linear alignment as well as variations in elevation at the installation area.

2. Ensure the top surface of the barricade is designed to function as a hand-trailing edge, and has a height between 32 and 38 inches. Ensure the lower edge of the barricade is no more than 2 inches above the surface of the non-motorized facility. Ensure the top edge of the bottom rail of the barricade is a minimum of 8 inches above the surface of the non-motorized facility. The barricade may have a solid continuous face. Finally, all features on the front face of the barricade (the face in contact with pedestrians) must share a common vertical plane.

3. Equip both sides of the barricade with bands of alternating 6-inch wide orange and white vertical stripes of reflective sheeting. Two bands of sheeting 6 inches tall and a minimum of 36 inches long containing at least two orange and two white stripes each are required. One band placed near the top and one near the bottom if the barricade section has a solid face. If the barricade consists of two rails, affix one band of sheeting to each rail. Ensure the stripes of reflective sheeting are aligned vertically. Ensure this sheeting meets or exceeds the requirements of *ASTM D 4956* Type IV sheeting.

c. Construction. Construct the temporary pedestrian Type II barricade in accordance with the manufacturer's recommendations, Michigan Manual on Uniform Traffic Control Devices (MMUTCD), the plans, and the following requirements:

1. Install the barricade as shown on the plans and as directed by the Engineer. Interconnect all barricade sections using hinge components if necessary to ensure a continuous detectable edge for the entire installation. Ensure the barricade is ballasted according to the manufacturer's recommendations to ensure stability during wind events and contact with pedestrians.

2. When the barricade is installed near motor vehicle traffic, ensure reflective sheeting is visible to motorists.

3. When pedestrian Type II barricades are used to close a non-motorized facility, ensure a sufficient number of barricade sections are used to block the entire width of the facility. The barricade may extend outside the edge of the non-motorized facility but must not be less than the full width of the facility.

4. If sections of multiple colored barriers are used (i.e. safety orange and white) install the sections such that the colors alternate to increase conspicuity.

5. Ensure pedestrian Type II barricades are not used to close a motor vehicle facility. Ensure these barricades are not used to guide pedestrian traffic on a motor vehicle facility in the presence of active traffic. This prohibition includes bicycle/shared use lanes or shoulders in the presence of active traffic.

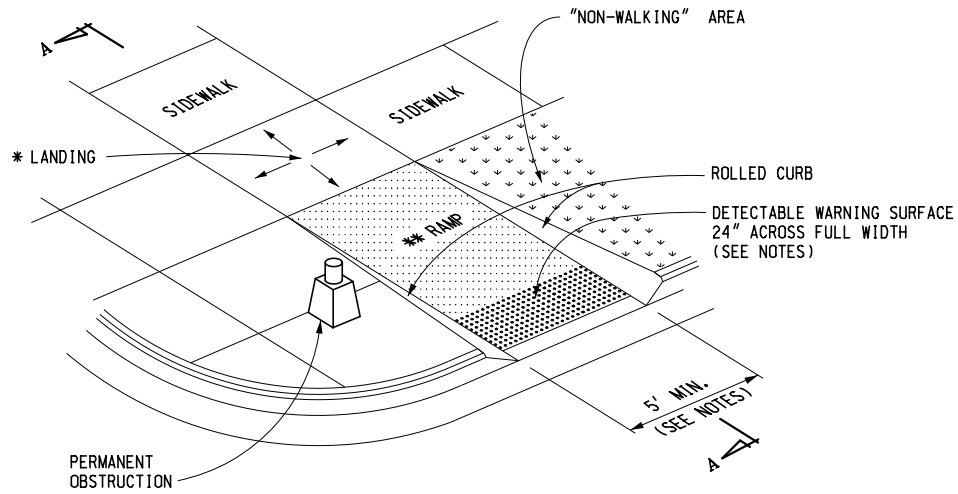
d. Measurement and Payment. The completed work, as described, will be measured and paid for at the contract unit price using the following pay item:

Pay Item	Pay Unit
Pedestrian Type II Barricade, Temp	Each

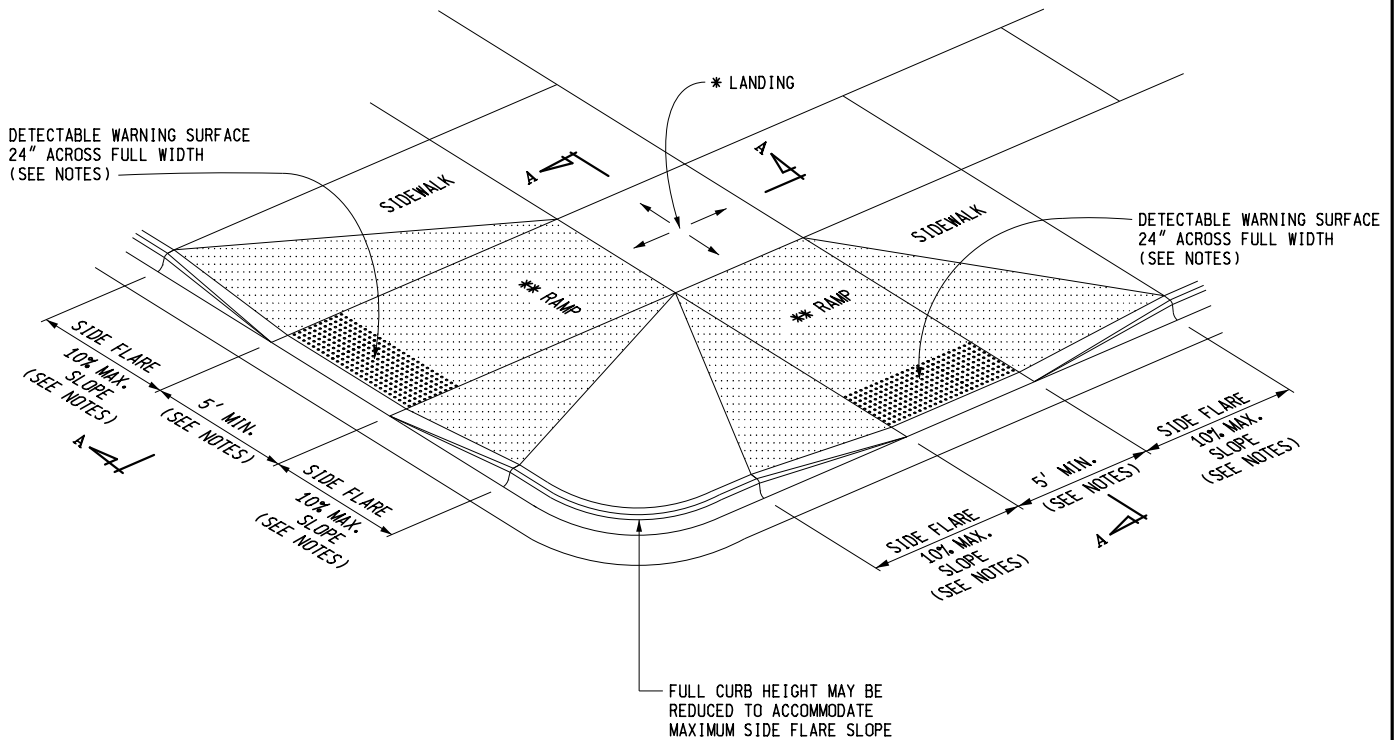
Pedestrian Type II Barricade, Temp, includes all labor, equipment, and materials to furnish, install, maintain, relocate, and remove one barricade section that is at least 43 inches wide. Additional payment will not be made if wider sections are provided. This includes all rails, supports, ballast, hinge points, reflective sheeting, and miscellaneous hardware needed to install and maintain a barricade section.

* MAXIMUM LANDING SLOPE IS 2.0% IN EACH DIRECTION OF TRAVEL. MINIMUM DIMENSIONS 5' x 5'. SEE NOTES.

