



Department of Management Services  
Purchasing Division  
241 West South Street  
Kalamazoo, MI 49007-4796  
Phone: 269.337.8020  
Fax: 269.337.8500  
[www.kalamazoocity.org](http://www.kalamazoocity.org)  
[purchasing@kalamazoocity.org](mailto:purchasing@kalamazoocity.org)

### **INVITATION FOR BIDS (IFB)**

The City of Kalamazoo, Michigan is soliciting sealed bids for:

**Project Name: Riverview Drive Resurfacing**

**Bid Reference #: 91396-019.0**

**IFB ISSUE DATE: December 13, 2023**

**BID DUE/OPENING DATE: January 16, 2024 @ 3:00 p.m. Local Time**

*Facsimile Bids Will Not Be Accepted.*

#### **MAILING ADDRESS & INSTRUCTIONS**

**Mail To:**

Purchasing Division  
241 W. South Street  
Kalamazoo, MI 49007

**Questions for this IFB should be directed to:**

Department Contact: George Waring, Public  
Works Senior Civil Engineer at  
[waringg@kalamazoocity.org](mailto:waringg@kalamazoocity.org), 269-303-7844

***Include on the Envelope the Project Name and Bid Reference Number. All Envelopes Must Be Sealed.***

You are invited to submit a bid for this project. Specifications, terms, conditions and instructions for submitting bids are contained herein. This Invitation for Bids with all pages, documents and attachments contained herein, or subsequently added to and made a part hereof, submitted as a fully and properly executed bid shall constitute the contract between the City and the successful bidder when approved and accepted on behalf of the City by an authorized official or agent of the City. Please review the bid document as soon as possible and note the **DEADLINE FOR QUESTIONS** in the Instructions to Bidders.

All bidders shall complete and return the Bid and Award page(s) and submit all information requested herein in order for a bid to be responsive. The bid document shall be returned in its entirety, in a properly identified and sealed envelope to the Purchasing Division at the above address. **BIDS MUST BE RECEIVED BEFORE THE DUE DATE - LATE BIDS WILL NOT BE CONSIDERED.** The City reserves the right to postpone the bid opening for its own convenience.

TABLE OF CONTENTS

Table of Contents

STATEMENT OF NO BID .....5

SECTION I INSTRUCTIONS FOR BIDDERS .....6

1. EXAMINATION OF BID DOCUMENT .....6

2. PREPARATION OF BID .....6

3. EXPLANATION TO BIDDERS .....6

4. CASH DISCOUNTS .....6

5. WITHDRAWAL OF BIDS .....6

6. ALTERNATE BIDS .....6

7. LATE BIDS .....7

8. UNIT PRICES .....7

9. BID SUBMITTAL .....7

10. BID TABULATIONS .....7

SECTION II BID AND AWARD .....9

CITY OF KALAMAZOO EX-OFFENDER POLICY CHECKLIST .....12

CITY OF KALAMAZOO LOCAL PREFERENCE POLICY AND CERTIFICATION .....13

SUB-CONTRACTING INFORMATION .....15

REFERENCE QUESTIONNAIRE .....16

SECTION III CITY OF KALAMAZOO INDEMNITY AND INSURANCE .....18

SECTION IV SPECIAL REQUIREMENTS .....20

1. BID BOND/GUARANTEEE .....20

2. WAIVERS OF LIEN .....20

3. SUBCONTRACTORS .....21

4. PREVAILING WAGES .....21

SECTION V SPECIAL CONDITIONS .....22

1. INTENT .....22

2. SCOPE OF WORK .....22

3. UNIT PRICING .....22

4. TEMPORARY UTILITIES .....23

5. PROGRESS SCHEDULE .....23

6. LIQUIDATED DAMAGES .....23

7. MAINTAINING TRAFFIC .....23

8. COORDINATING .....25

9. WORK HOURS .....25

SECTION VI GENERAL CONDITIONS .....26

1. PROJECT MANAGER’S STATUS .....	26
2. CONSTRUCTION SCHEDULE AND COORDINATION.....	26
3. PROTECTION OF WORK .....	26
4. PROTECTION OF PROPERTY .....	27
5. REMOVAL OF RUBBISH .....	27
6. BRICK SIDEWALK OR PAVEMENT REMOVAL .....	27
7. REMOVAL OF PERMANENT TRAFFIC SIGNS AND POSTS.....	27
8. PERMANENT TRAFFIC SIGN STAKING .....	27
9. LAWN SPRINKLER SYSTEMS .....	27
10. SALVAGING DRAINAGE STRUCTURE COVERS.....	27
11. REMOVING AND REPLACING CURB AND GUTTER .....	28
12. DRAINAGE INLET COVERS (K COVERS) .....	28
13. FLY ASH USE IN CONCRETE ITEMS.....	28
14. EXISTING WATER MAINS.....	28
15. GRADE INTERSECTIONS .....	28
16. UNDERGROUND UTILITIES .....	28
17. ADJUSTING MONUMNET BOXES .....	28
18. PAVEMENT REMOVAL QUANTITIES.....	28
19. COLD MILLING .....	28
20. SITE SECURITY .....	29
21. SITE ACCESS .....	29
22. MATERIALS INSPECTION AND RESPONSIBILITY .....	29
23. GUARANTEE.....	29
24. SAFETY .....	29
25. SPECIFICATIONS FOR CONSTRUCTION.....	29
26. QUANTITIES .....	29
27. PRICE.....	30
28. BASIS FOR PAYMENT.....	30
29. PAY ESTIMATES .....	30
30. PAYMENT TO CONTRACTOR .....	30
31. INSPECTION OF WORK .....	30
32. INSPECTION OF SITE .....	31
33. LAYING OUT OF WORK .....	31
34. SUPERVISION .....	31
35. TARDINESS .....	31
36. ADDITIONS .....	31
37. INSPECTION AND TESTING .....	31

38. QUESTIONS.....	31
SECTION VII TERMS AND CONDITIONS.....	32
1. AWARD OF CONTRACT.....	32
2. COMPLETE CONTRACT.....	32
3. SUBCONTRACTORS – NON-ASSIGNMENT.....	32
4. TAXES.....	32
5. INVOICING.....	33
6. PAYMENTS.....	33
7. CHANGES AND/OR CONTRACT MODIFICATIONS.....	33
8. LAWS, ORDINANCES, AND REGULATIONS.....	33
9. RIGHT TO AUDIT.....	34
10. HOLD HARMLESS.....	34
11. DEFAULT.....	34
12. TERMINATION OF CONTRACT.....	35
13. INDEPENDENT CONTRACTOR.....	35
14. PROJECT SUPERVISOR.....	35
15. MEETINGS.....	35
16. INSPECTION OF WORKSITE.....	36
17. CONTRACT PERIOD, EXTENSIONS, CANCELLATION.....	36
APPENDIX A NON-DISCRIMINATION CLAUSE FOR ALL CITY OF KALAMAZOO CONTRACTS.....	37
APPENDIX B PREVAILING WAGES.....	39
APPENDIX C ADDITIONAL INFORMATION.....	42
APPENDIX D SPECIAL PROVISIONS.....	44



### STATEMENT OF NO BID

**NOTE: If you DO NOT intend to bid on this commodity or service, please complete and return this form immediately.** Your response will assist us in evaluating all responses for this important project and to improve our bid solicitation process.

The Purchasing Division of the City of Kalamazoo wishes to keep its bidders list file up-to-date. If, for any reason you cannot supply the commodity/service noted in this bid solicitation, this form must be completed and returned to remain on the particular bid list for future projects of this type.

**If you do not respond to this inquiry within the time set for the bid opening date and time noted, we will assume that you can no longer supply this commodity/service, and your name will be removed from this bid list.**

- \_\_\_\_\_ Specifications too "tight", i.e. geared toward one brand/ manufacturer only (explain below).
- \_\_\_\_\_ Specifications are unclear (explain below).
- \_\_\_\_\_ We are unable to meet specifications.
- \_\_\_\_\_ Insufficient time to respond to the Invitation for Bid.
- \_\_\_\_\_ Our schedule would not permit us to perform.
- \_\_\_\_\_ We are unable to meet bond requirements.
- \_\_\_\_\_ We are unable to meet insurance requirements.
- \_\_\_\_\_ We do not offer this product or service.
- \_\_\_\_\_ Remove us from your bidders list for this commodity or service.
- \_\_\_\_\_ Other (specify below).

REMARKS: \_\_\_\_\_

SIGNED: \_\_\_\_\_ NAME: \_\_\_\_\_  
(Type or Print)

TITLE: \_\_\_\_\_ DATE: \_\_\_\_\_

FIRM NAME: \_\_\_\_\_  
(if any)

ADDRESS: \_\_\_\_\_  
(Street address) (City) (State) (Zip)

PHONE: \_\_\_\_\_ FAX: \_\_\_\_\_

EMAIL: \_\_\_\_\_

## SECTION I INSTRUCTIONS FOR BIDDERS

### 1. EXAMINATION OF BID DOCUMENT

Before submitting a bid, bidders shall carefully examine the specifications and shall fully inform themselves as to all existing conditions and limitations. The bidder shall indicate in the bid the sum to cover the cost of all items included on the bid form.

### 2. PREPARATION OF BID

The bid shall be legibly prepared in ink or typed. If a unit price or extension already entered by the bidder on the Bid and Award form is to be altered, it shall be crossed out and the new unit price or extension entered above or below and initialed by the bidder with ink. The bid shall be legally signed and the complete address of the bidder given thereon.

All bids shall be tightly sealed in an envelope plainly marked SEALED BID and identified by project name, bid opening date and time. Bids opened by mistake, due to improper identification, will be so documented and resealed. The Purchasing Division will maintain and guarantee confidentiality of the contents until the specified opening date and time. Bids submitted by Fax machine will not be accepted.

### 3. EXPLANATION TO BIDDERS

Any binding explanation desired by a bidder regarding the meaning or interpretation of the Invitation for Bid (IFB) and attachments must be requested in writing, **at least 5 business days before the bid opening** so a reply may reach all prospective bidders before the submission of bids. Any information given to a prospective bidder concerning the IFB will be furnished to all prospective bidders as an amendment or addendum to the IFB if such information would be prejudicial to uninformed bidders. Receipt of amendments or addenda by a bidder must be acknowledged in the bid by attachment, or by letter or fax received before the time set for opening of bids. Oral explanation or instructions given prior to the opening will not be binding.

### 4. CASH DISCOUNTS

Discount offered for payment of less than thirty (30) days will not be considered in evaluating bids for award. Offered discounts of less than thirty (30) days will be taken if payment is made within the discount period, even though not considered in evaluation of the bid.

### 5. WITHDRAWAL OF BIDS

Bids may be withdrawn in person by a bidder or authorized representative, provided their identity is made known and a receipt is signed for the bid, but only if the withdrawal is made prior to the exact time set for receipt of bid. No bid may be withdrawn for at least ninety (90) days after bid opening.

### 6. ALTERNATE BIDS

bidders are cautioned that any alternate bid, unless specifically requested or any changes, insertions or omissions to the terms and conditions, specifications or any other requirement of this IFB may be considered non-responsive, and at the option of the City, result in rejection of the alternate bid.

## **7. LATE BIDS**

Any bid received at the office designated herein after the exact time specified for receipt will not be considered. (Note: The City reserves the right to consider bids that have been determined by the City to be received late due to mishandling by the City after receipt of the bid and no award has been made).

## **8. UNIT PRICES**

If there is a discrepancy between unit prices and their extension, unit prices shall prevail.

## **9. BID SUBMITTAL**

- 9.1. **Mail your bid**, to be received before the bid due date and time indicated in the bid document, to the City of Kalamazoo at the following address:

City of Kalamazoo  
Purchasing Division  
241 West South Street  
Kalamazoo, MI 49007

- 9.2. **Deliver your bid to City Hall In-Person** before the bid due date and time indicated in the bid document.
- 9.3. **Deliver your bid to the Treasurer’s Office Payment Drop Box** located in the northwest corner of City Hall (see photos on the following page) before the bid due date and time indicated in the bid document.

## **10. BID TABULATIONS**

The Purchasing Division makes an effort to post bid tabulations to the City of Kalamazoo website within 24 hours after the bid opening date and time at: <https://www.kalamazoo.org/bidopportunities>. However, in certain cases the posting of the bid tabulation may extend beyond the 24-hour window.



1. Open drop box located at City Hall.

2. Insert SEALED BID here.



## SECTION II BID AND AWARD

The undersigned having become thoroughly familiar with all of the bid/contract documents incorporated herein, the project site and the location conditions affecting the work, hereby proposes to perform everything required to be performed in strict conformity with the requirements of these documents, and to provide and furnish all the equipment, labor and materials necessary to complete, in a professional manner, the furnishing and installing of all of the following, meeting or exceeding the specifications as set forth herein for the prices as stated on page 10 of this document (Bid and Award Page).

### RIVERVIEW DRIVE RESURFACING

ITEM CODE	DESCRIPTION	UNIT	TOTAL	UNIT PRICE	EXT. COST
1100001	Mobilization, Max 10%	LSUM	1	\$	\$
2040020	Curb and Gutter, Rem	Ft	130	\$	\$
2040050	Pavt, Rem	Syd	112	\$	\$
2050016	Excavation, Earth	Cyd	75	\$	\$
2080020	Erosion Control, Inlet Protection, Fabric Drop	Ea	26	\$	\$
3020030	Aggregate Base, 12 inch	Syd	225	\$	\$
4027050	_Dr Structure Cover, Type Q, Modified	Ea	3	\$	\$
4027050	_Dr Structure Cover, Type S, Modified	Ea	3	\$	\$
4030005	Dr Structure Cover, Adj, Case 1	Ea	29	\$	\$
5010021	Pavt Joint and Crack Repr, Det 8	Ft	675	\$	\$
5010025	Hand Patching	Ton	125	\$	\$
5012085	HMA, 5EML, High Stress	Ton	1825	\$	\$
5017011	Cold Milling HMA and Conc Pavt, Modified	Syd	10053	\$	\$
5027001	Asphalt Repr Mastic	Ft	9000	\$	\$
8010005	Driveway, Nonreinf Conc, 6 inch	Syd	130	\$	\$
8020016	Curb and Gutter, Conc, Det B2	Ft	50	\$	\$
8020038	Curb and Gutter, Conc, Det F4	Ft	80	\$	\$
8100371	Post, Steel, 3 pound	Ft	288	\$	\$
8100405	Sign, Type IIIB	Sft	94	\$	\$
8100425	Sign, Type VB	Sft	256	\$	\$
8100616	Reflective Panel for Permanent Sign Support, 6 foot	Ea	14	\$	\$
8110024	Pavt Mrkg, Ovly Cold Plastic, 6 inch, Crosswalk	Ft	180	\$	\$
8110041	Pavt Mrkg, Ovly Cold Plastic, 12 inch, Crosswalk	Ft	180	\$	\$
8110045	Pavt Mrkg, Ovly Cold Plastic, 24 inch, Stop Bar	Ft	115	\$	\$

**City of Kalamazoo – Invitation for Bids  
Riverview Drive Resurfacing**

8110063	Pavt Mrkg, Ovly Cold Plastic, Lt Turn Arrow Sym	Ea	3	\$	\$
8110068	Pavt Mrkg, Ovly Cold Plastic, Only	Ea	6	\$	\$
8110078	Pavt Mrkg, Ovly Cold Plastic, Thru Arrow Sym	Ea	3	\$	\$
8110155	Pavt Mrkg, Sprayable Thermopl, 6 inch, White	Ft	375	\$	\$
8110156	Pavt Mrkg, Sprayable Thermopl, 6 inch, Yellow	Ft	3800	\$	\$
8110343	Rem Spec Mrkg	Sft	510	\$	\$
8120012	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn	Ea	20	\$	\$
8120013	Barricade, Type III, High Intensity, Double Sided, Lighted, Oper	Ea	20	\$	\$
8120035	Channelizing Device, 42 inch, Fluorescent, Furn	Ea	100	\$	\$
8120036	Channelizing Device, 42 inch, Fluorescent, Oper	Ea	100	\$	\$
8120140	Lighted Arrow, Type C, Furn	Ea	4	\$	\$
8120141	Lighted Arrow, Type C, Oper	Ea	4	\$	\$
8120160	Ltg for Night Work	LSUM	1	\$	\$
8120170	Minor Traf Devices	LSUM	1	\$	\$
8120210	Pavt Mrkg, Longit, 6 inch or Less Width, Rem	Ft	5820	\$	\$
8120245	Pavt Mrkg, Wet Reflective, Type R, Tape, 4 inch, White, Temp	Ft	3700	\$	\$
8120246	Pavt Mrkg, Wet Reflective, Type R, Tape, 4 inch, Yellow, Temp	Ft	7400	\$	\$
8120252	Plastic Drum, Fluorescent, Furn	Ea	100	\$	\$
8120253	Plastic Drum, Fluorescent, Oper	Ea	100	\$	\$
8120310	Sign Cover	Ea	20	\$	\$
8120332	Sign, Portable, Changeable Message, NTCIP-Compliant, Furn	Ea	3	\$	\$
8120333	Sign, Portable, Changeable Message, NTCIP-Compliant, Oper	Ea	3	\$	\$
8120350	Sign, Type B, Temp, Prismatic, Furn	Sft	400	\$	\$
8120351	Sign, Type B, Temp, Prismatic, Oper	Sft	400	\$	\$
8120352	Sign, Type B, Temp, Prismatic, Spec, Furn	Sft	400	\$	\$
8120353	Sign, Type B, Temp, Prismatic, Spec, Oper	Sft	400	\$	\$
8120370	Traf Regulator Control	LSUM	1	\$	\$
8167011	_Surface Restoration, Modified	Syd	300	\$	\$
8230431	Gate Box, Adj, Case 1	Ea	9	\$	\$
8237050	_Gate Box, Reconstruct, Modified	Ea	1	\$	\$
<b>TOTAL</b>					<b>\$</b>

Bidder shall provide all of the information as requested herein with their bid. Failure to do so and/or failure to provide post-bid requested information may be cause for rejecting the bid as non-responsive.