** MAXIMUM RAMP CROSS SLOPE IS 2.0%, RUNNING SLOPE 5% - 7% (8.3% MAXIMUM). SEE NOTES.



SIDEWALK RAMP TYPE R
(ROLLED SIDES)



SIDEWALK RAMP TYPE F
(FLARED SIDES, TWO RAMPS SHOWN)



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

**SIDEWALK RAMP AND
DETECTABLE WARNING DETAILS**

F.H.W.A. APPROVAL

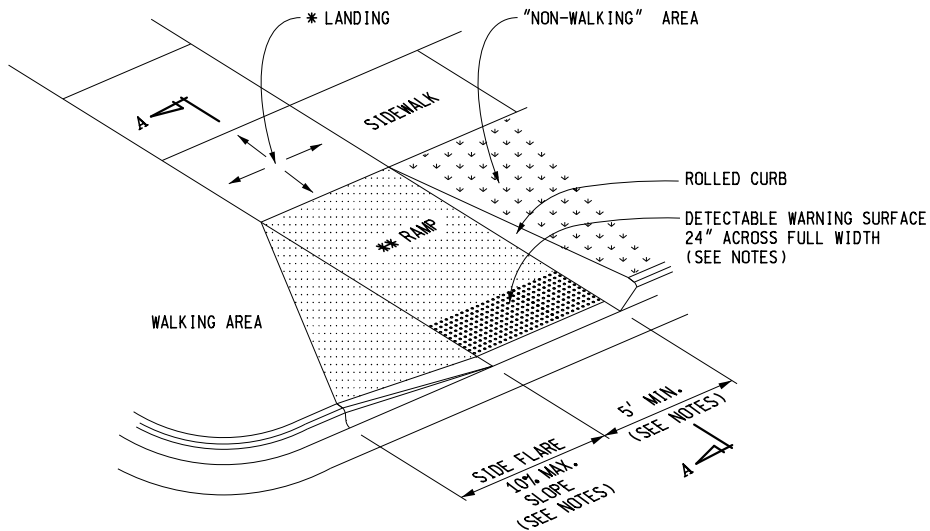
3-31-2017
PLAN DATE

R-28-J

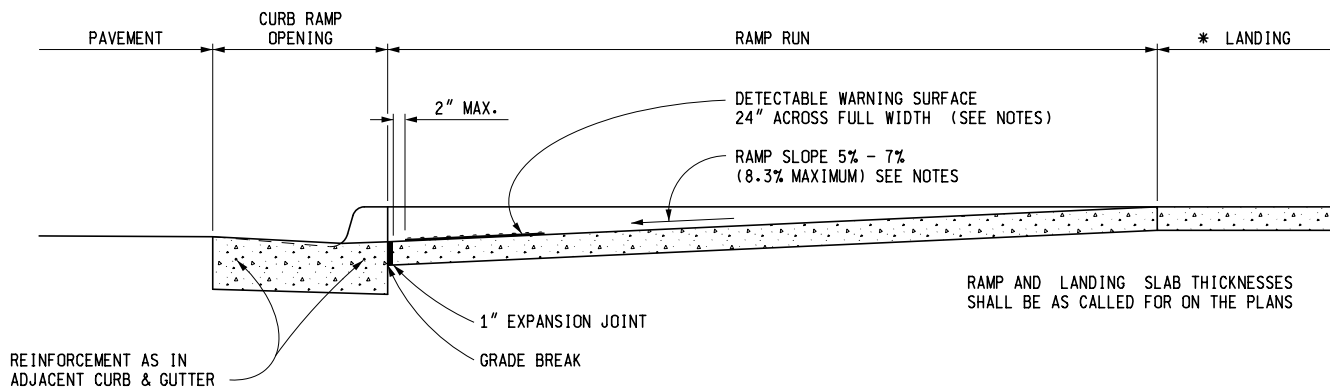
SHEET
1 OF 7

* MAXIMUM LANDING SLOPE IS 2.0% IN EACH DIRECTION OF TRAVEL. MINIMUM DIMENSIONS 5' x 5'. SEE NOTES.

** MAXIMUM RAMP CROSS SLOPE IS 2.0%, RUNNING SLOPE 5% - 7% (8.3% MAXIMUM). SEE NOTES.



SIDEWALK RAMP TYPE RF
(ROLLED / FLARED SIDES)

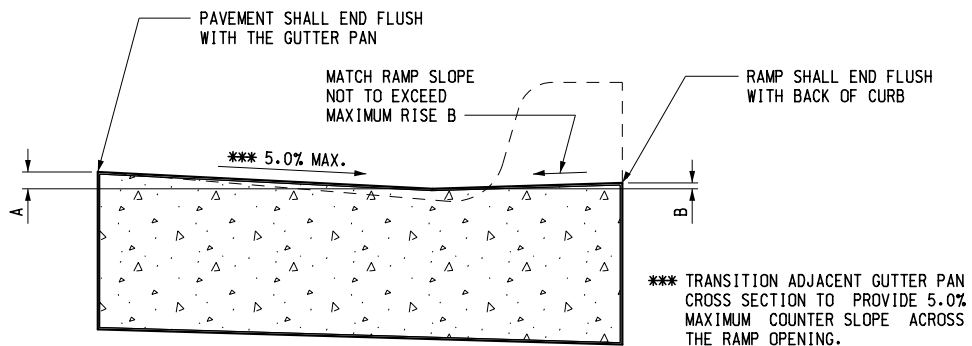


REINFORCEMENT AS IN ADJACENT CURB & GUTTER

CURB TYPE	MAXIMUM RISE (INCHES)	
	A	B
B1	3/4	1
B2	3/4	1
B3	3/4	1
D1	3/4	1
D2	3/4	1
D3	3/4	1
C1	1/2	1/2
C2	1/2	1/2
C3	3/4	1/2
C4	3/4	1/2
C5	1	1/2
C6	1	1/2
F1	1/2	1/2
F2	1/2	1/2
F3	3/4	1/2
F4	3/4	1/2
F5	1	1/2
F6	1	1/2

FOR CURB TYPES SEE STANDARD PLAN R-30-SERIES

SECTION A-A



SECTION THROUGH CURB RAMP OPENING
(TYPICAL ALL RAMP TYPES)

MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF DEVELOPMENT STANDARD PLAN FOR

**SIDEWALK RAMP AND
DETECTABLE WARNING DETAILS**

F.H.W.A. APPROVAL

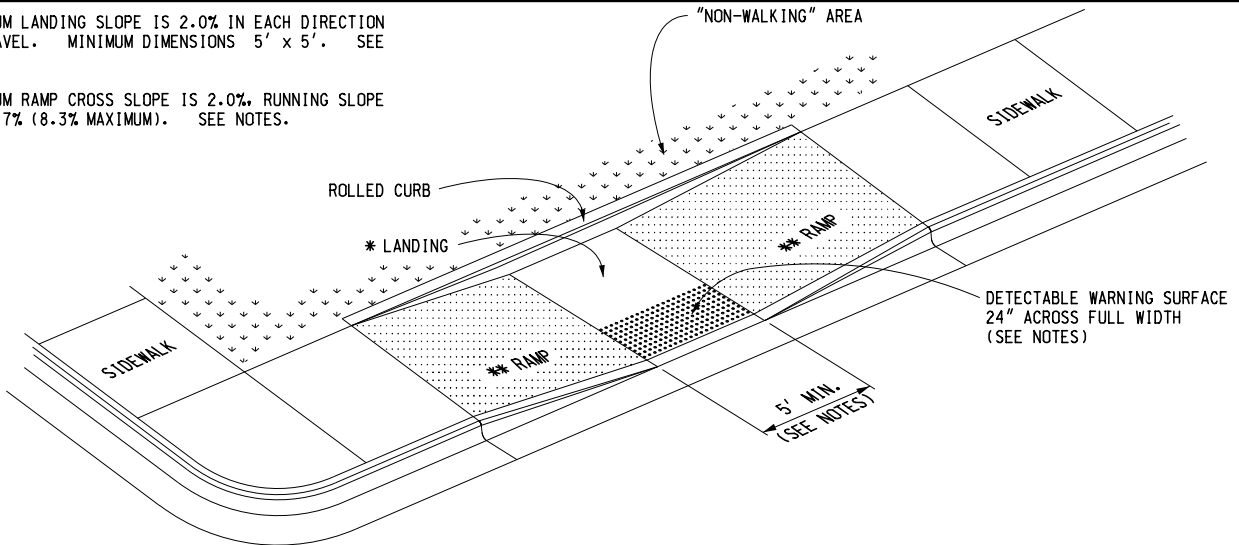
3-31-2017
PLAN DATE

R-28-J

SHEET
2 OF 7

* MAXIMUM LANDING SLOPE IS 2.0% IN EACH DIRECTION OF TRAVEL. MINIMUM DIMENSIONS 5' x 5'. SEE NOTES.

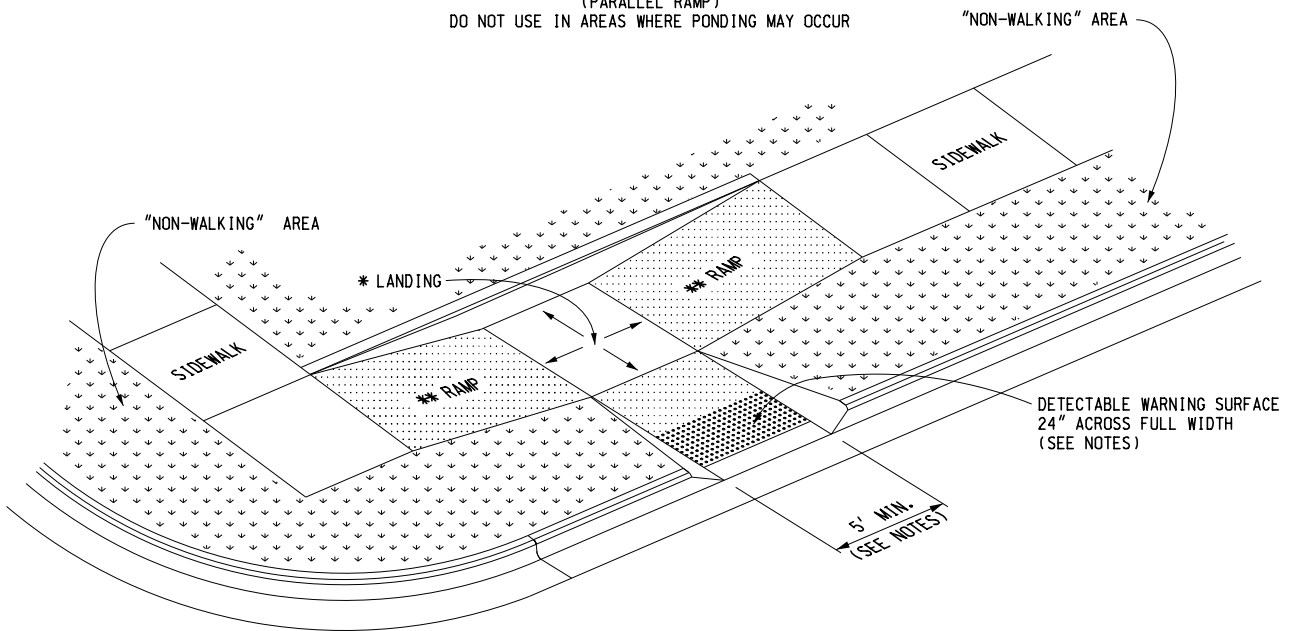
** MAXIMUM RAMP CROSS SLOPE IS 2.0%, RUNNING SLOPE 5% - 7% (8.3% MAXIMUM). SEE NOTES.



SIDEWALK RAMP TYPE P

(PARALLEL RAMP)

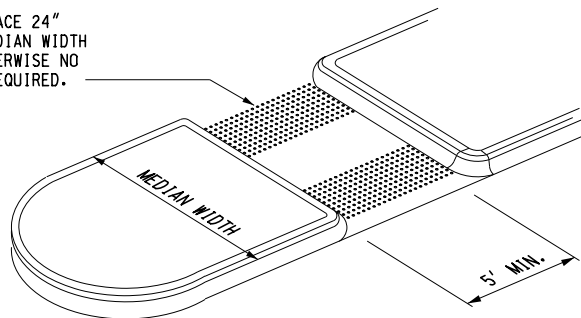
DO NOT USE IN AREAS WHERE PONDING MAY OCCUR



SIDEWALK RAMP TYPE C

(COMBINATION RAMP)

DETECTABLE WARNING SURFACE 24" ACROSS FULL WIDTH IF MEDIAN WIDTH IS AT LEAST 6'-0". OTHERWISE NO DETECTABLE WARNING IS REQUIRED.



SIDEWALK RAMP TYPE M

(MEDIAN ISLAND)

MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF DEVELOPMENT STANDARD PLAN FOR