After receipt of Notice to Proceed (NTP), work shall start within 10 calendar days, unless otherwise agreed to by the Project Manager, and shall be completed by June 14, 2024.

Bidder/Contractor has examined and carefully studied the bidding documents and attachments, and acknowledges receipt of the following addenda:

Addendum No: \_\_\_\_\_

Date: \_\_\_\_\_

By my signature below, I certify that the firm bidding on this contract, when making hiring decisions, does not use a past criminal conviction as a bar to or preclude a person with a criminal conviction from being considered for employment with the bidding firm unless otherwise precluded by federal or state law. I further certify that I have read and agree to be bound by the provisions of the City’s Non-Discrimination Clause found in Appendix A as updated by City Ordinance 1856.

Signed: \_\_\_\_\_ Name: \_\_\_\_\_

Title: \_\_\_\_\_

## CITY OF KALAMAZOO EX-OFFENDER POLICY CHECKLIST

As part of the City’s commitment to reducing unacceptable poverty, encouraging rehabilitation, reducing recidivism and strengthening families in Kalamazoo, the City has updated its Purchasing Policy to ensure that firms with whom the City does business share in this commitment by utilizing hiring practices that do not unfairly deny people with arrest and conviction records gainful employment. *(Important: This requirement also extends to any subcontractors the bidder intends to use to fulfill the contract for goods or services being sought from the City.)*

### **Part I: Proof that the bidder does not inquire about an individual’s past arrest or criminal history on the bidder’s employment application form**

- Attach a copy of the current application for employment being used by the bidder

### **Part II: Certification that the bidder does not use an individual’s past arrest or criminal history to unlawfully discriminate against them by checking one or more of the following:**

- That pursuant to federal or state law bidder is precluded from hiring persons with certain criminal records from holding particular positions or engaging in certain occupations by providing a cite to the applicable statute or regulation; if checking this box, provide a citation to the applicable statute or rule upon which the bidder is relying: \_\_\_\_\_
- That bidder conducts criminal history background checks only as necessary, and only after making a conditional offer of employment; that any withdrawal of an offer of employment to an individual because of a past criminal history is job-related and consistent with business necessity after the individual has been provided an individualized assessment opportunity to review and challenge or supplement the history of past criminal conduct being relied upon by the bidder.
- That the use by bidder of criminal history background checks complies with the U.S. Equal Employment Opportunity Commission’s Enforcement Guidance on the Consideration of Arrest and Conviction Records in Employment Decisions and that the bidder has not had a determination rendered against it in past 7 years that it discriminated against a person through the use of an individual’s arrest or criminal history

I CERTIFY THAT THE ABOVE STATEMENTS ARE TRUE.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Position



## CITY OF KALAMAZOO LOCAL PREFERENCE POLICY AND CERTIFICATION

The lowest responsive Kalamazoo County bidder whose bid is not low but falls within 2% of the lowest responsive bid is afforded the opportunity to become the successful bidder if it agrees to reduce its bid to match the lowest responsive bid. The City of Kalamazoo is the sole determiner whether a bidder is responsible, qualifies as a Kalamazoo County bidder, and if its bid is responsive to the City’s specifications, terms and conditions.

If the lowest Kalamazoo County bidder chooses not to match the lowest bid, the next lowest responsive Kalamazoo County bidder whose bid falls within 2% of the lowest bid, is given the opportunity to match the lowest responsive bid.

To qualify as a Kalamazoo County bidder, the bidder must meet both the following criteria:

1. Have a physical presence in Kalamazoo County by maintaining a permanent office, factory or other facility in Kalamazoo County with employees working in Kalamazoo County.
2. Have paid real or personal property taxes related to said business to the City of Kalamazoo, County of Kalamazoo or other municipal corporation within Kalamazoo County in the previous tax year, except that a non-profit entity need not meet this requirement.

This local preference policy applies only to purchases for materials, supplies, capital outlay, and services for maintenance, repair or operation of City facilities that are over \$25,000. If more than 50% of the contract is sub-contracted to firms located outside of Kalamazoo County that bid does not qualify for the local preference policy outlined above. The local preference policy will not apply if prohibited by law. The Purchasing Agent has the authority to finally determine if the bidder qualifies as a Kalamazoo County bidder as set forth herein. The Purchasing Agent may take into account the permanency of the business in Kalamazoo, and whether the business appears to be claiming to be a Kalamazoo County business solely or primarily to qualify as a Kalamazoo County business under this Resolution, and any other material factors.

### CERTIFICATION

If you qualify as a Kalamazoo County bidder and wish to be considered for the local preference provisions as provided above please certify that fact by providing the information requested below and attesting to its accuracy.

Firm Name: \_\_\_\_\_

Street Address of Business: \_\_\_\_\_

City, State, and Zip Code: \_\_\_\_\_

Number of employees working in Kalamazoo County: \_\_\_\_\_

Name the city or township to which business real and/or personal property taxes are paid or provide non-profit status: \_\_\_\_\_  
\_\_\_\_\_

The above information is accurate:

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Title: \_\_\_\_\_

Revised April 2008



## REFERENCE QUESTIONNAIRE

Please answer the following questions completely.

1. Firm name: \_\_\_\_\_
2. Established: Year \_\_\_\_\_ Number of Employees: \_\_\_\_\_
3. Type of organization:
  - a. Individual: \_\_\_\_\_
  - b. Partnership: \_\_\_\_\_
  - c. Corporation: \_\_\_\_\_
  - d. Other: \_\_\_\_\_
4. Former firm name(s) if any, and year(s) in business:  
\_\_\_\_\_  
\_\_\_\_\_
5. Include at least 3 references of contracts for similar work performed over the last five (5) years. Include: owner, contact person and phone number and description of work performed.
  - a. Company Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
Phone: \_\_\_\_\_  
Contact: \_\_\_\_\_  
Type of work or contract: \_\_\_\_\_
  - b. Company Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
Phone: \_\_\_\_\_  
Contact: \_\_\_\_\_  
Type of work or contract: \_\_\_\_\_
  - c. Company Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
Phone: \_\_\_\_\_  
Contact: \_\_\_\_\_  
Type of work or contract: \_\_\_\_\_

I hereby certify that all of the information provided is true and answered to the best of my ability.

Signed: \_\_\_\_\_ Name: \_\_\_\_\_  
(type or print)

Title: \_\_\_\_\_ Date: \_\_\_\_\_

I hereby state that all of the information I have provided is true, accurate and complete. I hereby state that I have the authority to submit this bid which will become a binding contract if accepted by the City of Kalamazoo. I hereby state that I have not communicated with nor otherwise colluded with any other bidder, nor have I made any agreement with nor offered/accepted anything of value to/from an official or employee of the City of Kalamazoo that would tend to destroy or hinder free competition.

The firm's identification information provided will be used by the City for purchase orders, payment and other contractual purposes. If the contractual relationship is with, or the payment made to, another firm please provide a complete explanation on your letterhead and attach to your bid. Please provide for accounts payable purposes:

Tax Identification Number (Federal ID): \_\_\_\_\_

Remittance Address: \_\_\_\_\_

Financial Contact Name: \_\_\_\_\_ Financial Contact Phone Number: \_\_\_\_\_

Financial Contact Email Address: \_\_\_\_\_

I hereby state that I have read, understand and agree to be bound by all terms and conditions of this bid document.

SIGNED: \_\_\_\_\_ NAME: \_\_\_\_\_  
(Type or Print)

TITLE: \_\_\_\_\_ DATE: \_\_\_\_\_

FIRM NAME: \_\_\_\_\_  
(if any)

ADDRESS: \_\_\_\_\_  
(Street address) (City) (State) (Zip)

PHONE: \_\_\_\_\_ FAX: \_\_\_\_\_

EMAIL ADDRESS: \_\_\_\_\_

---

**FOR CITY USE ONLY - DO NOT WRITE BELOW**

### SECTION III CITY OF KALAMAZOO INDEMNITY AND INSURANCE

Contractor, or any of their subcontractors, shall not commence work under this contract until they have obtained the insurance required under this paragraph, 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 Kalamazoo within ten (10) days of the Notice of Award. 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:

Workers' Compensation Insurance including Employers' Liability Coverage, in accordance with all applicable statutes of the State of Michigan.

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 and (E) XCU coverage if the nature of the contract requires XC or U work.

Automobile Liability in accordance with all applicable statutes of the State of Michigan, 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.

Additional Insured: Commercial General Liability and Automobile Liability, as described above, shall include an endorsement stating that the following shall be *Additional Insureds*: The City of Kalamazoo, 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 that by naming the City of Kalamazoo as additional insured, coverage afforded is considered to be primary and any other insurance the City of Kalamazoo may have in effect shall be considered secondary and/or excess.

To the fullest extent permitted by law the Contractor agrees to pay on behalf of, indemnify, and hold harmless the City of Kalamazoo, its elected and appointed officials, and employees against any claims, demands, suits, or loss, including all costs connected therewith, and for any damages which may be asserted, claimed, or recovered against or from the City of Kalamazoo, by reason of personal injury, including bodily injury or death and/or property damage, including loss of use thereof, caused in whole or part by any negligent act or omission by the Contractor, its employees, agents, or officers which arises out of, or is in any way connected or associated with, this contract.

**INDEMNITY AND INSURANCE**

*Continued*

Cancellation Notice: All policies, as described above, shall include an endorsement stating that it is understood and agreed that thirty (30) days, or ten (10) days for non-payment of premium, Advance Written Notice of Cancellation, Non-Renewal, Reduction, and/or Material Change shall be sent to: City of Kalamazoo, Purchasing Division, 241 W. South Street, Kalamazoo, MI 49007.

Proof of Insurance Coverage: The Contractor shall provide the City of Kalamazoo at the time that the contracts are returned by him/her for execution, or within 10 days of Notice of Award, whichever is earlier, 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/or policies to City of Kalamazoo at least ten (10) days prior to the expiration date.

Scope of Coverage: The above requirements and conditions shall not be interpreted to limit the liability of the Contractor under this Contract, but shall be interpreted to provide the greatest benefit to the City and its officers and employees. The above listed coverages shall protect the Contractor, its employees, agents, representatives and subcontractors against claims arising out of the work performed. It shall be the Contractor's responsibility to provide similar insurance for each subcontractor or to provide evidence that each subcontractor carries such insurance in like amount prior to the time such subcontractor proceeds to perform under the contract.

## SECTION IV SPECIAL REQUIREMENTS

### 1. BID BOND/GUARANTEE

The bid must be accompanied by a bid bond which shall not be less than five (5%) percent of the total amount of the bid. No bid will be considered unless it is accompanied by the required guarantee. The bid guarantee shall ensure the execution of the bid and award, and the furnishing of a performance bond and a labor and material bond (A and B below) by the successful bidder. (Contractors Note: A cashier's or certified check in lieu of a bid bond is **NOT** acceptable.)

#### A. PERFORMANCE BOND

A performance bond shall be furnished in the full amount of the contract ensuring the City of faithful performance of all the provisions of the contract, and the satisfactory performance of any equipment required hereunder. The bond shall also ensure the City against defective workmanship and/or materials.

#### B. LABOR AND MATERIAL (PAYMENT) BOND

A labor and material (payment) bond shall be furnished for the period covered by the contract, in the full amount of the contract for the protection of labor and material suppliers and sub-contractors.

Bonds shall be secured by a guaranty or a surety company listed in the latest issue of the U.S. Treasury, circular 570, and licensed to do business in the State of Michigan, and written in favor of the City of Kalamazoo. The amount of such bonds shall be within the maximum amount specified for such company in said circular 570. The bonds shall be accompanied by a power of attorney showing authority of the bonding agent to sign such bonds on behalf of the guaranty or surety company. The cost of the bonds shall be borne by the Contractor.

Failure of the Contractor to supply the required bonds within ten (10) days after Notice of Award, or within such extended period as the Purchasing Agent may agree to, shall constitute a default and the City of Kalamazoo may either award this contract to the next lowest bidder or re-advertise for bids and may charge against the Contractor for the difference between the amount of the bid and the amount for which a contract for the work is subsequently executed, irrespective of whether the amount thus due exceeds the amount of the bid bond. If a more favorable bid is received by re-advertising, the defaulting bidder shall have no claim against the City of Kalamazoo for a refund.

### 2. WAIVERS OF LIEN

Upon completion of all work and request for final payment, the Contractor shall furnish a 100% waiver of lien from each supplier and sub-contractor covering all items of the work. Failure to supply waivers of lien for the entire job upon completion and final payment request will be considered grounds for withholding final payment.



### **3. SUBCONTRACTORS**

- A. Contractors shall state on the Bid and Award page any and all subcontractors to be associated with their bid, including the type work to be performed. Any and all subcontractors shall be bound by all of the terms, conditions and requirements of the contract; however, the prime contractor shall be responsible for the performance of the total work requirements.
  
- B. The Contractor shall cooperate with the City of Kalamazoo in meeting its commitments and goals with regard to maximum utilization of minority and women business enterprise, and shall use its best efforts to ensure that minority and women business enterprises have maximum practicable opportunity to compete for subcontract work under this agreement.

### **4. PREVAILING WAGES**

The successful bidder will be required to comply with Section 2-125 of the Code of Ordinances of the City of Kalamazoo regarding prevailing wages and Appendix B attached, incorporated herein by reference. Special note: This provision applies only to projects in excess of \$100,000 for City (\$2,000 federal) funded projects.

The City's requirements as it relates to prevailing wages includes a meeting with the City's Purchasing Division **prior** to work and payroll and work monitoring during the duration of the contract. Please contact Purchasing at (269) 337-8020 if you have any questions regarding Davis-Bacon provisions.

## SECTION V SPECIAL CONDITIONS

### 1. INTENT

It is the intent of these plans and specifications to provide for a general contractor who shall provide all labor, materials, tools and equipment necessary to perform in a professional manner for the **Riverview Drive Resurfacing** as described in the specifications and bid document.

### 2. SCOPE OF WORK

The scope of work for this project shall consist of milling and resurfacing approximately 0.35 miles of pavement and concrete along Riverview Drive, included in this project is the repairing of full depth pavement, adjusting all affected structures, removal and replacement of various sections of curb, gutter, and drive approaches, and the placement of pavement markings throughout the project and an enhanced pedestrian crossing at Hotop Ave.

Work shall consist of three phases with the first two phases consisting of milling the roadway, repairing the base, and paving the leveling course of asphalt pavement. The final phase will consist of paving the top course of asphalt via night paving operations. Care and consideration should be given by the contractor to the schedule and timeline of work. Riverview Drive is a key street in the City's road network and it is essential that lane closure timelines are minimized to the extent possible.

The improvements in this project shall be done in accordance with the latest edition of the Michigan Department of Transportation's (MDOT) standard specifications for construction, AASHTO's green book and guide for design of pavement structures, Michigan's Manual on Uniform Traffic Control Devices (MMUTCD), the City of Kalamazoo standard details and street design manual, MDOT standard and special details, the NACTO urban street design guide, and the supplemental specifications and special provisions, as specified in this log of project.

All necessary traffic control, labor, materials, tools, equipment, and other items incidental to the work being performed shall be included in the Contractor's unit price for this contract. Such items will not be bid or paid for separately but shall be included in the overall unit price.

The bidder shall furnish all labor, supervision, supplies, tools, equipment, and other means necessary or proper for performing and completing the work. The bidder shall be responsible for the cleaning up of the job site and shall repair or restore all structures and property that may be damaged or disturbed during performance of the work to the satisfaction of the Public Services Department for the City of Kalamazoo. Drainage structure covers shall be salvaged and reused if in usable condition; otherwise, they shall be replaced. Where needed, all traffic control used for such operations as defined by the MMUTCD will be the responsibility of the bidder.

**The bidder shall have all work completed by June 14, 2024**

### 3. UNIT PRICING

The unit price, including its pro rata share of overhead, multiplied by the quantity shown shall represent the total bid and shall be held firm for the life of this contract. Any bid not conforming to this requirement may be rejected as non-responsive.

#### **4. TEMPORARY UTILITIES**

- A. Temporary or construction water will NOT be available on the sites. The Contractor must provide for drinking water.
- B. Temporary toilets: To be supplied by the Contractor as may be necessary.