**SIDEWALK RAMP AND
DETECTABLE WARNING DETAILS**

F.H.W.A. APPROVAL

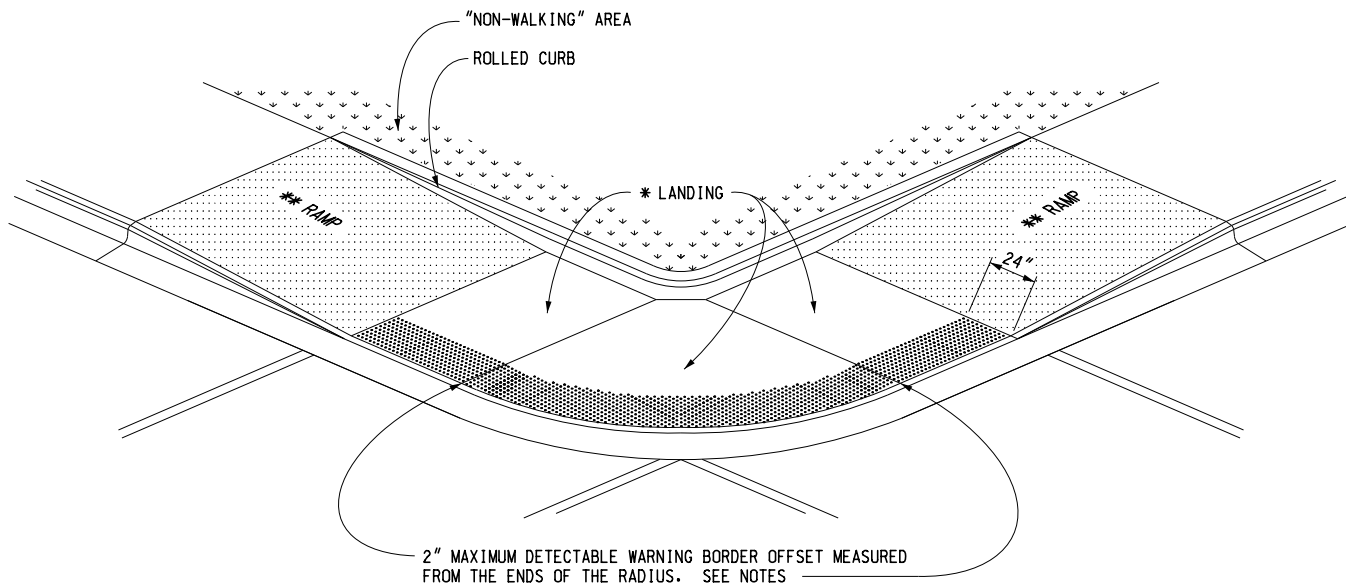
3-31-2017
PLAN DATE

R-28-J

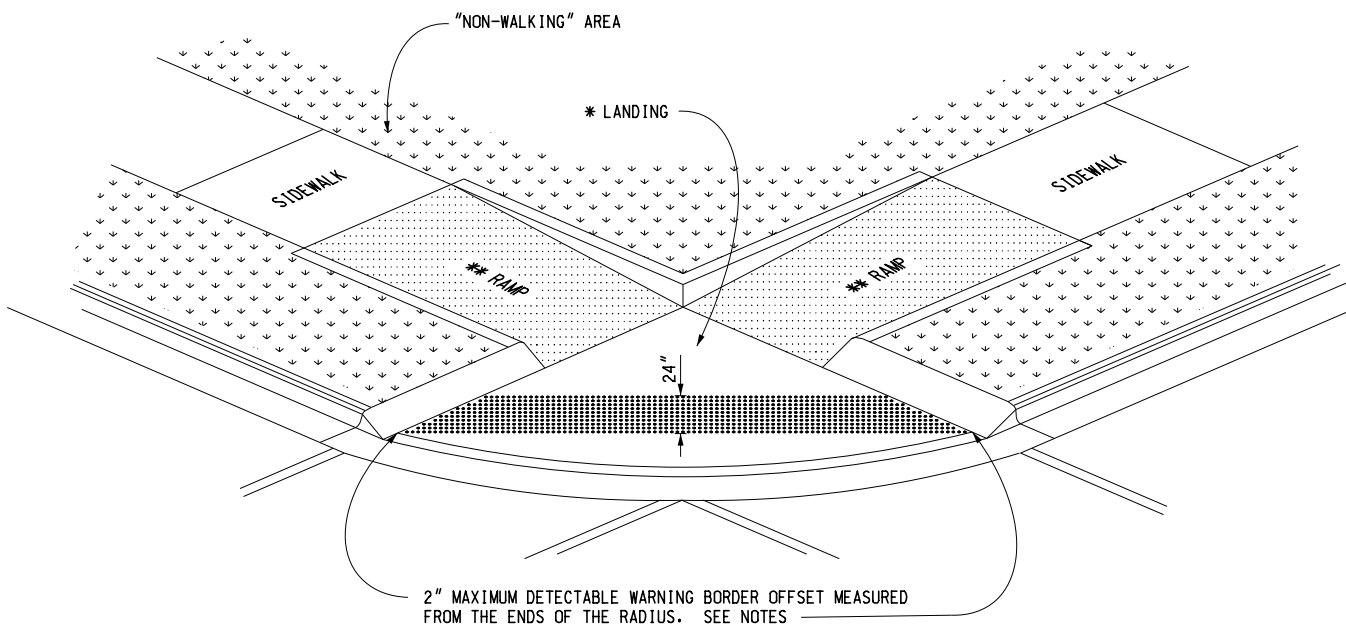
SHEET
3 OF 7

* MAXIMUM LANDING SLOPE IS 2.0% IN EACH DIRECTION OF TRAVEL. MINIMUM DIMENSIONS 5' x 5'. SEE NOTES.

** MAXIMUM RAMP CROSS SLOPE IS 2.0%, RUNNING SLOPE 5% - 7% (8.3% MAXIMUM). SEE NOTES.



(RADIAL DETECTABLE WARNING SHOWN)



(TANGENT DETECTABLE WARNING SHOWN)

SIDEWALK RAMP TYPE D

(DEPRESSED CORNER)

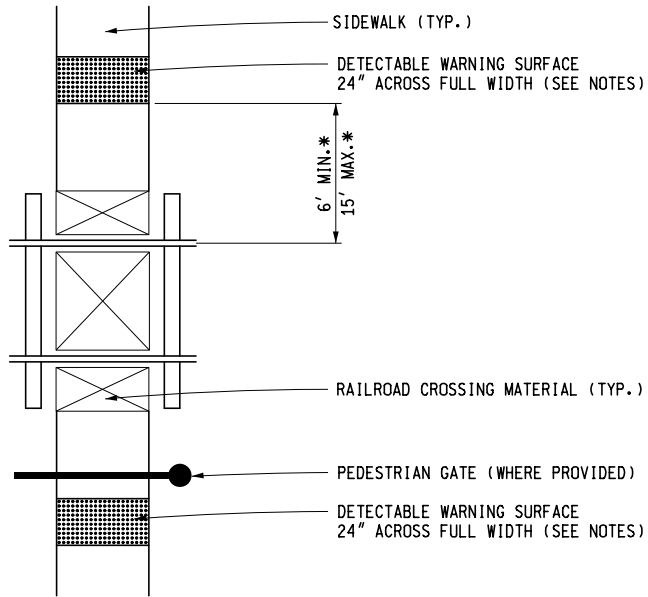
USE ONLY WHEN INDEPENDENT DIRECTIONAL RAMPS CAN NOT BE CONSTRUCTED FOR EACH CROSSING DIRECTION

MICHIGAN DEPARTMENT OF TRANSPORTATION
 BUREAU OF DEVELOPMENT STANDARD PLAN FOR

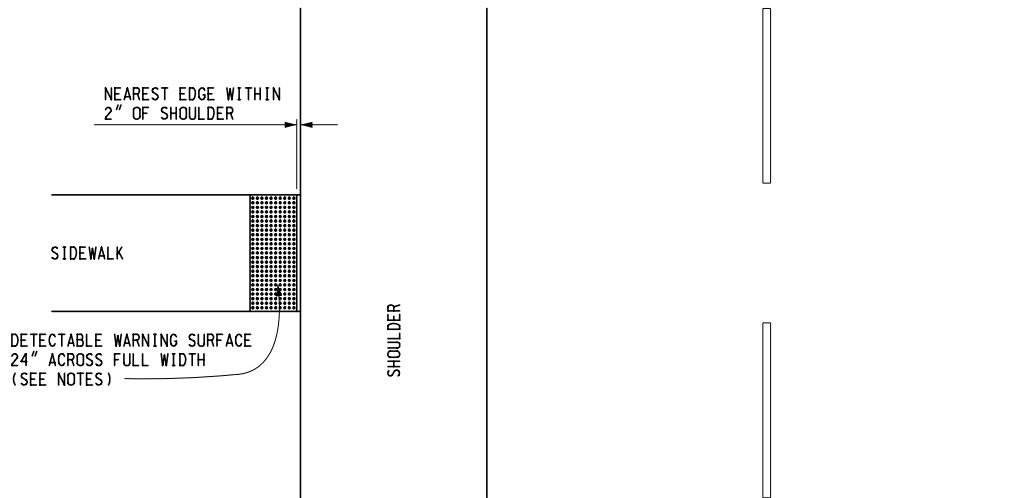
**SIDEWALK RAMP AND
 DETECTABLE WARNING DETAILS**

F.H.W.A. APPROVAL	3-31-2017 PLAN DATE	R-28-J	SHEET 4 OF 7
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* THE DETECTABLE WARNING SURFACE SHALL BE LOCATED SO THAT THE EDGE NEAREST THE RAIL CROSSING IS 6' MINIMUM AND 15' MAXIMUM FROM THE CENTERLINE OF THE NEAREST RAIL. DO NOT PLACE DETECTABLE WARNING ON RAILROAD CROSSING MATERIAL.