#### **5. PROGRESS SCHEDULE**

- 5.1 After receipt of notification by Contractor of Notice to Proceed work shall start no earlier than April 1, 2024
- 5.2 Project shall have a final completion date of June 14, 2024
- 5.3 Work of a similar nature may be added to this contract if agreed to by the City and the Contractor. In the event that work is added, the progress schedule for the existing work will remain unchanged. Any contract time added for additional work will be applied to that additional work only and cannot be added to items in the original contract. Any work done on the items in the original contract past the number of working days stated herein will be subject to liquidated damages regardless of any work that may be added at a later date.
- 5.4 The Contractor will be required to meet with the Public Services representatives to work out a detailed progress schedule. The schedule for this meeting will be within two weeks after contract award has been made.
- 5.5 The named sub contractor(s) for all items shall also be present at the scheduled meeting and be required to sign the Progress Schedule to indicate their approval of the scheduled dates of work set forth in the Progress Schedule. If unable to attend the scheduled meeting, the sub-contractor shall, at a minimum, sign the Progress Schedule to indicate their approval of the dates of work. MDOT Form 1130 shall be used for schedule submission and signature of all parties.
- 5.6 The Progress Schedule shall include, as a minimum, the starting and completion dates for major items, and where specified in the bid document the date the project is to be opened to traffic as well as the final project completion date specified in the bid document. The Progress Schedule shall be coordinated with all aspects of the work occurring at the site.
- 5.7 Failure on the part of the Contractor to carry out the provisions of the Progress Schedule as established may be considered sufficient cause to prevent bidding future projects until a satisfactory rate of progress is again established.
- 5.8 The starting date and the contract time to the completion date for this project may be adjusted by Public Services without imposing liquidated damages upon the receipt of satisfactory documented evidence that unforeseen delayed delivery of critical materials will prevent the orderly prosecution of the work.
- 5.9 Any request extension of the completion date and satisfactory documented evidence of unforeseen delays shall be submitted via MDOT Form 1100A – Extension of Contract Time.
- 5.10 MDOT Standard Specifications for Construction Section 501.03.I.1, Weather Limitations, shall apply.

#### **6. LIQUIDATED DAMAGES**

Liquidated Damages will be assessed per Section 108.10C of the MDOT Standard Specifications for Construction.

#### **7. MAINTAINING TRAFFIC**

- 7.1 This work shall be in accordance with the requirements of Section 812 of the MDOT Standard Specifications for Construction, the Maintaining Traffic special provision, and as specified herein. The Contractor is advised that the current Michigan Manual of Uniform Traffic Control Devices (MMUTCD) is hereby established as governing all work in connection with traffic control devices, barricade lighting, etc. required on this project.
- 7.2 The Contractor shall furnish, erect, maintain and, upon completion of the work, remove all traffic control devices and barricade lights within the project and around the perimeter of the project for the safety and protection of through and local traffic. This includes, but is not limited to: Advance, regulatory and warning signs; barricades and channeling devices at intersecting streets on which traffic is to be maintained; barricades at the ends of the project and at right of way lines for intersecting streets which are to be closed with the first usable street on each side of the project. Traffic regulators, where required by the Engineer, are included.
- 7.3 Where the existing pavement or partial widths of new pavement are to be utilized for the maintenance of through and local traffic, channelizing devices will be required at 50' intervals or as directed by the Engineer for channeling and directing traffic through the construction area.
- 7.4 Through traffic shall be maintained utilizing sidewalk closures with detours and traffic shifts per MDOT traffic and safety details.
- 7.5 Protection of all pedestrian traffic shall be maintained at all times in accordance with the MMUTCD. Type II barricades and sidewalk detour signs shall be used in accordance with the MMUTCD at all intersections and ramps. Sidewalk detours shall direct pedestrians safely around closed sidewalk locations and shall be placed at the nearest pedestrian crossing locations still open to traffic.
- 7.6 Payment for furnishing and operating all temporary traffic control devices and traffic regulators shall be paid as pay items included in this contract and shall include all the temporary traffic control measures on all road segments.
- 7.7 Under Article 812.04.D "Operated Pay Items" the term 'Relocating' shall include the relocating of the item from any street covered by the contract to any other street covered by the contract.
- 7.8 No work shall be allowed on the following dates:

3/29/24	Good Friday
5/27/24	Memorial Day Holiday
6/19/24	Juneteenth
7/4/24	Fourth of July Holiday
9/2/24	Labor Day Holiday
- 7.9 Milled surfaces will not be allowed on travel lanes for longer than 72 hours unless approved by the Project Manager. Any traffic surface within the construction area containing a drop off at the edge of a pavement greater than two (2) inches shall not be allowed to be opened to the public without proper wedging of the edges according to the COK standard detail. Any areas not conforming to the road levelness and profile shall be signed appropriately in accordance with the MMUTCD and best management practices.
- 7.10 Once work is initiated that includes lane restrictions or detours, that work shall be continuous until complete. If work is suspended for more than three (3) continuous working days all lane restrictions and detours shall be removed at the Contractor's expense.

Special Restrictions: Access to frontage properties shall be maintained as much as practical. Emergency access shall be maintained at all times. The Contractor shall maintain two way traffic with flag control as needed when the road is restricted to only one traffic lane.

## **8. COORDINATING**

The Contractor's attention is called to Article 104.08 of the MDOT Standard Specifications for Construction entitled "Cooperation by Contractor" and the special provisions contained within this contract.

## **9. WORK HOURS**

All work shall be done between the hours specified in the bid documents (Monday – Saturday). Work done outside of the times specified in the bid documents will be at the discretion of the Project Manager.

No work shall be done on Sunday, unless otherwise approved by the Project Manager in writing.

The Contractor shall conduct their work in such a manner that no excavations are left open overnight. If this is not possible, the Contractor shall provide and install a temporary fence to protect the excavation, at the Contractor's expense.

## SECTION VI GENERAL CONDITIONS

### 1. PROJECT MANAGER'S STATUS

The City Engineer (Engineer) or his/her duly authorized representative shall be the City's Project Manager and shall have the duties and responsibilities as provided in the contract.

The Project Manager shall have the authority to reject any work or materials which do not conform to the contract and to decide questions or interpretations which may arise from the contract documents.

The Contractor shall immediately report to the Project Manager any questionable or obvious error or omission which may be apparent in the contract documents and shall not proceed with work until the Project Manager has resolved the error or omission.

### 2. CONSTRUCTION SCHEDULE AND COORDINATION

- 2.1 The Contractor shall supply the City with an agreeable construction schedule before commencing work on this contract. This schedule shall detail beginning and completion dates for each major component of the project.
- 2.2 The Contractor shall coordinate and cooperate with all other contractors who may be working on the site, to allow for the orderly progress of work being done.
- 2.3 The Contractor is required to keep the Project Manager fully informed of any proposed work which will tend to interfere with the existing operations at the site.
- 2.4 The Contractor shall schedule all work to accommodate the City's schedule. In the event the Contractor's schedule falls on weekends, nights or overtime work is required, no additional compensation will be allowed. All work shall be part of this contract without regard to when it is done.
- 2.5 The Contractor shall coordinate with other construction projects and contractors adjacent to the location of this project.
- 2.6 The Contractor shall notify, by door hanger/written flier (pre-approved by the Project Manager), affected residents and business of work and areas to be disturbed by construction at least 72 hours in advance. Work shall not commence until the affected residents/business have been notified and given advanced notice. The Contractor shall work to minimize impacts to those affected by the construction while still maintaining project schedule and objectives. For impacts to driveways or property access points that affect residents or businesses, resident/business shall be notified 24 hours in advance of the work taking place and coordinated with for parking and property access.

### 3. PROTECTION OF WORK

The Contractor shall maintain adequate protection of all his/her work from damage and shall protect all public and private abutting property from injury or loss arising in connection with this contract.

#### **4. PROTECTION OF PROPERTY**

- 4.1 The Contractor shall confine his/her equipment and operations to those areas of the work site necessary for the completion of the work, or as authorized by the Project Manager. The Contractor shall protect and preserve from damage any facilities, utilities or features including trees, shrubs and turf which are not required to be disturbed by the requirements of the work.
- 4.2 The Contractor shall be responsible to determine the location of and to protect from damage any utilities or other improvements.

#### **5. REMOVAL OF RUBBISH**

The Contractor shall daily remove all rubbish and accumulated materials due to his/her construction.

#### **6. BRICK SIDEWALK OR PAVEMENT REMOVAL**

When brick is removed from City of Kalamazoo sidewalk or pavement it shall be salvaged, unless otherwise stated in the contract. Brick to be salvaged shall be placed within the right-of-way (ROW) for pickup by the City. Brick shall not be placed or stored on any pavement, sidewalk, bike, or pedestrian areas but in ROW green space only; salvaged brick shall not be placed on private property without written approval given by the owner.

#### **7. REMOVAL OF PERMANENT TRAFFIC SIGNS AND POSTS**

The Contractor shall notify the Project Manager five (5) working days in advance of the time permanent signs must be removed to accommodate the construction. The Contractor shall remove and salvage any permanent signs that must be removed for construction.

#### **8. PERMANENT TRAFFIC SIGN STAKING**

The City shall stake the field locations for the new permanent traffic signs that the Contractor shall install under this contract. The Contractor shall call MISS DIG to arrange for staking prior to sign installation.

#### **9. LAWN SPRINKLER SYSTEMS**

- 9.1 Owners of known lawn sprinkler systems shall be notified by the contractor a minimum of 72 hours in advance of any work to be done that will affect those systems. Modifications to the systems are the responsibility of the owners and are not a part of this contract.
- 9.2 Owners of lawn sprinkler systems that were unknown to the contractor at the beginning of work and uncovered during the work for this contract, shall be notified as soon as possible and no later than 24 hours after discovery of the system. The Contractor shall coordinate with the owner for placement outside the immediate work area until modifications can take place. Modifications to the systems are the responsibility of the owners and are not a part of this contract.

#### **10. SALVAGING DRAINAGE STRUCTURE COVERS**

The City of Kalamazoo reserves the right to salvage any drainage structure covers or portions thereof which are to be removed as a result of work done under this contract. Any covers which are to be salvaged will be identified by the City. The contractor will set those items identified aside for pick up by City personnel.

### **11. REMOVING AND REPLACING CURB AND GUTTER**

When the contract provides for streets to be milled and resurfaced, or when the existing base course is to remain in place, and replacement of curb and gutter is called for, milling or other surface removal operations will not take place until placement of the new curb and gutter, and adjacent concrete base course has been completed.

### **12. DRAINAGE INLET COVERS (K COVERS)**

In compliance with the Clean Water Act, all inlet covers must have on their backs reminders against dumping waste into the drains.

### **13. FLY ASH USE IN CONCRETE ITEMS**

The use of fly ash, as described in Section 901.07 of the MDOT Standard Specifications for Construction, shall not be allowed.

### **14. EXISTING WATER MAINS**

The Contractor will be responsible for any damage to the existing water mains during the work required under this contract. This includes but is not limited to the construction of the proposed storm sewers, catch basins, leaching basins, leaching trenches, subgrade under drains, subgrade undercutting, full depth repairs, or other miscellaneous work.

### **15. GRADE INTERSECTIONS**

All intersections are to be considered as complete units and their grades determined before construction is started.

### **16. UNDERGROUND UTILITIES**

For protection of underground utilities, the Contractor shall dial Miss Dig at 1-800-482-7171 a minimum of 72 hours prior to excavating in the vicinity of utility lines. All “Miss Dig” participating members will thus be routinely notified. This does not relieve the Contractor of notifying utility owners who may not be part of the “Miss Dig” alert system.

### **17. ADJUSTING MONUMENT BOXES**

It is the intent that all government corners on this project be preserved and that, where necessary, monument boxes be placed or adjusted whether shown or not.

### **18. PAVEMENT REMOVAL QUANTITIES**

Pavement removal as called for in this proposal shall be at the discretion of the Project Manager. If, in his/her judgment, areas of pavement may be left in place or additional area added to provide the proper cross-section and base, adjustments can be made in the quantities.

### **19. COLD MILLING**

In those locations where cold milling is called for and the existing curb is to remain in place, the cold milling item shall cover removal of all asphalt up to the face of the curb. Any materials which are left due to the inability of the cold milling machine to work immediately adjacent to the face of the curb will be removed to the depth indicated on the typical cross-section by other means approved by the Project Manager. Any extra work involved in removing said HMA material shall be considered incidental to the item of Cold Milling HMA Surface.



## **20. SITE SECURITY**

The Contractor shall be responsible for job site security of all materials and tools provided by him/her and no claim for loss or damage will be considered by the City.

## **21. SITE ACCESS**

The City will provide fair and reasonable access to the job site within the working schedules of both parties.

## **22. MATERIALS INSPECTION AND RESPONSIBILITY**

- 22.1 The Project Manager shall have the right to inspect any materials to be used in carrying out the terms of the contract.
- 22.2 The City does not assume any responsibility for the contracted quality and standard of all materials, equipment, components or completed work furnished under this contract.
- 22.3 Any materials, equipment, components or completed work which does not comply with contract specifications, MDOT, or state codes may be rejected by the City, and shall be replaced by the Contractor at no cost to the City.
- 22.4 Any materials, equipment or components rejected shall be removed within a reasonable period of time from the premises of the City at the entire expense of the Contractor after written notice has been mailed by the City to the Contractor that such materials, equipment or components have been rejected.

## **23. GUARANTEE**

The Contractor shall guarantee all of his/her work for a period of one (1) year following the date of final acceptance of the completed work and shall repair, replace or make good any materials or work which fail to function or perform or be found defective, without cost to the city.

## **24. SAFETY**

The Contractor shall comply with all applicable OSHA and MIOSHA regulations.

## **25. SPECIFICATIONS FOR CONSTRUCTION**

The items of work in this contract shall conform to the Michigan Department of Transportation (MDOT) 2020 Standard Specifications for Construction, MDOT Supplemental Specifications, and/or the City of Kalamazoo Standard Specifications unless superseded by a Special Provision contained in this document.

## **26. QUANTITIES**

The quantities shown on the Bid and Award pages are approximate only and may be subject to increase or decrease. No guarantee of maximum or minimum is given.

## **27. PRICE**

The unit price, including its pro rata share of overhead, multiplied by the quantity shown shall represent the total bid and shall be held firm for the life of this contract. Any bid not conforming to this requirement may be rejected as non-responsive. Special attention of all bidders is called to this provision since if conditions make it necessary to revise the quantities, no limit will be fixed for such increased or decreased quantities, nor extra compensation allowed; provided the net monetary value of all such additive and subtractive changes in quantities of such items of work, i.e., difference in cost, shall not increase or decrease the original contract price by more than twenty five (25) percent. Some items of work might be increased beyond the 25% limitations as spelled out previously, upon mutual agreement.

## **28. BASIS FOR PAYMENT**

Payment shall be based on the bid unit price for each work item and the approved constructed quantity for that work item. Due to potential differences in conditions between the plans and the field, final as built quantities may be different than contained in the bid document. The City does not guarantee quantities and will pay only for "as built" quantities approved by the Project Manager or his representative. Quantities in excess of those approved shall be at the Contractor's own expense, the City will not be responsible for excess quantities not approved. Should an item of work have to be redone, such as replacing new walk because the Contractor failed to adequately protect the wet concrete from rain or pedestrian or vehicular damage, such work shall be replaced at the Contractor's expense. Should changes in design result in the Project Manager directing the removal and reinstallation of already completed work prior to final completion and acceptance of the project, such removal and installation shall be paid for based on as-bid unit prices and the quantities removed and installed.

## **29. PAY ESTIMATES**

The Contractor shall be responsible for the generation of invoices for payment. Payment will be generated by the City based upon an approved invoice. Frequency of payment shall be monthly unless agreed to otherwise by the Project Manager, with the invoiced period ending on the last day of the month. However, if a different frequency is approved by the Project Manager, it shall not exceed bi-weekly invoicing.

## **30. PAYMENT TO CONTRACTOR**

The Project Manager will be responsible for approving all measured quantities of work. Once measured quantities are approved, the Contractor shall submit a pay invoice to the City of Kalamazoo Attn: Accounts Payable at 241 West South Street, Kalamazoo MI, 49007 or [apinvoice@kalamazoocity.org](mailto:apinvoice@kalamazoocity.org). The contractor is required to meet with the Project Manager to verify final constructed quantities within 60 days of project completion. In the event of a disagreement the Project Manager's measured quantities shall be considered final.

## **31. INSPECTION OF WORK**

The City may maintain inspectors on the job who shall, at all times, have access to work.

### **32. INSPECTION OF SITE**

Each bidder shall visit the site of the proposed work and fully acquaint himself/herself with the existing conditions relating to construction, labor, and shall fully inform himself/herself as to the facilities involved and the difficulties and restrictions attending the performance of this contract. The bidder shall thoroughly examine and become familiar with the drawings, specifications, and all other bid/contract documents. The Contractor, by the execution of this contract, shall in no way be relieved of any obligation under it due to his failure to receive or examine any form or legal instrument, or to visit the site and acquaint himself/herself with the conditions there existing. No allowance shall be made subsequently in this connection on behalf of the Contractor for any negligence of his/her part. For inspection call the Public Services Department, Engineering Division.

### **33. LAYING OUT OF WORK**

Before submitting a bid, the Contractor shall verify all measurements and shall be responsible for the correctness of same. No extra charge or compensation will be allowed on account of differences between actual dimensions and the measurements indicated on the drawings. Any difference that may be found shall be submitted to the City Engineer for consideration before proceeding.

### **34. SUPERVISION**

The Contractor shall employ an experienced superintendent or foreperson on the job at all times.

### **35. TARDINESS**

Construction delays resulting from tardiness on the part of the Contractor will be reviewed by the City in the event of any request for contract extension by the Contractor.

### **36. ADDITIONS**

Any modification to the contract shall be subject to prior approval by the Purchasing Agent. City Commission approval may also be required.

Prices for additional work required are not requested in the itemized listing contained herein for the base project. Should additional work be authorized, compensation shall be made on the basis of price or prices to be mutually agreed upon. Such additional work shall not begin until a Change Order has been approved.

### **37. INSPECTION AND TESTING**

The Contractor shall give the Project Manager timely notice of readiness of the work for all required inspections, tests or approvals, and shall cooperate with inspections and testing personnel to facilitate required inspections or tests.

### **38. QUESTIONS**

Bidders shall address questions regarding the specifications to George Waring at [waringg@kalamazoo.org](mailto:waringg@kalamazoo.org) and/or 269-303-7844 by 10 am on January 8, 2024. (This does not relieve the requirements of Page 6, Item 3.) Questions regarding terms, conditions and other related bid requirements may be addressed to the Kyle Dunn, Buyer, at [dunnk@kalamazoo.org](mailto:dunnk@kalamazoo.org) (269) 337-8720.

## **SECTION VII TERMS AND CONDITIONS**

### **1. AWARD OF CONTRACT**

- 1.1 This contract will be awarded to that responsible bidder whose bid, conforming to this solicitation, will be most advantageous to the City, price and other factors considered. The City reserves the right to accept or reject any or all bids and waive informalities and minor irregularities in bids received. Other factors include, as an example but not limited to, delivery time, conformance to specifications, incidental costs such as demurrage and deposits, etc.
- 1.2 Notification of award will be in writing by the Purchasing Manager. Upon notification, the Contractor shall submit to the Purchasing Division all required insurance certificates (if required) and such other documentation as may be requested or required hereunder. Upon their receipt and subsequent approval by the City, the Purchasing Manager will forward to the Contractor a written NOTICE TO PROCEED. Work shall NOT be started until such NOTICE TO PROCEED is received by the Contractor.
- 1.3 Unilateral changes in bid prices by the bidder shall not be allowed. However, the City, at its sole option, reserves the right to negotiate with bidders in the event of, but not limited to:
  - 1) No bids received;
  - 2) A single bid being received; or
  - 3) Prices quoted are over budget and/or unreasonable.

### **2. COMPLETE CONTRACT**

This bid document together with its addenda, amendments, attachments and modifications, when executed, becomes the complete contract between the parties hereto, and no verbal or oral promises or representations made in conjunction with the negotiation of this contract shall be binding on either party.

### **3. SUBCONTRACTORS – NON-ASSIGNMENT**

- 3.1 Bidders shall state in writing any and all sub-contractors to be associated with this bid, including the type of work to be performed. The Contractor shall cooperate with the City of Kalamazoo in meeting its commitments and goals with regard to maximum utilization of minority and women-owned business enterprises.
- 3.2 The Contractor hereby agrees and understands that the contract resulting from this solicitation shall not be transferred, assigned or sublet without prior written consent of the City of Kalamazoo.

### **4. TAXES**

The City of Kalamazoo is exempt from all federal excise tax and state sales and use taxes.

## 5. INVOICING

All original invoice(s) will be sent to the Financial Services Division, 241 W. South Street, Kalamazoo, MI 49007 or via email at [apinvoice@kalamazoo-city.org](mailto:apinvoice@kalamazoo-city.org). The Finance Division processes payments after receipt of an original invoice from the Contractor and approval by the department. The City of Kalamazoo's policy is to pay invoice(s) within 30 days from the receipt of the original invoice, if the services or supplies are satisfactory and the proper paperwork and procedures have been followed. **In order to guarantee payment to the vendor on a timely basis, the vendor needs to receive a purchase order number before supplying the City of Kalamazoo with goods or services.** All original, and copies of original invoice(s), will clearly state which purchase order they are being billed against.

**The City of Kalamazoo is a government municipality and therefore is tax exempt from all sales tax.**

**The vendor is responsible for supplying the Finance Division with a copy of their W9 if they are providing a service to the City of Kalamazoo.**

## 6. PAYMENTS

- 6.1 Upon issuance of certificates of Payment by the Architect/Engineer for labor and material incorporated in the work and the materials suitably stored at the site payment shall be made up to ninety (90%) percent of the value thereof.
- 6.2 When the cumulative total of payment is equal to fifty (50%) percent of the contract sum, subsequent payments will be made in the full amount for labor and material certified by the Architect/Engineer.
- 6.3 The amount retained shall be held until final acceptance of the work, receipt of all payrolls, releases, and waiver of liens.

## 7. CHANGES AND/OR CONTRACT MODIFICATIONS

- 7.1 The City reserves the right to increase or decrease quantities, service or requirements, or make any changes necessary at any time during the term of this contract, or any negotiated extension thereof. Price adjustments due to any of the foregoing changes shall be negotiated and mutually agreed upon by the Contractor and the City.
- 7.2 Changes of any nature after contract award which reflect an increase or decrease in requirements or costs shall not be permitted without prior approval by the Purchasing Agent. City Commission approval may also be required.
- 7.3 ANY CHANGES PERFORMED IN ADVANCE OF PURCHASING AGENT APPROVAL, MAY BE SUBJECT TO DENIAL AND NON-PAYMENT.

## 8. LAWS, ORDINANCES, AND REGULATIONS

- 8.1 The Contractor shall keep himself/herself fully informed of all local, state and federal laws, ordinances and regulations in any manner affecting those engaged or employed in the work and the equipment used. Contractor and/or employees shall, at all times, serve and comply with such laws, ordinances and regulations.
- 8.2 Any permits, licenses, certificates, or fees required for the performance of the work shall be obtained and paid for by the Contractor.
- 8.3 This contract shall be governed by the laws of the State of Michigan.

## **9. RIGHT TO AUDIT**

The City or its designee shall be entitled to audit all of the Contractor's records, and shall be allowed to interview any of the Contractor's employees, throughout the term of this contract and for a period of three years after final payment or longer if required by law to the extent necessary to adequately permit evaluation and verification of:

- A. Contractor compliance with contract requirements,
- B. Compliance with provisions for pricing change orders, invoices or claims submitted by the Contractor or any of his payees.

## **10. HOLD HARMLESS**

If the negligent acts or omissions of the Contractor/Vendor or its employees, agents or officers, cause injury to person or property, the Contractor/Vendor shall indemnify and save harmless the City of Kalamazoo, its agents, officials, and employees against all claims, judgments, losses, damages, demands, and payments of any kind to persons or property to the extent occasioned from any claim or demand arising therefrom.

## **11. DEFAULT**

The City may at any time, by written notice to the Contractor, terminate this contract and the Contractor's right to proceed with the work, for just cause, which shall include, but is not limited to the following:

- A. Failure to provide insurance and bonds (when called for), in the exact amounts and within the time specified or any extension thereof.
- B. Failure to make delivery of the supplies, or to perform the services within the time specified herein, or any extension thereof.
- C. The unauthorized substitution of articles for those bid and specified.
- D. Failure to make progress if such failure endangers performance of the contract in accordance with its terms.
- E. Failure to perform in compliance with any provision of the contract.
- F. Standard of Performance
  - a. Contractor guarantees the performance of the commodities, goods or services rendered herein in accordance with the accepted standards of the industry or industries concerned herein, except that if this specification calls for higher standards, then such higher standards shall be provided.
  - b. Upon notice by the City of Contractor's failure to comply with such standards or to otherwise be in default of this contract in any manner following the Notice to Proceed, Contractor shall immediately remedy said defective performance in a manner acceptable to the City. Should Contractor fail to immediately correct said defective performance, said failure shall be considered a breach of this contract and grounds for termination of the same by the City.
  - c. In the event of any breach of this contract by Contractor, Contractor shall pay any cost to the City caused by said breach including but not limited to the replacement cost of such goods or services with another Contractor.
  - d. The City reserves the right to withhold any or all payments until any defects in performance have been satisfactorily corrected.
  - e. In the event the Contractor is in breach of this contract in any manner, and such breach has not been satisfactorily corrected, the City may bar the Contractor from being awarded any future City contracts.

- G. All remedies available to the City herein are cumulative and the election of one remedy by the City shall not be a waiver of any other remedy available to the City.

## **12. TERMINATION OF CONTRACT**

The City may, at any time and without cause, suspend the work of this contract for a period of not more than ninety days after providing notice in writing to the Contractor. The Contractor shall be allowed an adjustment in the contract price or an extension of the contract times, or both, directly attributable to the suspension if Contractor makes an approved claim.

The City may, without prejudice to any other right or remedy of the City, and with or without cause, terminate the contract by giving seven days written notice to the Contractor. In such case the Contractor shall be paid, without duplication, for the following items:

- A. Completed and acceptable work executed in accordance with the contract documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such work;
- B. Expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials or equipment as required by the contract documents in connection with uncompleted work, plus fair and reasonable sums for overhead and profit on such expenses;
- C. All documented claims, costs, losses and damages incurred in settlement of terminated contracts with Subcontractors, Suppliers and others; and
- D. Reasonable expenses directly attributable to termination.

The Contractor shall not be paid on account of loss of anticipated profits or revenue or other economic loss arising out of or resulting from such termination.

## **13. INDEPENDENT CONTRACTOR**

At all times, the Contractor, any of his/her employees, or his/her sub-contractors and their subsequent employees shall be considered independent contractors and not as City employees. The Contractor shall exercise all supervisory control and general control over all workers' duties, payment of wages to Contractor's employees and the right to hire, fire and discipline their employees and workers. As an independent contractor, payment under this contract shall not be subject to any withholding for tax, social security or other purposes, nor shall the Contractor or his/her employees be entitled to sick leave, pension benefit, vacation, medical benefits, life insurance or workers' unemployment compensation or the like.

## **14. PROJECT SUPERVISOR**

The Contractor shall employ an individual to act as Project Supervisor. The Project Supervisor shall be available to the Contractor's workers and the Project Manager at all times by use of a mobile phone or other reliable means. The Project Supervisor shall prepare daily work plans for the employees, monitor employee performance, attendance and punctuality; and work closely with the City's Project Manager in assuring contract compliance.

## **15. MEETINGS**

The Contractor and/or Project Supervisor shall be available to meet with the Department Head or Project Manager at a mutually agreeable time to discuss problems, issues or concerns relative to the contract. Either party may call a meeting at any time. When such a request for a meeting is made, the meeting date shall, in no case exceed five (5) working days after the request; and, if in the sole opinion of the Department Head, the severity of the circumstance warrants, no more than one (1) working day.

## **16. INSPECTION OF WORKSITE**

Before submitting bids or quotes for work, the Contractor shall be responsible for examining the work site and satisfying himself/herself as to the existing conditions under which he/she will be obligated to operate, or that in any way affects the work under this contract. No allowance shall be made subsequently, in behalf of the Contractor, for any negligence on his/her part.

## **17. CONTRACT PERIOD, EXTENSIONS, CANCELLATION**

- 17.1 The contract shall be in effect for the term stated in the specifications.
- 17.2 The City may opt to extend this contract upon mutual agreement of both parties. The number of extensions shall be limited to that stated in the specifications.
- 17.3 The City may, from time to time, find it necessary to continue this contract on a month-to-month basis only, not to exceed a six (6) month period. Such month-to-month extended periods shall be by mutual agreement of both parties, with all provisions of the original contract or any extension thereof remaining in full force and effect.
- 17.4 All contracts, extensions and cost increases are subject to availability of funds and the approval of the City Commission (if required).
- 17.5 The City reserves the right to cancel the contract due to non-appropriation of funds by the City with thirty (30) days written notice.
- 17.6 Either party may terminate the contract (or any extension thereof) without cause at the end of any twelve (12) month term by giving written notice of such intent at least 60 days prior to the end of said twelve (12) month term.
- 17.7 All notices are in effect commencing with the date of mailing. Written notices may be delivered in person or sent by First Class mail; faxed or emailed to the last known address.
- 17.8 If cancellation is for default of contract due to non-performance, the contract may be canceled at any time (see Item 11, DEFAULT).



## **APPENDIX A NON-DISCRIMINATION CLAUSE FOR ALL CITY OF KALAMAZOO CONTRACTS**

The Contractor agrees to comply with the Federal Civil Rights Act of 1964 as amended; the Federal Civil Rights Act of 1991 as amended; the Americans With Disabilities Act of 1990 as amended; the Elliott-Larson Civil Rights Act, Act. No. 453, Public Act of 1976 as amended; the Michigan Handicappers Civil Rights Act, Act No. 220, Public Act of 1976 as amended, City Ordinance 1856 and all other applicable Federal and State laws. The Contractor agrees as follows:

1. The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, national origin, sex, age, height, weight, marital status, physical or mental disability, family status, sexual orientation or gender identity that is unrelated to the individual's ability to perform the duties of the particular job or position. Such action shall include, but not be limited to the following: employment, upgrading, demotion or transfer, recruitment advertising, layoff or termination; rates of pay or other forms of compensations; and selection for training, including apprenticeship.
2. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, national origin, sex, age, height, weight, marital status, physical or mental disability family status, sexual orientation or gender identity that is unrelated to the individual's ability to perform the duties of the particular job or position.
3. If requested by the City, the Contractor shall furnish information regarding practices, policies and programs and employment statistics for the Contractor and subcontractors. The Contractor and subcontractors shall permit access to all books, records and accounts regarding employment practices by agents and representatives of the City duly charged with investigative duties to assure compliance with this clause.
4. Breach of the covenants herein may be regarded as a material breach of the contract or purchasing agreement as provided in the Elliott-Larsen Civil Rights Act and City Ordinance 1856.
5. The Contractor will include or incorporate by reference the provisions of the foregoing paragraphs 1 through 4 in every subcontract or purchase order unless exempted by the rules, regulations or orders of the Michigan Civil Rights Commission\* and will provide in every subcontract or purchase order that said provision will be binding upon each subcontractor or seller.
6. The Contractor will not preclude a person with a criminal conviction from being considered for employment unless otherwise precluded by federal or state law. (for contracts over \$25,000)

The Elliott-Larson Civil Rights Act, Sec. 202 of Act. No. 453 of 1976 reads in part as follows:

Sec. 202. (1) An employer shall not:

- (a) Fail or refuse to hire, or recruit, or discharge or otherwise discriminate against an individual with respect to employment, compensation, or a term condition or privilege of employment because of religion, race, color, national origin, age, sex, height, weight or marital status.
- (b) Limit, segregate or classify an employee or applicant for employment in a way which deprives or tends to deprive the employee or applicant of an employment opportunity or otherwise adversely affects the status of an employee or applicant because of religion, race, color, national origin, age, sex, height, weight or marital status.
- (c) Segregate, classify or otherwise discriminate against a person on the basis of sex with respect to a term, condition or privilege of employment, including a benefit plan or system.

\* Except for contracts entered into with parties employing less than three employees.  
1-2010

## APPENDIX B PREVAILING WAGES

Prevailing wages are applicable to this contract, therefore, rates will apply as follows:

(XX) Project is funded by City of Kalamazoo monies and is estimated to be in excess of \$100,000.00. The applicable prevailing wage rates are attached.

Specifications for projects in which the City of Kalamazoo is party for construction, alterations and/or repair including painting and decorating of public buildings or public works in or for the City of Kalamazoo and which requires or involves the employment of mechanics and/or laborers shall contain the following provisions stating the minimum wages to be paid the various classes of laborers and mechanics for the project. Prevailing wage rates determined by the U.S. Department of Labor under Davis Bacon and related acts will be used for City of Kalamazoo construction projects.

By the incorporation of prevailing wage rates within this specification, the City of Kalamazoo stipulates that:

- ✓ Contractor or his/her subcontractor shall pay all mechanics and laborers employed directly upon the site of the work, unconditionally and not less than once a week and without subsequent deduction or rebate on any account the full amount, accrued at the time of payment, computed at wage rates as incorporated herein regardless of any contractual relationship which may be alleged to exist between the contractor or subcontractor and such laborers and mechanics;
- ✓ The scale of wages to be paid shall be posted by the contractor in a prominent and easily accessible place at the site of the work;
- ✓ The Prime Contractor and all subcontractors shall submit weekly certified payrolls documenting the hours worked and wages paid by work classification. NOTE: Contactor shall not include Social Security numbers of employees on certified payrolls.
- ✓ There may be withheld from the contractor's accrued payments the amount considered necessary by the City's Contracting Official to pay to laborers and mechanics employed by the contractor or any subcontractor on the work for the difference between the rates of wages required by the contract and the rates of wages received by such laborers and mechanics except those amounts properly deducted or refunded pursuant to the terms of the Davis-Bacon Act (USC, Title 40, Sec. 276a) and interpretations thereof.

Special Note: The City's requirements as it relates to prevailing wages includes a meeting with the City's Purchasing Agent prior to starting work and the submission of weekly certified payrolls by prime contractors and all subcontractors. The City will monitor certified payrolls, work progress, and conduct interviews with the mechanics and labors employed directly upon the site during the duration of the contract Please contact the Purchasing Department at (269) 337-8020 if you have any questions regarding prevailing wage provision.

The overtime pay to which a laborer or mechanic is entitled under this contract shall be that overtime pay to which he/she is entitled by any agreement made with the contractor or subcontractor or by any applicable provision of law; but in no event shall such amount be less than the prevailing wage in the Kalamazoo community for such overtime.