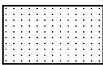

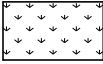



DETECTABLE WARNING AT RAILROAD CROSSING

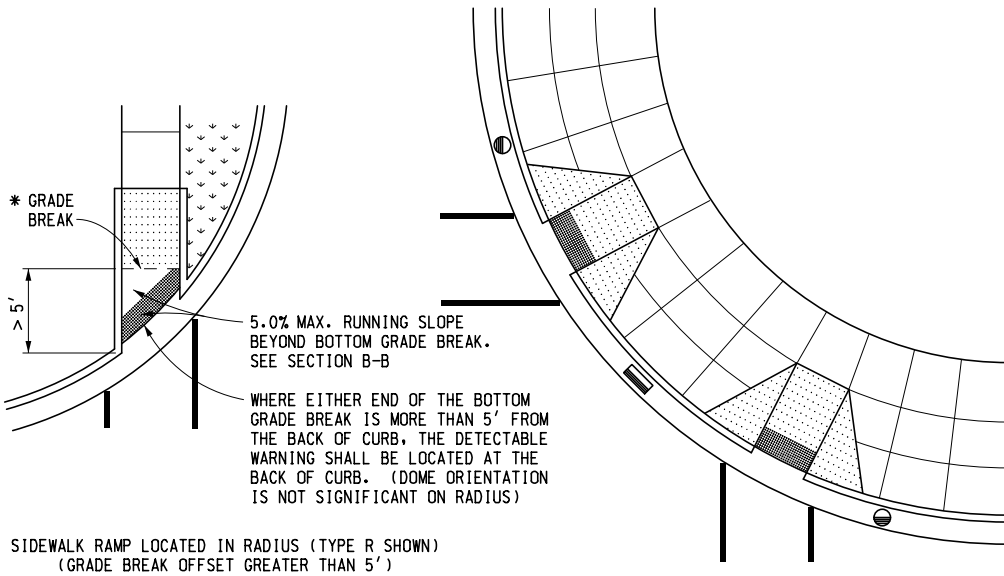


DETECTABLE WARNING AT FLUSH SHOULDER OR ROADWAY

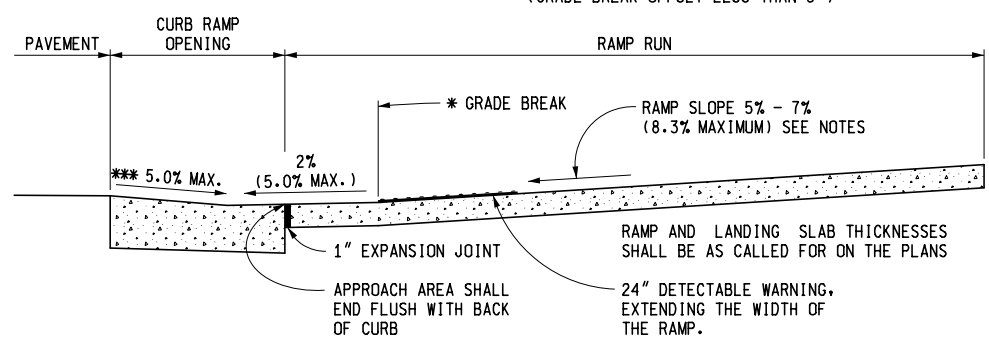
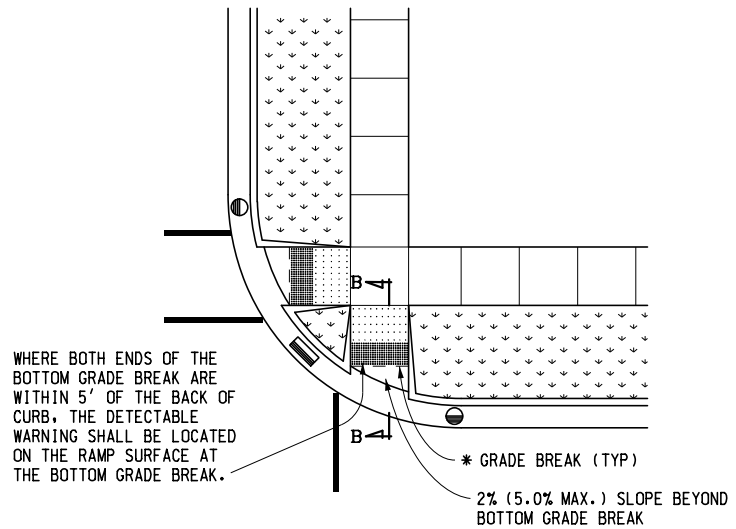
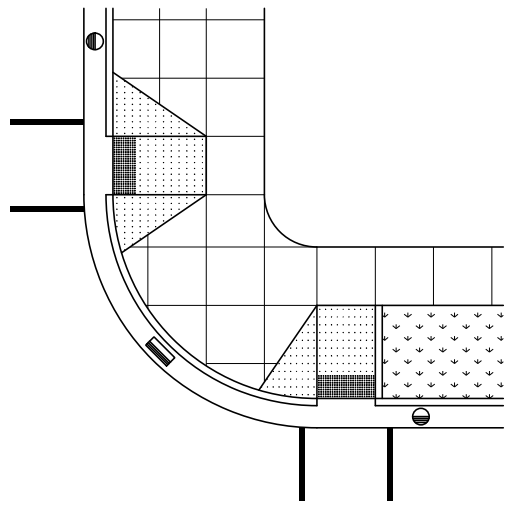
MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF DEVELOPMENT STANDARD PLAN FOR		
SIDEWALK RAMP AND DETECTABLE WARNING DETAILS		
F.H.W.A. APPROVAL	3-31-2017 PLAN DATE	R-28-J
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LEGEND

	SLOPED SURFACE
	DETECTABLE WARNING
	"NON-WALKING" AREA
	CROSSWALK MARKING
	PREFERRED LOCATION OF DRAINAGE INLET (TYP.)
	ALTERNATE LOCATION OF DRAINAGE INLET (TYP.)



(USE WITH RADIAL CURB WHEN THE CROSSWALK AND SIDEWALK RAMP ARE NOT ALIGNED)



* GRADE BREAKS AT THE TOP AND BOTTOM OF CURB RAMPS SHALL BE PERPENDICULAR TO THE DIRECTION OF TRAVEL.

*** TRANSITION ADJACENT GUTTER PAN CROSS SECTION TO PROVIDE 5.0% MAXIMUM COUNTER SLOPE ACROSS THE RAMP OPENING.

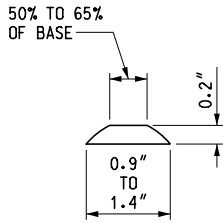
SEE SHEET 2 FOR CURB RAMP OPENING DETAILS.

**SECTION B-B
SIDEWALK RAMP ORIENTATION**

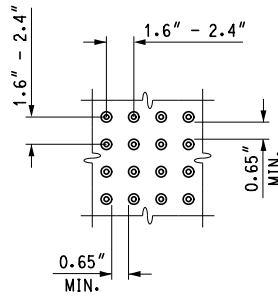
MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF DEVELOPMENT STANDARD PLAN FOR

**SIDEWALK RAMP AND
DETECTABLE WARNING DETAILS**

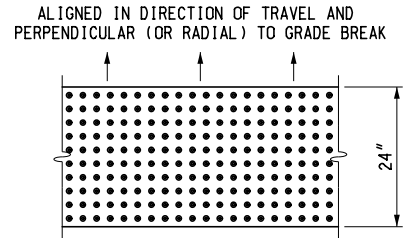
F.H.W.A. APPROVAL	3-31-2017 PLAN DATE	R-28-J	SHEET 6 OF 7
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DOMES SECTION



DOMES SPACING



DOMES ALIGNMENT

DETECTABLE WARNING DETAILS

NOTES:

DETAILS SPECIFIED ON THIS PLAN APPLY TO ALL CONSTRUCTION, RECONSTRUCTION, OR ALTERATION OF STREETS, CURBS, OR SIDEWALKS IN THE PUBLIC RIGHT OF WAY.

SIDEWALK RAMPS ARE TO BE LOCATED AS SPECIFIED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

RAMPS SHALL BE PROVIDED AT ALL CORNERS OF AN INTERSECTION WHERE THERE IS EXISTING OR PROPOSED SIDEWALK AND CURB. RAMPS SHALL ALSO BE PROVIDED AT MARKED AND/OR SIGNALIZED MID-BLOCK CROSSINGS.

SURFACE TEXTURE OF THE RAMP SHALL BE THAT OBTAINED BY A COARSE BROOMING, TRANSVERSE TO THE RUNNING SLOPE.

SIDEWALK SHALL BE RAMPED WHERE THE DRIVEWAY CURB IS EXTENDED ACROSS THE WALK.

CARE SHALL BE TAKEN TO ASSURE A UNIFORM GRADE ON THE RAMP. WHERE CONDITIONS PERMIT, IT IS DESIRABLE THAT THE SLOPE OF THE RAMP BE IN ONLY ONE DIRECTION, PARALLEL TO THE DIRECTION OF TRAVEL.

RAMP WIDTH SHALL BE INCREASED, IF NECESSARY, TO ACCOMMODATE SIDEWALK SNOW REMOVAL EQUIPMENT NORMALLY USED BY THE MUNICIPALITY.

WHEN 5' MINIMUM WIDTHS ARE NOT PRACTICABLE, RAMP WIDTH MAY BE REDUCED TO NOT LESS THAN 4' AND LANDINGS TO NOT LESS THAN 4' x 4'.