Revised 4-08



***PREVAILING WAGE RATES***

**Riverview Drive Resurfacing**

**Bid Reference #: 91396-019.0**

**December 2023**

"General Decision Number: MI20230001 11/03/2023

Superseded General Decision Number: MI20220001

State: Michigan

Construction Types: Highway (Highway, Airport & Bridge xxxxx and Sewer/Incid. to Hwy.)

Counties: Michigan Statewide.

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60).

<p>If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:</p>	<ul style="list-style-type: none"> <li>. Executive Order 14026 generally applies to the contract.</li> <li>. The contractor must pay all covered workers at least \$16.20 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2023.</li> </ul>
<p>If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:</p>	<ul style="list-style-type: none"> <li>. Executive Order 13658 generally applies to the contract.</li> <li>. The contractor must pay all covered workers at least \$12.15 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2023.</li> </ul>

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at <http://www.dol.gov/whd/govcontracts>.

Modification Number	Publication Date
0	01/06/2023
1	02/03/2023
2	02/17/2023

3	03/17/2023
4	05/12/2023
5	05/19/2023
6	05/26/2023
7	07/21/2023
8	08/25/2023
9	09/29/2023
10	10/06/2023
11	10/20/2023
12	11/03/2023

CARP0004-004 06/01/2019

REMAINDER OF STATE

	Rates	Fringes
CARPENTER ( Piledriver).....	\$ 27.62	20.59

-----  
CARP0004-005 06/01/2018

LIVINGSTON (Townships of Brighton, Deerfield, Genoa, Hartland, Oceola & Tyrone), MACOMB, MONROE, OAKLAND, SANILAC, ST. CLAIR AND WAYNE COUNTIES

	Rates	Fringes
CARPENTER (Piledriver).....	\$ 30.50	27.28

-----  
ELEC0017-005 06/01/2023

STATEWIDE

	Rates	Fringes
Line Construction		
Groundman/Driver.....	\$ 29.24	7.20+32%
Journeyman Signal Tech, Communications Tech, Tower Tech & Fiber Optic Splicers.	\$ 52.02	7.20+32%
Journeyman Specialist.....	\$ 53.83	32%+7.20
Operator A.....	\$ 37.13	7.20+32%
Operator B.....	\$ 34.67	7.20+32%

Classifications

Journeyman Specialist: Refers to a crew of only one person working alone.  
 Operator A: Shall be proficient in operating all power equipment including: Backhoe, Excavator, Directional Bore and Boom/Digger truck.  
 Operator B: Shall be proficient in operating any 2 of the above mentioned pieces of equipment listed under Operator A.

-----  
ENGI0324-003 06/01/2023

ALCONA, ALPENA, ARENAC, BAY, CHEBOYGAN, CLARE, CLINTON, CRAWFORD, GENESEE, GLADWIN, GRATIOT, HURON, INGHAM, IOSCO, ISABELLA, JACKSON, LAPEER, LENAWE, LIVINGSTON, MACOMB, MIDLAND, MONROE, MONTMORENCY, OAKLAND, OGEMAW, OSCODA, OTSEGO, PRESQUE ISLE, ROSCOMMON, SAGINAW, ST. CLAIR, SANILAC, SHIAWASSEE, TUSCOLA, WASHTENAW AND WAYNE COUNTIES:

	Rates	Fringes
OPERATOR: Power Equipment (Steel Erection)		
GROUP 1.....	\$ 53.02	25.25
GROUP 2.....	\$ 54.02	25.25
GROUP 3.....	\$ 51.52	25.25
GROUP 4.....	\$ 52.52	25.25
GROUP 5.....	\$ 50.02	25.25
GROUP 6.....	\$ 51.02	25.25
GROUP 7.....	\$ 49.75	25.25
GROUP 8.....	\$ 50.75	25.25
GROUP 9.....	\$ 49.30	25.25
GROUP 10.....	\$ 50.30	25.25
GROUP 11.....	\$ 48.57	25.25
GROUP 12.....	\$ 49.57	25.25
GROUP 13.....	\$ 48.21	25.25
GROUP 14.....	\$ 49.21	25.25
GROUP 15.....	\$ 47.57	25.25
GROUP 16.....	\$ 44.37	25.25
GROUP 17.....	\$ 28.89	12.40
GROUP 18.....	\$ 33.38	25.25

## FOOTNOTE:

Paid Holidays: New Year's Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day and Christmas Day.

## POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Engineer when operating combination of boom and jib 400' or longer

GROUP 2: Engineer when operating combination of boom and jib 400' or longer on a crane that requires an oiler

GROUP 3: Engineer when operating combination of boom and jib 300' or longer

GROUP 4: Engineer when operating combination of boom and jib 300' or longer on a crane that requires an oiler

GROUP 5: Engineer when operating combination of boom and jib 220' or longer

GROUP 6: Engineer when operating combination of boom and jib 220' or longer on a crane that requires an oiler

GROUP 7: Engineer when operating combination of boom and jib 140' or longer

GROUP 8: Engineer when operating combination of boom and jib 140' or longer on a crane that requires an oiler

GROUP 9: Tower crane & derrick operator (where operator's work station is 50 ft. or more above first sub-level)

GROUP 10: Tower crane & derrick operator (where operator's work station is 50 ft. or more above first sub-level) on a crane that requires an oiler

GROUP 11: Engineer when operating combination of boom and jib 120' or longer

GROUP 12: Engineer when operating combination of boom and jib 120' or longer on a crane that requires an oiler

GROUP 13: Crane operator; job mechanic and 3 drum hoist and excavator

GROUP 14: Crane operator on a crane that requires an oiler

GROUP 15: Hoisting operator; 2 drum hoist and rubber tired backhoe

GROUP 16: Forklift and 1 drum hoist

GROUP 17: Compressor or welder operator

GROUP 18: Oiler

-----  
 ENGI0324-004 06/01/2023

AREA 1: ALLEGAN, BARRY, BERRIEN, BRANCH, CALHOUN, CASS, EATON, HILLSDALE, IONIA, KALAMAZOO, KENT, LAKE, MANISTEE, MASON, MECOSTA, MONTCALM, MUSKEGON, NEWAYGO, OCEANA, OSCEOLA, OTTAWA, ST. JOSEPH, VAN BUREN

AREA 2: ANTRIM, BENZIE, CHARLEVOIX, EMMET, GRAND TRAVERSE, KALKASKA, LEELANAU, MISSAUKEE AND WEXFORD COUNTIES:

	Rates	Fringes
OPERATOR: Power Equipment (Steel Erection)		
AREA 1		
GROUP 1.....	\$ 53.02	25.25
GROUP 2.....	\$ 49.75	25.25
GROUP 3.....	\$ 48.21	25.25
GROUP 4.....	\$ 44.37	25.25
GROUP 5.....	\$ 28.89	12.40
GROUP 6.....	\$ 33.38	25.25
AREA 2		
GROUP 1.....	\$ 53.02	25.25
GROUP 2.....	\$ 49.75	24.25
GROUP 3.....	\$ 48.21	25.25
GROUP 4.....	\$ 44.37	25.25
GROUP 5.....	\$ 28.89	12.40
GROUP 6.....	\$ 33.38	25.25

FOOTNOTES:

Crane operator with main boom and jib 300' or longer: \$1.50 additional to the group 1 rate. Crane operator with main boom and jib 400' or longer: \$3.00 additional to the group 1 rate.

PAID HOLIDAYS: New Year's Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day and Christmas Day.

POWER EQUIPMENT OPERATOR CLASSIFICATIONS:

GROUP 1: Crane Operator with main boom & jib 400', 300', or 220' or longer.

GROUP 2: Crane Operator with main boom & jib 140' or longer, Tower Crane; Gantry Crane; Whirley Derrick.



GROUP 3: Regular Equipment Operator, Crane, Dozer, Loader, Hoist, Straddle Wagon, Mechanic, Grader and Hydro Excavator.

GROUP 4: Air Tugger (single drum), Material Hoist Pump 6" or over, Elevators, Brokk Concrete Breaker.

GROUP 5: Air Compressor, Welder, Generators, Conveyors

GROUP 6: Oiler and fire tender

-----  
 \* ENGI0324-005 09/01/2023

AREA 1: GENESEE, LAPEER, LIVINGSTON, MACOMB, MONROE, OAKLAND, ST. CLAIR, WASHTENAW AND WAYNE COUNTIES

AREA 2: ALCONA, ALLEGAN, ALGER, ALPENA, ANTRIM, ARENAC, BARAGA, BARRY, BAY, BENZIE, BERRIEN, BRANCH, CALHOUN, CASS, CHARLEVOIX, CHEBOYGAN, CHIPPEWA, CLARE, CLINTON, CRAWFORD, DELTA, DICKINSON, EATON, EMMET, GLADWIN, GOGEBIC, GRAND TRAVERSE, GRATIOT, HILLSDALE, HOUGHTON, HURON, INGHAM, IONIA, IOSCO, IRON, ISABELLA, JACKSON, KALAMAZOO, KALKASKA, KENT, KWEENAW, LAKE, LEELANAU, LENAWEE, LUCE, MACKINAC, MANISTEE, MARQUETTE, MASON, MECOSTA, MENOMINEE, MIDLAND, MISSAUKEE, MONTCALM, MONTMORENCY, MUSKEGON, NEWAYGO, OCEANA, OGEMAW, ONTONAGON, OSCEOLA, OSCODA, OTSEGO, OTTAWA, PRESQUE ISLE, ROSCOMMON, SAGINAW, SANILAC, SCHOOLCRAFT, SHIAWASSEE, ST. JOSEPH, TUSCOLA, VAN BUREN AND WEXFORD COUNTIES

Rates Fringes

OPERATOR: Power Equipment  
 (Underground construction  
 (including sewer))

AREA 1:		
GROUP 1.....	\$ 41.08	25.25
GROUP 2.....	\$ 36.25	25.25
GROUP 3.....	\$ 35.52	25.25
GROUP 4.....	\$ 34.95	25.25
GROUP 5.....	\$ 25.35	12.10
AREA 2:		
GROUP 1.....	\$ 39.27	25.25
GROUP 2.....	\$ 34.38	25.25
GROUP 3.....	\$ 33.88	25.25
GROUP 4.....	\$ 33.60	25.25
GROUP 5.....	\$ 25.35	12.10

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Backfiller tamper; Backhoe; Batch plant operator (concrete); Clamshell; Concrete paver (2 drums or larger); Conveyor loader (Euclid type); Crane (crawler, truck type or pile driving); Dozer; Dragline; Elevating grader; Endloader; Gradall (and similar type machine); Grader; Mechanic; Power shovel; Roller (asphalt); Scraper (self-propelled or tractor drawn); Side boom tractor (type D-4 or equivalent and larger); Slip form paver; Slope paver; Trencher (over 8 ft. digging capacity); Well drilling rig; Concrete pump with boom operator; Hydro Excavator

GROUP 2: Boom truck (power swing type boom); Crusher; Hoist; Pump (1 or more - 6-in. discharge or larger - gas or

diesel- powered or powered by generator of 300 amperes or more - inclusive of generator); Side boom tractor (smaller than type D-4 or equivalent); Tractor (pneu-tired, other than backhoe or front end loader); Trencher (8-ft. digging capacity and smaller); Vac Truck and End dump operator;

GROUP 3: Air compressors (600 cfm or larger); Air compressors (2 or more-less than 600 cfm); Boom truck (non-swinging, non- powered type boom); Concrete breaker (self-propelled or truck mounted - includes compressor); Concrete paver (1 drum-1/2 yd. or larger); Elevator (other than passenger); Maintenance person; Pump (2 or more-4-in. up to 6-in. discharge-gas or diesel powered - excluding submersible pumps); Pumpcrete machine (and similar equipment); Wagon drill (multiple); Welding machine or generator (2 or more-300 amp. or larger - gas or diesel powered)

GROUP 4: Boiler; Concrete saw (40 hp or over); Curing machine (self-propelled); Farm tractor (with attachment); Finishing machine (concrete); Hydraulic pipe pushing machine; Mulching equipment; Pumps (2 or more up to 4-in. discharge, if used 3 hours or more a day, gas or diesel powered - excluding submersible pumps); Roller (other than asphalt); Stump remover; Trencher (service); Vibrating compaction equipment, self-propelled (6 ft. wide or over); Sweeper (Wayne type); Water wagon and Extend-a boom forklift

Group 5: Fire Person, Oiler

-----  
 \* ENGI0324-006 06/01/2023

GENESEE, MACOMB, MONROE, OAKLAND, WASHTENAW, WAYNE, ALCONA, ALGER, ALLEGAN, ALPENA, ANTRIM, ARENAC, BARAGA, BARRY, BAY, BENZIE, BERRIEN, BRANCH, CALHOUN, CASS, CHARLEVOIX, CHEBOYGAN, CHIPPEWA, CLARE, CLINTON, CRAWFORD, DELTA, DICKINSON, EATON, EMMET, GLADWIN, GOGEBIC, GRAND TRAVERSE, GRATIOT, HILLSDALE, HOUGHTON, HURON, INGHAM, IONIA, IOSCO, IRON, ISABELLA, JACKSON, KALAMAZOO, KALKASKA, KENT, KEWEENAW, LAKE, LAPEER, LEELANAU, LENAWEE, LIVINGSTON, LUCE, MACKINAC, MANISTEE, MARQUETTE, MASON, MECOSTA, MENOMINEE, MIDLAND, MISSAUKEE, MONTCALM, MONTMORENCY, MUSKEGON, NEWAYGO, OCEANA, OGEMAW, ONTONAGON, OSCEOLA, OSCODA, OTSEGO, OTTAWA, PRESQUE ISLE, ROSCOMMON, SAGINAW, ST. CLARE, ST. JOSEPH, SANILAC, SCHOOLCRAFT, SHIAWASSEE, TUSCOLA, VAN BUREN AND WEXFORD COUNTIES

Rates Fringes

Power equipment operators:  
 (AIRPORT, BRIDGE & HIGHWAY  
 CONSTRUCTION)

GROUP 1.....	\$ 40.46	25.25
GROUP 2.....	\$ 37.73	25.25
GROUP 3.....	\$ 33.17	25.55
GROUP 4.....	\$ 33.00	25.25

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Asphalt plant operator; Crane operator (does not include work on bridge construction projects when the crane operator is erecting structural components); Dragline operator; Shovel operator; Locomotive operator; Paver operator (5 bags or more); Elevating grader operator; Pile driving operator; Roller operator (asphalt); Blade grader

operator; Trenching machine operator (ladder or wheel type); Auto-grader; Slip form paver; Self-propelled or tractor-drawn scraper; Conveyor loader operator (Euclid type); Endloader operator (1 yd. capacity and over); Bulldozer; Hoisting engineer; Tractor operator; Finishing machine operator (asphalt); Mechanic; Pump operator (6-in. discharge or over, gas, diesel powered or generator of 300 amp. or larger); Shouldering or gravel distributing machine operator (self-propelled); Backhoe (with over 3/8 yd. bucket); Side boom tractor (type D-4 or equivalent or larger); Tube finisher (slip form paving); Gradall (and similar type machine); Asphalt paver (self-propelled); Asphalt planer (self-propelled); Batch plant (concrete-central mix); Slurry machine (asphalt); Concrete pump (3 in. and over); Roto-mill; Swinging boom truck (over 12 ton capacity); Hydro demolisher (water blaster); Farm-type tractor with attached pan; Vacuum truck operator; Batch Plant (concrete dry batch); Concrete Saw Operator (40h.p. or over; Tractor Operator (farm type); Finishing Machine Operator (concrete); Grader Operator (self-propelled fine grade or form (concrete)).

GROUP 2: Screening plant operator; Washing plant operator; Crusher operator; Backhoe (with 3/8 yd. bucket or less); Side boom tractor (smaller than D-4 type or equivalent); Sweeper (Wayne type and similar equipment); Greese Truck; Air Compressor Operator (600 cu.ft. per min or more); Air Compressor Operator (two or more, less than 600 cfm);

GROUP 3: Boiler fire tender; Tractor operator (farm type with attachment); Concrete Breaker; Wagon Drill Operator;

GROUP 4: Oiler; Fire tender; Trencher (service); Flexplane operator; Cleftplane operator; Boom or winch hoist truck operator; Endloader operator \*under 1 yd. capacity); Roller Operator (other than asphalt); Curing equipment operator (self-propelled); Power bin operator; Plant drier (6 ft. wide or over); Guard post driver operator (power driven); All mulching equipment; Stump remover; Concrete pump (under 3-in.); Mesh installer (self-propelled); End dump; Skid Steer.

-----  
 ENGI0324-007 05/01/2023

ALGER, BARAGA, CHIPPEWA, DELTA, DICKINSON, GOGEBIC, HOUGHTON, IRON, KEWEENAW, LUCE, MACKINAC MARQUETTE, MENOMINEE, ONTONAGON AND SCHOOLCRAFT COUNTIES:

	Rates	Fringes
OPERATOR: Power Equipment		
(Steel Erection)		
Compressor, welder and forklift.....	\$ 38.50	25.00
Crane operator, main boom & jib 120' or longer.....	\$ 44.97	25.00
Crane operator, main boom & jib 140' or longer.....	\$ 44.17	24.60
Crane operator, main boom & jib 220' or longer.....	\$ 45.27	25.00
Mechanic with truck and tools.....	\$ 44.10	25.00
Oiler and fireman.....	\$ 39.96	25.00

Regular operator.....\$ 42.32 25.00

-----  
ENGI0324-008 10/01/2022

ALCONA, ALGER, ALLEGAN, ALPENA, ANTRIM, ARENAC, BARAGA, BARRY, BAY, BENZIE, BERRIEN, BRANCH, CALHOUN, CASS, CHARLEVOIX, CHEBOYGAN, CHIPPEWA, CLARE, CLINTON, CRAWFORD, DELTA, DICKINSON, EATON, EMMET, GENESEE, GLADWIN, GOGEBIC, GRAND TRAVERSE, GRATIOT, HILLSDALE, HOUGHTON, HURON, INGHAM, IONIA, IOSCO, IRON, ISABELLA, JACKSON, KALAMAZOO, KALKASKA, KENT, KEWEENAW, LAKE, LAPEER, LEELANAU, LENAWEE, LIVINGSTON, LUCE, MACKINAC, MACOMB, MANISTEE, MARQUETTE, MASON, MECOSTA, MENOMINEE, MIDLAND, MISSAUKEE, MONTCALM, MONTMORENCY, MONROE, MUSKEGON, NEWAYGO, OAKLAND, OCEANA, OGEMAW, ONTONAGON, OSCEOLA, OSCODA, OTSEGO, OTTAWA, PRESQUE ISLE, ROSCOMMON, SAGINAW, ST. CLARE, ST. JOSEPH, SANILAC, SCHOOLCRAFT, SHIAWASSEE, TUSCOLA, VAN BUREN, WASHTENAW, WAYNE AND WEXFORD COUNTIES

Rates Fringes

OPERATOR: Power Equipment  
(Sewer Relining)

GROUP 1.....\$ 35.37 14.77  
GROUP 2.....\$ 33.33 14.77

SEWER RELINING CLASSIFICATIONS

GROUP 1: Operation of audio-visual closed circuit TV system, including remote in-ground cutter and other equipment used in connection with the CCTV system

GROUP 2: Operation of hot water heaters and circulation systems, water jettors and vacuum and mechanical debris removal systems

-----  
ENGI0325-012 05/01/2023

Rates Fringes

Power equipment operators -  
gas distribution and duct  
installation work:

GROUP 1.....\$ 36.18 25.25  
GROUP 2.....\$ 33.45 25.25

SCOPE OF WORK: The construction, installation, treating and reconditioning of pipelines transporting gas vapors within cities, towns, subdivisions, suburban areas, or within private property boundaries, up to and including private meter settings of private industrial, governmental or other premises, more commonly referred to as ""distribution work,"" starting from the first metering station, connection, similar or related facility, of the main or cross country pipeline and including duct installation.

Group 1: Backhoe, crane, grader, mechanic, dozer (D-6 equivalent or larger), side boom (D-4 equivalent or larger), trencher(except service), endloader (2 yd. capacity or greater).

GROUP 2: Dozer (less than D-6 equivalent), endloader (under 2 yd. capacity), side boom (under D-4 capacity), backfiller, pumps (1 or 2 of 6-inch discharge or greater),

boom truck (with powered boom), tractor (wheel type other than backhoe or front endloader). Tamper (self-propelled), boom truck (with non-powered boom), concrete saw (20 hp or larger), pumps (2 to 4 under 6-inch discharge), compressor (2 or more or when one is used continuously into the second day) and trencher(service). Oiler, hydraulic pipe pushing machine, grease person and hydrostatic testing operator.

-----  
 IRON0008-007 06/01/2022

ALGER, BARAGA, CHIPPEWA, DELTA, DICKINSON, GOGEBIC, HOUGHTON, IRON, KEWEENAW, LUCE, MACKINAC MARQUETTE, MENOMINEE, ONTONAGON AND SCHOOLCRAFT COUNTIES:

	Rates	Fringes
Ironworker - pre-engineered metal building erector.....	\$ 23.70	6.95
IRONWORKER		
General contracts		
\$10,000,000 or greater.....	\$ 38.14	28.70
General contracts less		
than \$10,000,000.....	\$ 38.14	28.70

Paid Holidays: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day & Christmas Day.

-----  
 IRON0025-002 06/01/2023

ALCONA, ALPENA, ARENAC, BAY, CHEBOYGAN, CLARE, CLINTON, CRAWFORD, GENESEE, GLADWIN, GRATIOT, HURON, INGHAM, IOSCO, ISABELLA, JACKSON, LAPEER, LIVINGSTON, MACOMB, MIDLAND, MONTMORENCY, OAKLAND, OGEMAW, OSCODA, OTSEGO, PRESQUE ISLE, ROSCOMMON, SAGINAW, SANILAC, SHIAWASSEE, ST. CLAIR, TUSCOLA, WASHTENAW AND WAYNE COUNTIES:

	Rates	Fringes
Ironworker - pre-engineered metal building erector		
ALLEGAN, ANTRIM, BARRY, BENZIE, BRANCH, CALHOUN, CHARLEVOIX, EATON, EMMET, GRAND TRAVERSE, HILLSDALE, IONIA, KALAMAZOO, KALKASKA, KENT, LAKE, LEELANAU, MANISTEE, MASON, MECOSTA, MISSAUKEE, MONTCALM, MUSKEGON, NEWAYGO, OCEANA, OSCEOLA, OTTAWA, ST. JOSEPH, VAN BUREN AND WEXFORD COUNTIES:..	\$ 24.59	25.43
Bay, Genesee, Lapeer, Livingston (east of Burkhardt Road), Macomb, Midland, Oakland, Saginaw, St. Clair, The University of Michigan, Washtenaw (east of U.S. 23) & Wayne...	\$ 25.81	26.43
IRONWORKER		
Ornamental and Structural...	\$ 34.50	38.44

Reinforcing.....\$ 32.68 35.15

-----  
IRON0055-005 07/01/2022

LENAWEE AND MONROE COUNTIES:

Rates Fringes

IRONWORKER

Pre-engineered metal buildings.....\$ 23.59 19.35  
All other work.....\$ 33.00 27.20

-----  
IRON0292-003 06/01/2020

BERRIEN AND CASS COUNTIES:

Rates Fringes

IRONWORKER (Including pre-engineered metal building erector).....\$ 31.75 22.84

-----  
LAB00005-006 10/01/2022

Rates Fringes

Laborers - hazardous waste abatement: (ALCONA, ALPENA, ANTRIM, BENZIE, CHARLEVOIX, CHEBOYGAN, CRAWFORD, EMMET, GRAND TRAVERSE, IOSCO, KALKASKA, LEELANAU, MISSAUKEE, MONTMORENCY, OSCODA, OTSEGO, PRESQUE ISLE AND WEXFORD COUNTIES - Zone 10)  
Levels A, B or C.....\$ 17.45 12.75  
class b.....\$ 18.64 12.90  
Work performed in conjunction with site preparation not requiring the use of personal protective equipment;  
Also, Level D.....\$ 16.45 12.75  
class a.....\$ 17.64 12.90

Zone 10

Laborers - hazardous waste abatement: (ALGER, BARAGA, CHIPPEWA, DELTA, DICKINSON, GOGEBIC, HOUGHTON, IRON, KEWEENAW, LUCE, MACKINAC, MARQUETTE, MENOMINEE, ONTONAGON AND SCHOOLCRAFT COUNTIES - Zone 11)  
Levels A, B or C.....\$ 25.18 12.90  
Work performed in conjunction with site preparation not requiring the use of personal protective equipment;  
Also, Level D.....\$ 22.58 12.90

Laborers - hazardous waste abatement: (ALLEGAN, BARRY, BERRIEN, BRANCH, CALHOUN,

CASS, IONIA COUNTY (except the city of Portland);		
KALAMAZOO, KENT, LAKE, MANISTEE, MASON, MECOSTA, MONTCALM, MUSKEGON, NEWAYGO, OCEANA, OSCEOLA, OTTAWA, ST. JOSEPH AND VAN BUREN COUNTIES - Zone 9)		
Levels A, B or C.....\$ 21.88		13.26
Work performed in conjunction with site preparation not requiring the use of personal protective equipment;		
Also, Level D.....\$ 20.80		12.90
Laborers - hazardous waste abatement: (ARENAC, BAY, CLARE, GLADWIN, GRATIOT, HURON, ISABELLA, MIDLAND, OGEMAW, ROSCOMMON, SAGINAW AND TUSCOLA COUNTIES - Zone 8)		
Levels A, B or C.....\$ 23.74		12.95
Work performed in conjunction with site preparation not requiring the use of personal protective equipment;		
Also, Level D.....\$ 20.80		12.90
Laborers - hazardous waste abatement: (CLINTON, EATON AND INGHAM COUNTIES; IONIA COUNTY (City of Portland); LIVINGSTON COUNTY (west of Oak Grove Rd., including the City of Howell) - Zone 6)		
Levels A, B or C.....\$ 26.33		12.95
Work performed in conjunction with site preparation not requiring the use of personal protective equipment;		
Also, Level D.....\$ 24.64		12.90
Laborers - hazardous waste abatement: (GENESEE, LAPEER AND SHIAWASSEE COUNTIES - Zone 7)		
Levels A, B or C.....\$ 24.20		13.80
Work performed in conjunction with site preparation not requiring the use of personal protective equipment;		
Also, Level D.....\$ 23.20		13.80
Laborers - hazardous waste abatement: (HILLSDALE, JACKSON AND LENAWEЕ COUNTIES - Zone 4)		
Levels A, B or C.....\$ 27.13		14.95
Work performed in conjunction with site preparation not requiring the use of personal protective equipment;		
Also, Level D.....\$ 24.17		12.90
Laborers - hazardous waste		

abatement: (LIVINGSTON COUNTY  
 (east of Oak Grove Rd. and  
 south of M-59, excluding the  
 city of Howell); AND  
 WASHTENAW COUNTY - Zone 3)  
 Levels A, B or C.....\$ 29.93                   14.20  
 Work performed in  
 conjunction with site  
 preparation not requiring  
 the use of personal  
 protective equipment;  
 Also, Level D.....\$ 28.93                   14.20  
 Laborers - hazardous waste  
 abatement: (MACOMB AND WAYNE  
 COUNTIES - Zone 1)  
 Levels A, B or C.....\$ 29.93                   16.90  
 Work performed in  
 conjunction with site  
 preparation not requiring  
 the use of personal  
 protective equipment;  
 Also, Level D.....\$ 28.93                   16.90  
 Laborers - hazardous waste  
 abatement: (MONROE COUNTY -  
 Zone 4)  
 Levels A, B or C.....\$ 31.75                   14.90  
 Work performed in  
 conjunction with site  
 preparation not requiring  
 the use of personal  
 protective equipment;  
 Also, Level D.....\$ 31.75                   14.90  
 Laborers - hazardous waste  
 abatement: (OAKLAND COUNTY  
 and the Northeast portion of  
 LIVINGSTON COUNTY bordered by  
 Oak Grove Road on the West  
 and M-59 on the South - Zone  
 2)  
 Level A, B, C.....\$ 29.93                   16.90  
 Work performed in  
 conjunction with site  
 preparation not requiring  
 the use of personal  
 protective equipment;  
 Also, Level D.....\$ 28.93                   16.90  
 Laborers - hazardous waste  
 abatement: (SANILAC AND ST.  
 CLAIR COUNTIES - Zone 5)  
 Levels A, B or C.....\$ 26.21                   16.62  
 Work performed in  
 conjunction with site  
 preparation not requiring  
 the use of personal  
 protective equipment;  
 Also, Level D.....\$ 24.75                   16.35

-----  
 LAB00259-001 09/01/2023

AREA 1: MACOMB, OAKLAND AND WAYNE COUNTIES  
 AREA 2: ALCONA, ALGER, ALLEGAN, ALPENA, ANTRIM, ARENAC, BARAGA,  
 BARRY, BAY, BENZIE, BERRIEN, BRANCH, CALHOUN, CASS, CHARLEVOIX,  
 CHEBOYGAN, CHIPPEWA, CLARE, CLINTON, CRAWFORD, DELTA,  
 DICKINSON, EATON, EMMET, GENESEE, GLADWIN, GOGEBIC, GRAND  
 TRAVERSE, GRATIOT, HILLSDALE, HOUGHTON, HURON, INGHAM, IONIA,



IOSCO, IRON, ISABELLA, JACKSON, KALAMAZOO, KALKASKA, KENT, KEWEENAW, LAKE, LAPEER, LEELANAU, LENAWEE, LIVINGSTON, LUCE, MACKINAC, MANISTEE, MARQUETTE, MASON, MECOSTA, MENOMINEE, MIDLAND, MISSAUKEE, MONROE, MONTCALM, MONTMORENCY, MUSKEGON, NEWAYGO, OCEANA, OGEMAW, ONTONAGON, OSCEOLA, OSCODA, OTSEGO, OTTAWA, PRESQUE ISLE, ROSCOMMON, SAGINAW, ST. CLARE, ST. JOSEPH, SANILAC, SCHOOLCRAFT, SHIAWASSEE, TUSCOLA, VAN BUREN, WASHTENAW AND WEXFORD COUNTIES

	Rates	Fringes
Laborers - tunnel, shaft and caisson:		
AREA 1		
GROUP 1.....	\$ 23.62	16.93
GROUP 2.....	\$ 23.73	16.93
GROUP 3.....	\$ 23.79	16.93
GROUP 4.....	\$ 23.97	16.93
GROUP 5.....	\$ 24.22	16.93
GROUP 6.....	\$ 24.55	16.93
GROUP 7.....	\$ 17.83	16.93
AREA 2		
GROUP 1.....	\$ 27.57	16.93
GROUP 2.....	\$ 25.24	16.93
GROUP 3.....	\$ 25.34	16.93
GROUP 4.....	\$ 29.57	16.93
GROUP 5.....	\$ 25.76	16.93
GROUP 6.....	\$ 26.07	16.93
GROUP 7.....	\$ 25.57	16.93

SCOPE OF WORK: Tunnel, shaft and caisson work of every type and description and all operations incidental thereto, including, but not limited to, shafts and tunnels for sewers, water, subways, transportation, diversion, sewerage, caverns, shelters, aquafers, reservoirs, missile silos and steel sheeting for underground construction.

TUNNEL LABORER CLASSIFICATIONS

GROUP 1: Tunnel, shaft and caisson laborer, dump, shanty, hog house tender, testing (on gas) and watchman

GROUP 2: Manhole, headwall, catch basin builder, bricklayer tender, mortar machine and material mixer

GROUP 3: Air tool operator (jackhammer, bush hammer and grinder), first bottom, second bottom, cage tender, car pusher, carrier, concrete, concrete form, concrete repair, cement invert laborer, cement finisher, concrete shoveler, conveyor, floor, gasoline and electric tool operator, gunite, grout operator, welder, heading dinky person, inside lock tender, pea gravel operator, pump, outside lock tender, scaffold, top signal person, switch person, track, tugger, utility person, vibrator, winch operator, pipe jacking, wagon drill and air track operator and concrete saw operator (under 40 h.p.)

GROUP 4: Tunnel, shaft and caisson mucker, bracer, liner plate, long haul dinky driver and well point

GROUP 5: Tunnel, shaft and caisson miner, drill runner, key board operator, power knife operator, reinforced steel or mesh (e.g. wire mesh, steel mats, dowel bars, etc.)

GROUP 6: Dynamite and powder

GROUP 7: Restoration laborer, seeding, sodding, planting, cutting, mulching and top soil grading; and the restoration of property such as replacing mailboxes, wood chips, planter boxes, flagstones, etc.