DETECTABLE WARNING SURFACE COVERAGE IS 24" MINIMUM IN THE DIRECTION OF RAMP/PATH TRAVEL AND THE FULL WIDTH OF THE RAMP/PATH OPENING EXCLUDING CURBED OR FLARED CURB TRANSITION AREAS. A BORDER OFFSET NOT GREATER THAN 2" MEASURED ALONG THE EDGES OF THE DETECTABLE WARNING IS ALLOWABLE. FOR RADIAL CURB THE OFFSET IS MEASURED FROM THE ENDS OF THE RADIUS.

FOR NEW ROADWAY CONSTRUCTION, THE RAMP CROSS SLOPE MAY NOT EXCEED 2.0%. FOR ALTERATIONS TO EXISTING ROADWAYS, THE CROSS SLOPE MAY BE TRANSITIONED TO MEET AN EXISTING ROADWAY GRADE. THE CROSS SLOPE TRANSITION SHALL BE APPLIED UNIFORMLY OVER THE FULL LENGTH OF THE RAMP.

THE MAXIMUM RUNNING SLOPE OF 8.3% IS RELATIVE TO A FLAT (0%) REFERENCE. HOWEVER, IT SHALL NOT REQUIRE ANY RAMP OR SERIES OF RAMPS TO EXCEED 15 FEET IN LENGTH.

DRAINAGE STRUCTURES SHOULD NOT BE PLACED IN LINE WITH RAMPS. THE LOCATION OF THE RAMP SHOULD TAKE PRECEDENCE OVER THE LOCATION OF THE DRAINAGE STRUCTURE. WHERE EXISTING DRAINAGE STRUCTURES ARE LOCATED IN THE RAMP PATH OF TRAVEL, USE A MANUFACTURER'S ADA COMPLIANT GRATE. OPENINGS SHALL NOT BE GREATER THAN 1/2". ELONGATED OPENINGS SHALL BE PLACED SO THAT THE LONG DIMENSION IS PERPENDICULAR TO THE DOMINANT DIRECTION OF TRAVEL.

THE TOP OF THE JOINT FILLER FOR ALL RAMP TYPES SHALL BE FLUSH WITH THE ADJACENT CONCRETE.

CROSSWALK AND STOP LINE MARKINGS, IF USED, SHALL BE SO LOCATED AS TO STOP TRAFFIC SHORT OF RAMP CROSSINGS. SPECIFIC DETAILS FOR MARKING APPLICATIONS ARE GIVEN IN THE "MICHIGAN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".

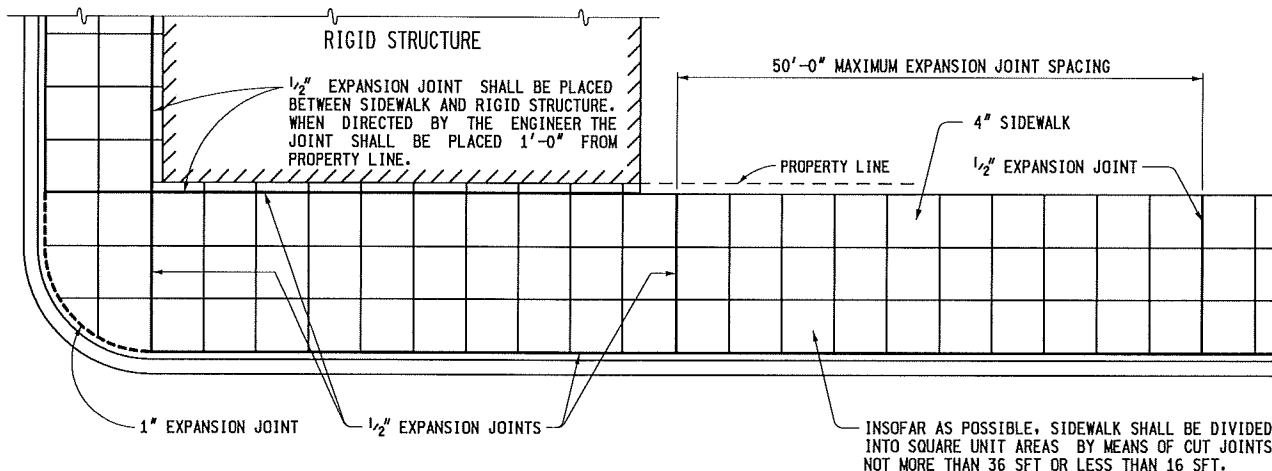
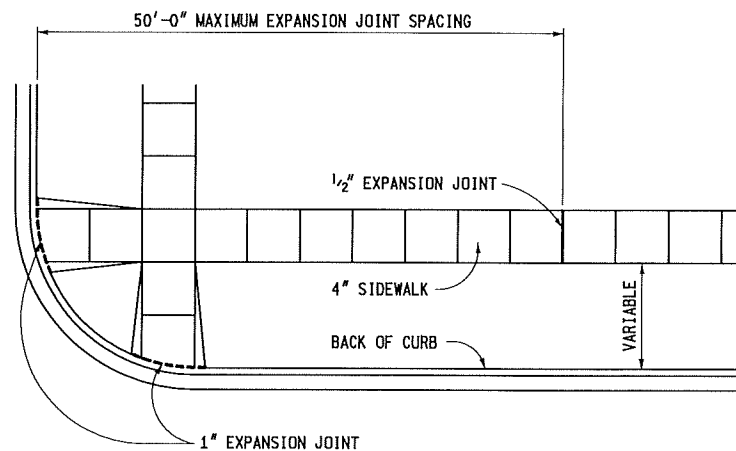
FLARED SIDES WITH A SLOPE OF 10% MAXIMUM, MEASURED ALONG THE ROADSIDE CURB LINE, SHALL BE PROVIDED WHERE AN UNOBSTRUCTED CIRCULATION PATH LATERALLY CROSSES THE SIDEWALK RAMP. FLARED SIDES ARE NOT REQUIRED WHERE THE RAMP IS BORDERED BY LANDSCAPING, UNPAVED SURFACE OR PERMANENT FIXED OBJECTS. WHERE THEY ARE NOT REQUIRED, FLARED SIDES CAN BE CONSIDERED IN ORDER TO AVOID SHARP CURB RETURNS AT RAMP OPENINGS.

DETECTABLE WARNING PLATES MUST BE INSTALLED USING FABRICATED OR FIELD CUT UNITS CAST AND/OR ANCHORED IN THE PAVEMENT TO RESIST SHIFTING OR HEAVING.

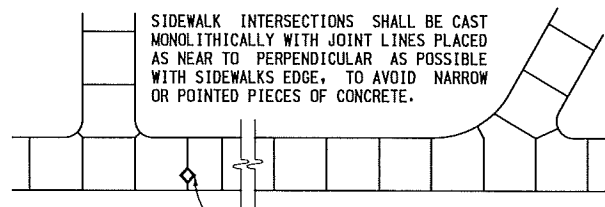
MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF DEVELOPMENT STANDARD PLAN FOR

**SIDEWALK RAMP AND
DETECTABLE WARNING DETAILS**

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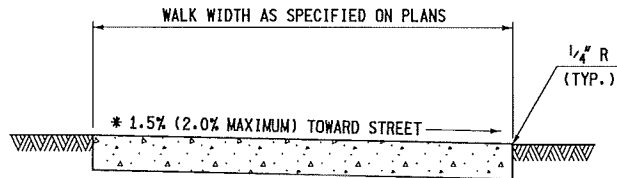


LOCATION OF JOINTS IN CONCRETE SIDEWALK



WHERE A PERMANENT STRUCTURE IS LOCATED IN SIDEWALK, PLACE EXPANSION MATERIAL AROUND STRUCTURE AND ADJUST JOINT PATTERN TO INTERSECT STRUCTURE AS ILLUSTRATED.

TYPICAL SIDEWALK JOINT LAYOUTS



* SEE NOTES

4" CONCRETE SIDEWALK



PREPARED BY
DESIGN DIVISION

DRAWN BY: B.L.T.

CHECKED BY: W.K.P.