-----  
LAB00334-001 09/01/2022

	Rates	Fringes
Laborers - open cut:		
ZONE 1 - MACOMB, OAKLAND AND WAYNE COUNTIES:		
GROUP 1.....	\$ 23.47	16.72
GROUP 2.....	\$ 23.58	16.72
GROUP 3.....	\$ 23.63	16.72
GROUP 4.....	\$ 23.71	16.72
GROUP 5.....	\$ 24.17	16.72
GROUP 6.....	\$ 22.00	16.72
GROUP 7.....	\$ 17.84	16.72
ZONE 2 - LIVINGSTON COUNTY (east of M-151 (Oak Grove Rd.)); MONROE AND WASHTENAW COUNTIES:		
GROUP 1.....	\$ 25.20	16.72
GROUP 2.....	\$ 24.91	16.72
GROUP 3.....	\$ 25.03	16.72
GROUP 4.....	\$ 25.10	16.72
GROUP 5.....	\$ 25.25	16.72
GROUP 6.....	\$ 22.55	16.72
GROUP 7.....	\$ 22.11	16.72
ZONE 3 - CLINTON, EATON, GENESEE, HILLSDALE AND INGHAM COUNTIES; IONIA COUNTY (City of Portland); JACKSON, LAPEER AND LENAWEЕ COUNTIES; LIVINGSTON COUNTY (west of M-151 Oak Grove Rd.); SANILAC, ST. CLAIR AND SHIAWASSEE COUNTIES:		
GROUP 1.....	\$ 23.39	16.72
GROUP 2.....	\$ 23.13	16.72
GROUP 3.....	\$ 23.25	16.72
GROUP 4.....	\$ 23.30	16.72
GROUP 5.....	\$ 23.44	16.72
GROUP 6.....	\$ 20.74	16.72
GROUP 7.....	\$ 22.23	16.72
ZONE 4 - ALCONA, ALLEGAN, ALPENA, ANTRIM, ARENAC, BARRY, BAY, BENZIE, BERRIEN, BRANCH, CALHOUN, CASS, CHARLEVOIX, CHEBOYGAN, CLARE, CRAWFORD, EMMET, GLADWIN, GRAND TRAVERSE, GRATIOT AND HURON COUNTIES; IONIA COUNTY (EXCEPT THE CITY OF PORTLAND); IOSCO, ISABELLA, KALAMAZOO, KALKASKA, KENT, LAKE, LEELANAU, MANISTEE,		

MASON, MECOSTA, MIDLAND,  
 MISSAUKEE, MONTCALM,  
 MONTMORENCY, MUSKEGON,  
 NEWAYGO, OCEANA, OGEMAW,  
 OSCEOLA, OSCODA, OTSEGO,  
 OTTAWA, PRESQUE ISLE,  
 ROSCOMMON, SAGINAW, ST.  
 JOSEPH, TUSCOLA, VAN BUREN  
 AND WEXFORD COUNTIES:

GROUP 1.....	\$ 22.42	16.72
GROUP 2.....	\$ 22.15	16.72
GROUP 3.....	\$ 22.26	16.72
GROUP 4.....	\$ 22.33	16.72
GROUP 5.....	\$ 22.45	16.72
GROUP 6.....	\$ 19.67	16.72
GROUP 7.....	\$ 22.30	16.72

ZONE 5 - ALGER, BARAGA,  
 CHIPPEWA, DELTA,  
 DICKINSON, GOGEBIC,  
 HOUGHTON, IRON,  
 KEWEENAW, LUCE, MACKINAC,  
 MARQUETTE, MENOMINEE,  
 ONTONAGON AND SCHOOLCRAFT  
 COUNTIES:

GROUP 1.....	\$ 22.24	16.72
GROUP 2.....	\$ 22.38	16.72
GROUP 3.....	\$ 22.51	16.72
GROUP 4.....	\$ 22.56	16.72
GROUP 5.....	\$ 22.64	16.72
GROUP 6.....	\$ 19.99	16.72
GROUP 7.....	\$ 22.45	16.72

SCOPE OF WORK:

Open cut construction work shall be construed to mean work which requires the excavation of earth including industrial, commercial and residential building site excavation and preparation, land balancing, demolition and removal of concrete and underground appurtenances, grading, paving, sewers, utilities and improvements; retention, oxidation, flocculation and irrigation facilities, and also including but not limited to underground piping, conduits, steel sheeting for underground construction, and all work incidental thereto, and general excavation. For all areas except the Upper Peninsula, open cut construction work shall also be construed to mean waterfront work, piers, docks, seawalls, breakwalls, marinas and all incidental work. Open cut construction work shall not include any structural modifications, alterations, additions and repairs to buildings, or highway work, including roads, streets, bridge construction and parking lots or steel erection work and excavation for the building itself and back filling inside of and within 5 ft. of the building and foundations, footings and piers for the building. Open cut construction work shall not include any work covered under Tunnel, Shaft and Caisson work.

OPEN CUT LABORER CLASSIFICATIONS

GROUP 1: Construction laborer

GROUP 2: Mortar and material mixer, concrete form person, signal person, well point person, manhole, headwall and catch basin builder, headwall, seawall, breakwall and dock builder

GROUP 3: Air, gasoline and electric tool operator, vibrator operator, driller, pump person, tar kettle operator, bracer, rodder, reinforced steel or mesh person (e.g., wire mesh, steel mats, dowel bars, etc.), welder, pipe jacking and boring person, wagon drill and air track operator and concrete saw operator (under 40 h.p.), windlass and tugger person and directional boring person

GROUP 4: Trench or excavating grade person

GROUP 5: Pipe layer (including crock, metal pipe, multi-plate or other conduits)

GROUP 6: Grouting man, audio-visual television operations and all other operations in connection with closed circuit television inspection, pipe cleaning and pipe relining work and the installation and repair of water service pipe and appurtenances

GROUP 7: Restoration laborer, seeding, sodding, planting, cutting, mulching and top soil grading; and the restoration of property such as replacing mailboxes, wood chips, planter boxes, flagstones, etc.

-----  
LAB00465-001 06/01/2023

LABORER: Highway, Bridge and Airport Construction

AREA 1: GENESEE, MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE COUNTIES

AREA 2: ALLEGAN, BARRY, BAY, BERRIEN, BRANCH, CALHOUN, CASS, CLINTON, EATON, GRATIOT, HILLSDALE, HURON, INGHAM, JACKSON, KALAMAZOO, LAPEER, LENAWEE, LIVINGSTON, MIDLAND, MUSKEGON, SAGINAW, SANILAC, SHIAWASSEE, ST. CLAIR, ST. JOSEPH, TUSCOLA AND VAN BUREN COUNTIES

AREA 3: ALCONA, ALPENA, ANTRIM, ARENAC, BENZIE, CHARLEVOIX, CHEBOYGAN, CLARE, CRAWFORD, EMMET, GLADWIN, GRAND TRAVERSE, IONIA, IOSCO, ISABELLA, KALKASKA, KENT, LAKE, LEELANAU, MANISTEE, MASON, MECOSTA, MISSAUKEE, MONTCALM, MONTMORENCY, NEWAYGO, OCEANA, OGEMAW, OSCEOLA, OSCODA, OTSEGO, OTTAWA, PRESQUE ISLE, ROSCOMMON AND WEXFORD COUNTIES

AREA 4: ALGER, BARAGA, CHIPPEWA, DELTA, DICKINSON, GOGEBIC, HOUGHTON, IRON, KEWEENAW, LUCE, MACKINAC, MARQUETTE, MENOMINEE, ONTONAGON AND SCHOOLCRAFT COUNTIES

	Rates	Fringes
LABORER (AREA 1)		
GROUP 1.....	\$ 29.67	13.45
GROUP 2.....	\$ 29.88	13.45
GROUP 3.....	\$ 30.17	13.45
GROUP 4.....	\$ 30.61	13.45
GROUP 5.....	\$ 30.23	13.45
GROUP 6.....	\$ 30.66	13.45
LABORER (AREA 2)		
GROUP 1.....	\$ 26.92	12.90
GROUP 2.....	\$ 27.12	12.90
GROUP 3.....	\$ 27.36	12.90
GROUP 4.....	\$ 27.71	12.90

GROUP 5.....	\$ 27.58	12.90
GROUP 6.....	\$ 27.92	12.90
LABORER (AREA 3)		
GROUP 1.....	\$ 26.22	12.90
GROUP 2.....	\$ 26.43	12.90
GROUP 3.....	\$ 26.72	12.90
GROUP 4.....	\$ 27.16	12.90
GROUP 5.....	\$ 26.78	12.90
GROUP 6.....	\$ 27.21	12.90
LABORER (AREA 4)		
GROUP 1.....	\$ 26.22	12.90
GROUP 2.....	\$ 26.43	12.90
GROUP 3.....	\$ 26.72	12.90
GROUP 4.....	\$ 27.16	12.90
GROUP 5.....	\$ 26.78	12.90
GROUP 6.....	\$ 27.21	12.90

## LABORER CLASSIFICATIONS

GROUP 1: Asphalt shoveler or loader; asphalt plant misc.; burlap person; yard person; dumper (wagon, truck, etc.); joint filling laborer; miscellaneous laborer; unskilled laborer; sprinkler laborer; form setting laborer; form stripper; pavement reinforcing; handling and placing (e.g., wire mesh, steel mats, dowel bars); mason's tender or bricklayer's tender on manholes; manhole builder; headwalls, etc.; waterproofing, (other than buildings) seal coating and slurry mix, shoring, underpinning; pressure grouting; bridge pin and hanger removal; material recycling laborer; horizontal paver laborer (brick, concrete, clay, stone and asphalt); ground stabilization and modification laborer; grouting; waterblasting; top person; railroad track and trestle laborer; carpenters' tender; guard rail builders' tender; earth retention barrier and wall and M.S.E. wall installer's tender; highway and median installer's tender (including sound, retaining, and crash barriers); fence erector's tender; asphalt raker tender; sign installer; remote control operated equipment.

GROUP 2: Mixer operator (less than 5 sacks); air or electric tool operator (jackhammer, etc.); spreader; boxperson (asphalt, stone, gravel); concrete paddler; power chain saw operator; paving batch truck dumper; tunnel mucker (highway work only); concrete saw (under 40 h.p.) and dry pack machine; roto-mill grounds person.

GROUP 3: Tunnel miner (highway work only); finishers tenders; guard rail builders; highway and median barrier installer; earth retention barrier and wall and M.S.E. wall installer's (including sound, retaining and crash barriers); fence erector; bottom person; powder person; wagon drill and air track operator; diamond and core drills; grade checker; certified welders; curb and side rail setter's tender.

GROUP 4: Asphalt raker

GROUP 5: Pipe layers, oxy-gun

GROUP 6: Line-form setter for curb or pavement; asphalt screed checker/screw man on asphalt paving machines.

-----  
LAB01076-005 04/01/2023

MICHIGAN STATEWIDE

	Rates	Fringes
LABORER (DISTRIBUTION WORK)		
Zone 1.....	\$ 25.17	13.32
Zone 2.....	\$ 24.22	13.45
Zone 3.....	\$ 21.60	13.45
Zone 4.....	\$ 20.97	13.43
Zone 5.....	\$ 21.00	13.40

DISTRIBUTION WORK - The construction, installation, treating and reconditioning of distribution pipelines transporting coal, oil, gas or other similar materials, vapors or liquids, including pipelines within private property boundaries, up to and including the meter settings on residential, commercial, industrial, institutional, private and public structures. All work covering pumping stations and tank farms not covered by the Building Trades Agreement. Other distribution lines with the exception of sewer, water and cable television are included.

Underground Duct Layer Pay: \$.40 per hour above the base pay rate.

- Zone 1 - Macomb, Oakland and Wayne
- Zone 2 - Monroe and Washtenaw
- Zone 3 - Bay, Genesee, Lapeer, Midland, Saginaw, Sanilac, Shiawassee and St. Clair
- Zone 4 - Alger, Baraga, Chippewa, Delta, Dickinson, Gogebic, Houghton, Iron, Keweenaw, Luce, Mackinac, Marquette, Menominee, Ontonagon and Schoolcraft
- Zone 5 - Remaining Counties in Michigan

-----  
 PAIN0022-002 07/01/2008

HILLSDALE, JACKSON AND LENAWEE COUNTIES; LIVINGSTON COUNTY (east of the eastern city limits of Howell, not including the city of Howell, north to the Genesee County line and south to the Washtenaw County line); MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE COUNTIES:

	Rates	Fringes
PAINTER.....	\$ 25.06	14.75

FOOTNOTES: For all spray work and journeyman rigging for spray work, also blowing off, \$0.80 per hour additional (applies only to workers doing rigging for spray work on off the floor work. Does not include setting up or moving rigging on floor surfaces, nor does it apply to workers engaged in covering up or tending spray equipment. For all sandblasting and spray work performed on highway bridges, overpasses, tanks or steel, \$0.80 per hour additional. For all brushing, cleaning and other preparatory work (other than spraying or steeplejack work) at scaffold heights of fifty (50) feet from the ground or higher, \$0.50 per hour additional. For all preparatorial work and painting performed on open steel under forty (40) feet when no scaffolding is involved, \$0.50 per hour additional. For all swing stage work-window jacks and window belts-exterior and interior, \$0.50 per hour additional. For all spray work and sandblaster work to a scaffold height of forty (40) feet

above the floor level, \$0.80 per hour additional. For all preparatorial work and painting on all highway bridges or overpasses up to forty (40) feet in height, \$0.50 per hour additional. For all steeplejack work performed where the elevation is forty (40) feet or more, \$1.25 per hour additional.

-----  
PAIN0312-001 06/01/2018

EXCLUDES: ALLEGAN COUNTY (Townships of Dorr, Fillmore, Heath, Hopkins, Laketown, Leighton, Manlius, Monterey, Overisel, Salem, Saugatuck and Wayland); INCLUDES: Barry, Berrien, Branch, Calhoun, Cass, Hillsdale, Kalamazoo, St. Joseph, Van Buren

	Rates	Fringes
PAINTER		
Brush and roller.....	\$ 23.74	13.35
Spray, Sandblast, Sign		
Painting.....	\$ 24.94	13.35

-----  
PAIN0845-003 05/10/2018

CLINTON COUNTY; EATON COUNTY (does not include the townships of Bellevue and Olivet); INGHAM COUNTY; IONIA COUNTY (east of Hwy. M 66); LIVINGSTON COUNTY (west of the eastern city limits of Howell, including the city of Howell, north to the Genesee County line and south to the Washtenaw County line); AND SHIAWASSEE COUNTY (Townships of Bennington, Laingsbury and Perry):

	Rates	Fringes
PAINTER.....	\$ 25.49	13.74

-----  
PAIN0845-015 05/10/2018

MUSKEGON COUNTY; NEWAYGO COUNTY (except the Townships of Barton, Big Prairie, Brooks, Croton, Ensley, Everett, Goodwell, Grant, Home, Monroe, Norwich and Wilcox); OCEANA COUNTY; OTTAWA COUNTY (except the townships of Allendale, Blendone, Chester, Georgetown, Holland, Jamestown, Olive, Park, Polkton, Port Sheldon, Tallmadge, Wright and Zeeland):

	Rates	Fringes
PAINTER.....	\$ 25.49	13.74

-----  
PAIN0845-018 05/10/2018

ALLEGAN COUNTY (Townships of Dorr, Fillmore, Heath, Hopkins, Laketown, Leighton, Manlius, Monterey, Overisel, Salem, Saugatuck and Wayland); IONIA COUNTY (west of Hwy. M-66); KENT, MECOSTA AND MONTCALM COUNTIES; NEWAYGO COUNTY (Townships of Barton, Big Prairie, Brooks, Croton, Ensley, Everett, Goodwell, Grant, Home, Monroe, Norwich and Wilcox); OSCEOLA COUNTY (south of Hwy. #10); OTTAWA COUNTY (Townships of Allendale, Blendone, Chester, Georgetown, Holland, Jamestown, Olive, Park, Polkton, Port Sheldon, Tallmadge, Wright and Zeeland):

	Rates	Fringes
PAINTER.....	\$ 25.49	13.74

FOOTNOTES: Lead abatement work: \$1.00 per hour additional.

-----

PAIN1011-003 06/02/2022

ALGER, BARAGA, CHIPPEWA, DELTA, DICKINSON, GOGEBIC, HOUGHTON, IRON, KEWEENAW, LUCE, MACKINAC, MARQUETTE, MENOMINEE, ONTONAGON AND SCHOOLCRAFT COUNTIES:

	Rates	Fringes
PAINTER.....	\$ 24.66	14.99

FOOTNOTES: High pay (bridges, overpasses, watertower): 30 to 80 ft.: \$.65 per hour additional. 80 ft. and over: \$1.30 per hour additional.

-----

PAIN1474-002 06/01/2010

HURON COUNTY; LAPEER COUNTY (east of Hwy. M-53); ST. CLAIR, SANILAC AND TUSCOLA COUNTIES:

	Rates	Fringes
PAINTER.....	\$ 23.79	12.02

FOOTNOTES: Lead abatement work: \$1.00 per hour additional. Work with any hazardous material: \$1.00 per hour additional. Sandblasting, steam cleaning and acid cleaning: \$1.00 per hour additional. Ladder work at or above 40 ft., scaffold work at or above 40 ft., swing stage, boatswain chair, window jacks and all work performed over a falling height of 40 ft.: \$1.00 per hour additional. Spray gun work, pick pullers and those handling needles, blowing off by air pressure, and any person rigging (setting up and moving off the ground): \$1.00 per hour additional. Steeplejack, tanks, gas holders, stacks, flag poles, radio towers and beacons, power line towers, bridges, etc.: \$1.00 per hour additional, paid from the ground up.

-----

PAIN1803-003 06/01/2019

ALCONA, ALPENA, ANTRIM, ARENAC, BAY, BENZIE, CHARLEVOIX, CHEBOYGAN, CLARE, CRAWFORD, EMMET, GLADWIN, GRAND TRAVERSE, GRATIOT, IOSCO, ISABELLA, KALKASKA, LAKE, LEELANAU, MANISTEE, MASON, MIDLAND, MISSAUKEE, MONTMORENCY AND OGEMAW COUNTIES; OSCEOLA COUNTY (north of Hwy. #10); OSCODA, OTSEGO, PRESQUE ISLE, ROSCOMMON, SAGINAW AND WEXFORD COUNTIES:

	Rates	Fringes
PAINTER		
Work performed on water, bridges over water or moving traffic, radio and powerline towers, elevated		



tanks, steeples, smoke stacks over 40 ft. of falling heights, recovery of lead-based paints and any work associated with industrial plants, except maintenance of industrial plants.....	\$ 25.39	14.68
All other work, including maintenance of industrial plant.....	\$ 25.39	14.68

FOOTNOTES: Spray painting, sandblasting, blowdown associated with spraying and blasting, water blasting and work involving a swing stage, boatswain chair or spider: \$1.00 per hour additional. All work performed inside tanks, vessels, tank trailers, railroad cars, sewers, smoke stacks, boilers or other spaces having limited egress not including buildings, opentop tanks, pits, etc.: \$1.25 per hour additional.