DEPARTMENT DIRECTOR
Kirk T. Stuedle

APPROVED BY: *Randy W. [Signature]*
DIRECTOR, BUREAU OF FIELD SERVICES

APPROVED BY: *Neil A. Van [Signature]*
DIRECTOR, BUREAU OF HIGHWAY DEVELOPMENT

MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAY DEVELOPMENT STANDARD PLAN FOR

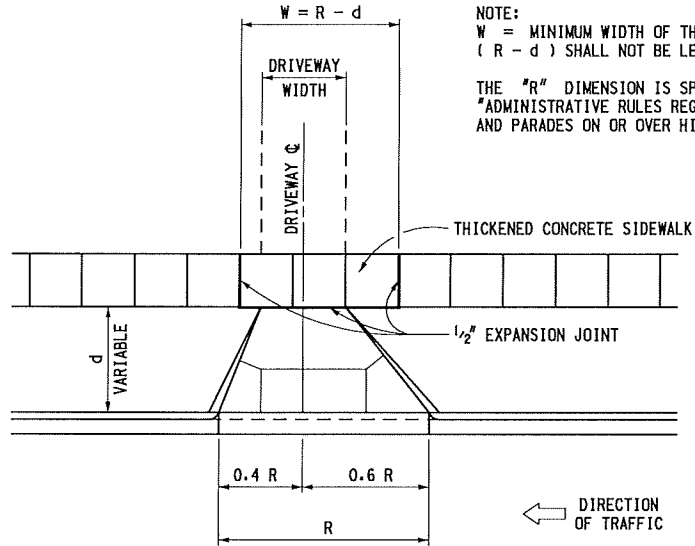
**DRIVEWAY OPENINGS
& APPROACHES,
AND CONCRETE SIDEWALK**

9-30-2014
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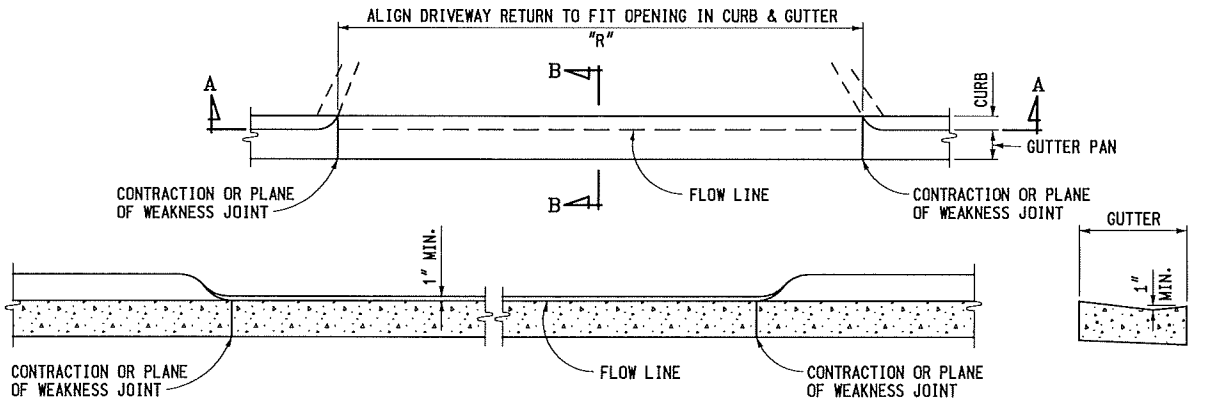
SHEET
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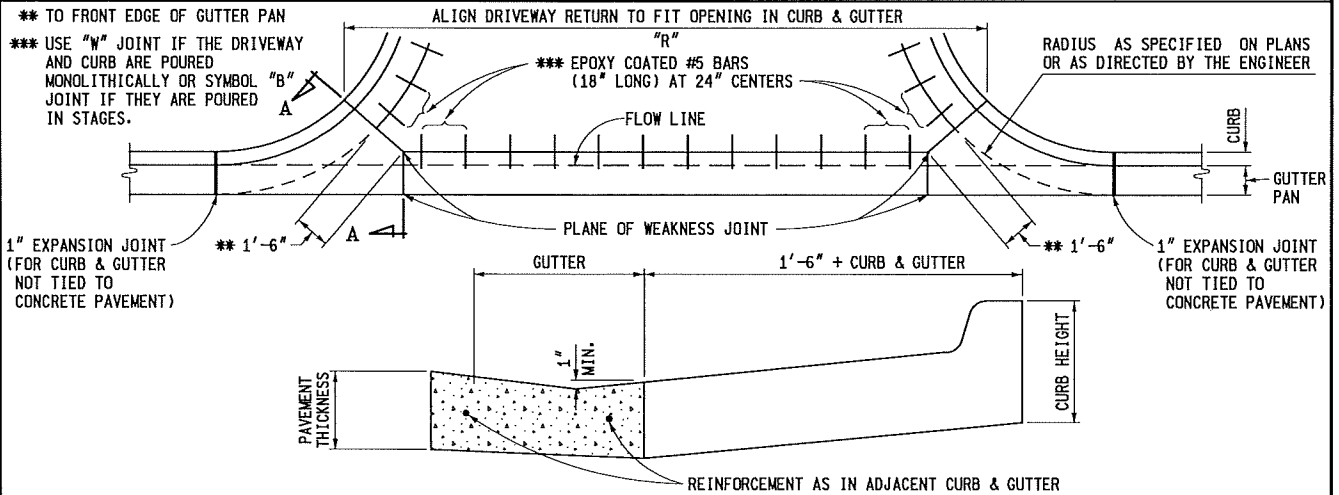
NOTE:
 W = MINIMUM WIDTH OF THICKENED CONCRETE SIDEWALK.
 $(R - d)$ SHALL NOT BE LESS THAN DRIVEWAY WIDTH.

THE "R" DIMENSION IS SPECIFIED IN THE PUBLICATION
 "ADMINISTRATIVE RULES REGULATING DRIVEWAYS, BANNERS
 AND PARADES ON OR OVER HIGHWAYS".

CONCRETE DRIVEWAY OPENING LAYOUT



SECTION A - A
 CONCRETE DRIVEWAY OPENING, DETAIL L
 SECTION B - B



SECTION A - A
 CONCRETE DRIVEWAY OPENING, DETAIL M

NOTE:
 FOR ROADWAYS WITH CONCRETE PAVEMENTS, LONGITUDINAL LANE TIES WILL
 BE CONTINUOUS THROUGH THE DRIVEWAY OPENING AND THE SPACING OF THE
 #5 BARS IN CONCRETE DRIVEWAYS SHALL BE ADJUSTED TO AVOID CONFLICT
 WITH THE LONGITUDINAL LANE TIES.

MICHIGAN DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAY DEVELOPMENT STANDARD PLAN FOR

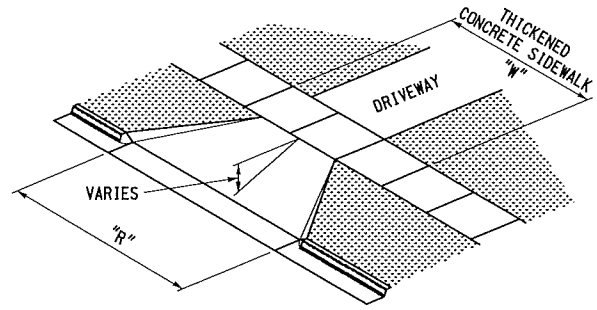
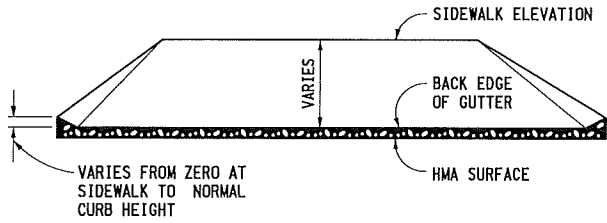
**DRIVEWAY OPENINGS
 & APPROACHES,
 AND CONCRETE SIDEWALK**

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 F.H.W.A. APPROVAL

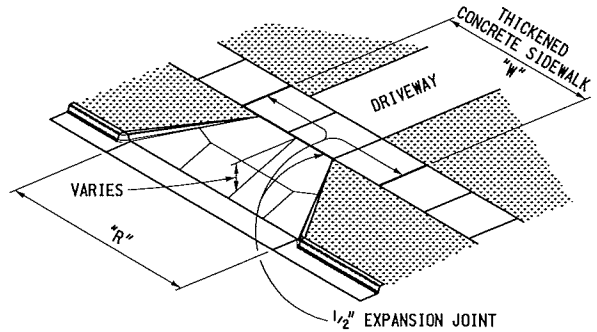
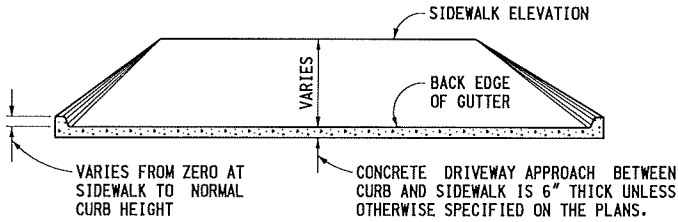
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HMA DRIVEWAY APPROACH
(TO BE USED WITH DETAIL L)

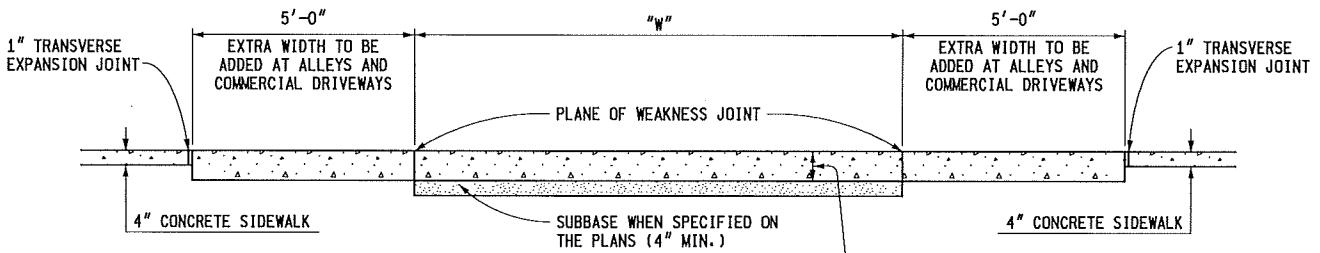


CONCRETE DRIVEWAY APPROACH
(TO BE USED WITH DETAIL L OR M)

NOTES:

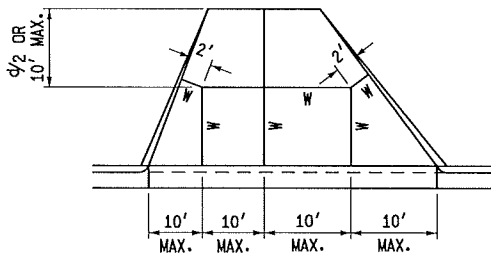
MONOLITHIC CURB IS INCLUDED IN THE CONCRETE DRIVEWAY APPROACH QUANTITY.

REINFORCEMENT IS NOT REQUIRED UNLESS SPECIFIED ON THE PLANS. WHEN REINFORCEMENT IS SPECIFIED, SEE CHART ON THIS SHEET.



WHEN CONCRETE DRIVEWAY APPROACH IS SPECIFIED, THE THICKENED CONCRETE SIDEWALK THICKNESS IS EQUAL TO THE THICKNESS OF THE CONCRETE DRIVEWAY APPROACH. WHEN HMA DRIVEWAY APPROACH IS SPECIFIED, THE THICKENED CONCRETE SIDEWALK THICKNESS IS 6" MIN.

THICKENED CONCRETE SIDEWALK



ADJUST DRIVEWAY JOINTS AS NEEDED TO ALIGN WITH ANY COINCIDING TRANSVERSE PAVEMENT JOINTS.

JOINT LAYOUT IS AS INDICATED OR AS DIRECTED BY THE ENGINEER.

INTERMEDIATE DRIVEWAY JOINT DETAILS

REINFORCEMENT FOR CONCRETE DRIVEWAYS

CONCRETE DRIVEWAY THICKNESS	WIRE SIZE (6" x 6" MESH)	AVERAGE WEIGHT (LBS/100 SFT)
LESS THAN 8"	W1.4	21
	W2.9	42
8" OR GREATER	USE WIRE FABRIC REINFORCEMENT SPECIFIED ON STANDARD PLAN R-37-SERIES	

MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAY DEVELOPMENT STANDARD PLAN FOR

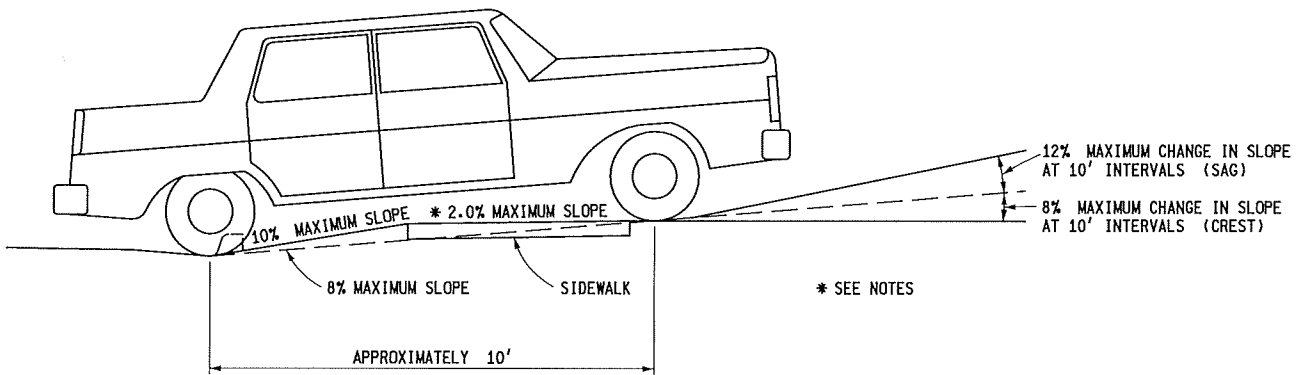
**DRIVEWAY OPENINGS
& APPROACHES,
AND CONCRETE SIDEWALK**

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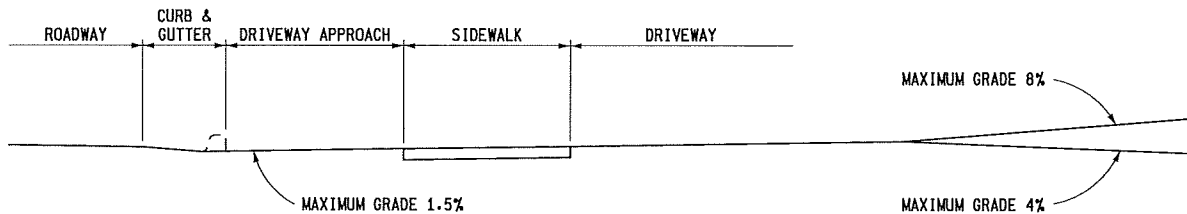
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LOW VOLUME COMMERCIAL OR RESIDENTIAL DRIVEWAY SLOPES



COMMERCIAL DRIVEWAY PROFILE FOR MAJOR TRAFFIC GENERATORS

NOTES:

FOR DRIVEWAY DESIGN REFER ALSO TO "ADMINISTRATIVE RULES REGULATING DRIVEWAYS, BANNERS, AND PARADES ON OR OVER HIGHWAYS" AND GEOMETRIC DESIGN G-680-SERIES, COMMERCIAL DRIVEWAYS.

FOR CURB AND GUTTER DETAILS, SEE STANDARD PLAN R-30-SERIES.

TRANSVERSE SIDEWALK SLOPES ARE TYPICALLY 1.5% (2.0% MAXIMUM). IN ORDER TO MEET SITE CONDITIONS, IF THE TRANSVERSE SLOPE IS REQUIRED TO BE LESS THAN 1.5%, LONGITUDINAL DRAINAGE MUST BE PROVIDED.

WHEN SETTING GRADES FOR COMMERCIAL DRIVES, THE TYPES OF VEHICLES USING THE DRIVE SHOULD BE CONSIDERED.

MICHIGAN DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAY DEVELOPMENT STANDARD PLAN FOR

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