-----  
 PLAS0514-001 06/01/2018

ZONE 1: GENESEE, LIVINGSTON, MACOMB, MONROE, OAKLAND, SAGINAW, WASHTENAW AND WAYNE COUNTIES

ZONE 2: ALCONA, ALGER, ALLEGAN, ALPENA, ANTRIM, ARENAC, BARAGA, BARRY, BAY, BENZIE, BERRIEN, BRANCH, CALHOUN, CASS, CHARLEVOIX, CHEBOYGAN, CHIPPEWA, CLARE, CLINTON, CRAWFORD, DELTA, DICKINSON, EATON, EMMET, GLADWIN, GOGEBIC, GRAND TRAVERSE, GRATIOT, HILLSDALE, HOUGHTON, HURON, INGHAM, IONIA, IOSCO, IRON, ISABELLA, JACKSON, KALAMAZOO, KALKASKA, KENT, KEWEENAW, LAKE, LAPEER, LEELANAU, LENAWEE, LUCE, MACKINAC, MANISTEE, MARQUETTE, MASON, MECOSTA, MENOMINEE, MIDLAND, MISSAUKEE, MONTCALM, MONTMORENCY, MUSKEGON, NEWAYGO, OCEANA, OGEMAW, ONTONAGON, OSCEOLA, OSCODA, OTSEGO, OTTAWA, PRESQUE ISLE, ROSCOMMON, SANILAC, SCHOOLCRAFT, SHIAWASSEE, ST. CLAIR, ST. JOSEPH, TUSCOLA, VAN BUREN AND WEXFORD COUNTIES

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER		
ZONE 1.....	\$ 31.47	13.81
ZONE 2.....	\$ 29.97	13.81

-----  
 PLUM0190-003 05/01/2015

ALCONA, ALGER, ALLEGAN, ALPENA, ANTRIM, ARENAC, BARAGA, BARRY, BAY, BENZIE, BERRIEN, BRANCH, CALHOUN, CASS, CHARLEVOIX, CHEBOYGAN, CHIPPEWA, CLARE, CLINTON, CRAWFORD, DELTA, DICKINSON, EATON, EMMET, GENESEE, GLADWIN, GOGEBIC, GRAND TRAVERSE, GRATIOT, HILLSDALE, HOUGHTON, HURON, INGHAM, IONIA, IOSCO, IRON, ISABELLA, JACKSON, KALAMAZOO, KALKASKA, KENT, KEWEENAW, LAKE, LAPEER, LEELANAU, LENAWEE, LIVINGSTON, LUCE, MACKINAC, MACOMB, MANISTEE, MARQUETTE, MASON, MECOSTA, MENOMINEE, MIDLAND, MISSAUKEE, MONTCALM, MONTMORENCY, MONROE, MUSKEGON, NEWAYGO, OAKLAND, OCEANA, OGEMAW, ONTONAGON, OSCEOLA, OSCODA, OTSEGO, OTTAWA, PRESQUE ISLE, ROSCOMMON, SAGINAW, ST. CLARE, ST. JOSEPH, SANILAC, SCHOOLCRAFT, SHIAWASSEE, TUSCOLA, VAN BUREN, WASHTENAW, WAYNE AND WEXFORD COUNTIES

	Rates	Fringes
--	-------	---------

Plumber/Pipefitter - gas  
distribution pipeline:

Welding in conjunction with gas distribution pipeline work.....	\$ 33.03	20.19
All other work:.....	\$ 24.19	12.28

-----  
TEAM007-004 06/01/2020

AREA 1: ALCONA, ALGER, ALLEGAN, ALPENA, ANTRIM, ARENAC, BARAGA, BARRY, BAY, BENZIE, BERRIEN, BRANCH, CALHOUN, CASS, CHARLEVOIX, CHEBOYGAN, CHIPPEWA, CLARE, CLINTON, CRAWFORD, DELTA, DICKINSON, EATON, EMMET, GLADWIN, GOGEBIC, GRAND TRAVERSE, GRATIOT, HILLSDALE, HOUGHTON, HURON, INGHAM, IONIA, IOSCO, IRON, ISABELLA, JACKSON, KALAMAZOO, KALKASKA, KENT, KEWEENAW, LAKE, LAPEER, LEELANAU, LENAWEE, LUCE, MACKINAC, MANISTEE, MARQUETTE, MASON, MECOSTA, MENOMINEE, MIDLAND, MISSAUKEE, MONTCALM, MONTMORENCY, MUSKEGON, NEWAYGO, OCEANA, OGEMAW, ONTONAGON, OSCEOLA, OSCODA, OTSEGO, OTTAWA, PRESQUE ISLE, ROSCOMMON, SAGINAW, SANILAC, SCHOOLCRAFT, SHIAWASSEE, ST. CLAIR, ST. JOSEPH, TUSCOLA, VAN BUREN AND WEXFORD COUNTIES

AREA 2: GENESEE, LIVINGSTON, MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE COUNTIES

Rates Fringes

TRUCK DRIVER

AREA 1

Euclids, double bottoms and lowboys.....	\$ 28.05	.50 + a+b
Trucks under 8 cu. yds.....	\$ 27.80	.50 + a+b
Trucks, 8 cu. yds. and over.....	\$ 27.90	.50 + a+b

AREA 2

Euclids, double bottomms and lowboys.....	\$ 24.895	.50 + a+b
Euclids, double bottoms and lowboys.....	\$ 28.15	.50 + a+b
Trucks under 8 cu. yds.....	\$ 27.90	.50 + a+b
Trucks, 8 cu. yds. and over.....	\$ 28.00	.50 + a+b

Footnote:

- a. \$470.70 per week
- b. \$68.70 daily

-----  
TEAM0247-004 04/01/2013

AREA 1: ALCONA, ALGER, ALLEGAN, ALPENA, ANTRIM, ARENAC, BARAGA, BARRY, BAY, BENZIE, BERRIEN, BRANCH, CALHOUN, CASS, CHARLEVOIX, CHEBOYGAN, CHIPPEWA, CLARE, CLINTON, CRAWFORD, DELTA, DICKINSON, EATON, EMMET, GLADWIN, GOGEBIC, GRAND TRAVERSE, GRATIOT, HILLSDALE, HOUGHTON, HURON, INGHAM, IONIA, IOSCO, IRON, ISABELLA, JACKSON, KALAMAZOO, KALKASKA, KENT, KEWEENAW, LAKE, LAPEER, LEELANAU, LENAWEE, LUCE, MACKINAC, MANISTEE, MARQUETTE, MASON, MECOSTA, MENOMINEE, MIDLAND, MISSAUKEE, MONTCALM, MONTMORENCY, MUSKEGON, NEWAYGO, OCEANA, OGEMAW, ONTONAGON, OSCEOLA, OSCODA, OTSEGO, OTTAWA, PRESQUE ISLE, ROSCOMMON, SANILAC, SCHOOLCRAFT, SHIAWASSEE, SAGINAW, ST. CLAIR, ST. JOSEPH, TUSCOLA, VAN BUREN AND WEXFORD COUNTIES

AREA 2: GENESEE, LIVINGSTON, MACOMB, MONROE, OAKLAND,

WASHTENAW AND WAYNE COUNTIES

	Rates	Fringes
Sign Installer		
AREA 1		
GROUP 1.....	\$ 21.78	11.83
GROUP 2.....	\$ 25.27	11.8375
AREA 2		
GROUP 1.....	\$ 22.03	11.83
GROUP 2.....	\$ 25.02	11.8375

FOOTNOTE:

a. \$132.70 per week, plus \$17.80 per day.

SIGN INSTALLER CLASSIFICATIONS:

GROUP 1: performs all necessary labor and uses all tools required to construct and set concrete forms required in the installation of highway and street signs

GROUP 2: performs all miscellaneous labor, uses all hand and power tools, and operates all other equipment, mobile or otherwise, required for the installation of highway and street signs

-----  
TEAM0247-010 04/01/2018

AREA 1: LAPEER AND SHIAWASSEE COUNTIES

AREA 2: GENESEE, MACOMB, MONROE, OAKLAND, ST. CLAIR, WASHTENAW AND WAYNE COUNTIES

	Rates	Fringes
TRUCK DRIVER (Underground construction)		
AREA 1		
GROUP 1.....	\$ 23.82	19.04
GROUP 2.....	\$ 23.91	19.04
GROUP 3.....	\$ 24.12	19.04
AREA 2		
GROUP 1.....	\$ 24.12	19.04
GROUP 2.....	\$ 24.26	19.04
GROUP 3.....	\$ 24.45	19.04

PAID HOLIDAYS: New Year's Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day and Christmas Day.

SCOPE OF WORK: Excavation, site preparation, land balancing, grading, sewers, utilities and improvements; also including but not limited to, tunnels, underground piping, retention, oxidation, flocculation facilities, conduits, general excavation and steel sheeting for underground construction. Underground construction work shall not include any structural modifications, alterations, additions and repairs to buildings or highway work, including roads, streets, bridge construction and parking lots or steel erection.

TRUCK DRIVER CLASSIFICATIONS

GROUP 1: Truck driver on all trucks (EXCEPT dump trucks of 8 cubic yards capacity or over, pole trailers, semis, low boys, Euclid, double bottom and fuel trucks)

GROUP 2: Truck driver on dump trucks of 8 cubic yards capacity or over, pole trailers, semis and fuel trucks

GROUP 3: Truck driver on low boy, Euclid and double bottom

-----  
 \* SUMI2002-001 05/01/2002

	Rates	Fringes
Flag Person.....	\$ 10.10 **	0.00
LINE PROTECTOR (ZONE 1: GENESEE, MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE)....	\$ 22.89	13.45
LINE PROTECTOR (ZONE 2: STATEWIDE (EXCLUDING GENESEE, MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE).....	\$ 20.19	13.45
Pavement Marking Machine (ZONE 1: GENESEE, MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE COUNTIES) Group 1.....	\$ 30.52	13.45
Pavement Marking Machine (ZONE 1: GENESEE, MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE) Group 2.....	\$ 27.47	13.45
Pavement Marking Machine (ZONE 2: STATEWIDE (EXCLUDING GENESEE, MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE COUNTIES) Group 1.....	\$ 26.92	13.45
Pavement Marking Machine (ZONE 2: STATEWIDE (EXCLUDING GENESEE, MACOMB, MONROE, OAKLAND, WASHTENAW AND WAYNE) Group 2.....	\$ 24.23	13.45

WORK CLASSIFICATIONS:

PAVEMENT MARKER GROUP 1: Drives or operates a truck mounted striper, grinder, blaster, groover, or thermoplastic melter for the placement or removal of temporary or permanent pavement markings or markers.

PAVEMENT MARKER GROUP 2: Performs all functions involved for the placement or removal of temporary or permanent pavement markings or markers not covered by the classification of Pavement Marker Group 1 or Line Protector.

LINE PROTECTOR: Performs all operations for the protection or

removal of temporary or permanent pavement markings or markers in a moving convoy operation not performed by the classification of Pavement Marker Group 1. A moving convoy operation is comprised of only Pavement Markers Group 1 and Line Protectors.

-----  
WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

=====  
\*\* Workers in this classification may be entitled to a higher minimum wage under Executive Order 14026 (\$16.20) or 13658 (\$12.15). Please see the Note at the top of the wage determination for more information.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at <https://www.dol.gov/agencies/whd/government-contracts>.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

-----  
The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number

where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

#### Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

#### Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

---

#### WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour National Office because National Office has responsibility for

the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations  
Wage and Hour Division  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

=====

END OF GENERAL DECISION

..

**APPENDIX C  
ADDITIONAL INFORMATION**



**THE CITY OF KALAMAZOO  
DEPARTMENT OF PUBLIC SERVICES  
ENGINEERING DIVISION**

**Log Plan, Details, and Anticipated  
Construction Schedule**

**Riverview Drive Resurfacing**

**Bid Reference #: 91396-019.0**

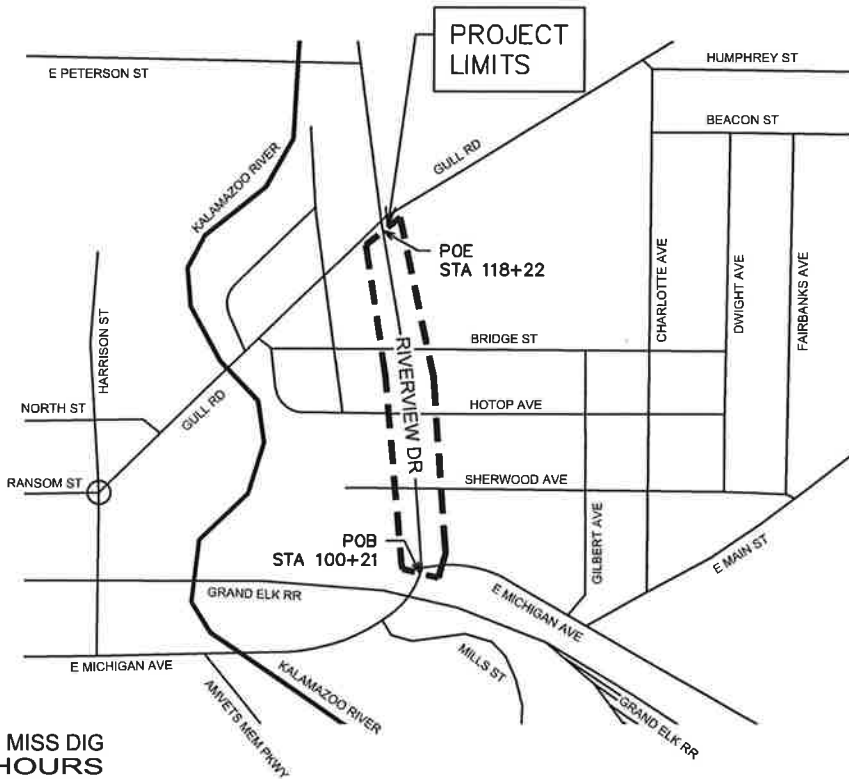


# CITY OF KALAMAZOO

## PLANS FOR

### RIVERVIEW DR 3" MILL AND RESURFACE PROJECT

HRC JOB NO. 20230591



Know what's below.  
Call before you dig.

CALL MISS DIG  
72 HOURS  
(3 WORKING DAYS)  
BEFORE YOU DIG  
1-800-482-7171  
or 811

CALL811.COM (TOLL FREE)

THE IMPROVEMENTS COVERED BY THIS LOG PROJECT SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF THE MICHIGAN DEPARTMENT OF TRANSPORTATION'S (MDOT) STANDARD SPECIFICATIONS FOR CONSTRUCTION, AS AMENDED BY SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS.

PROJECT DESCRIPTION: MILL AND RESURFACE TOP 3" OF EXISTING HMA AND / OR CONCRETE SURFACE WITH HIGH STRESS HMA. ALSO INCLUDED IS THE REPAIRING OF FULL DEPTH PAVT AS DIRECTED BY THE ENGINEER (POST MILLING), REMOVAL AND REPLACEMENT OF SECTIONS OF CURB, GUTTER, AND DRIVEWAYS, AS NEEDED AND NOTED ON THE LOG SHEETS, AND THE REPLACEMENT OF PAVEMENT MARKINGS WITHIN THE PROJECT LIMITS.

PROJECT LENGTH: 0.35 MILES  
PROJECT DESCRIPTION: 3" MILL AND RESURFACE  
TRAFFIC DATA: AADT (2024) = 17,210 ; AADT (2044) = 19,020  
SPEED LIMIT: 35 MPH

PREPARED UNDER SUPERVISION OF

BARTLETT E. FRANKLIN, PE  
REGISTERED PROFESSIONAL ENGINEER

HUBBELL, ROTH & CLARK, INC.  
ORGANIZATION

1925 BRETON ROAD SE, SUITE 100  
GRAND RAPIDS, MICHIGAN 49506

ADDRESS



MUNICIPAL APPROVAL BY

ANTHONY LADD, PE  
REGISTERED PROFESSIONAL ENGINEER

CITY OF KALAMAZOO  
ORGANIZATION

PUBLIC WORKS DIVISION MANAGER

TITLE

HRC JOB NO.: 20230591

**HRC**  
**HUBBELL, ROTH & CLARK, INC.**  
CONSULTING ENGINEERS SINCE 1915

1925 BRETON ROAD, SE SUITE 100  
GRAND RAPIDS, MICHIGAN 49506

*Bartlett E. Franklin* 11-2-23  
BARTLETT E FRANKLIN, P.E. DATE

ANTHONY LADD, P.E. DATE



11/2/2023 10:51 AM

HRC\_OLW.ctb

I:\202305\20230591\C\Sheets\JN20230591\_notes.dwg

APPROVED

CHECKED

DRAWN

DESIGNED

## LOG OF PROJECT

# RIVERVIEW DR 3" MILL AND RESURFACE PROJECT

HRC JOB NO. 20230591

LOCATED ALONG RIVERVIEW DR IN KALAMAZOO, MI, BETWEEN EAST MICHIGAN AVE AND GULL RD

### DESCRIPTION OF WORK

THIS PROJECT INVOLVES MILLING AND RESURFACING APPROXIMATELY 0.35 MILES OF PAVEMENT AND CONCRETE ALONG RIVERVIEW DRIVE, INCLUDED IN THIS PROJECT IS THE REPAIRING OF FULL DEPTH PAVEMENT, ADJUSTING ALL AFFECTED STRUCTURES, REMOVAL AND REPLACEMENT OF VARIOUS SECTIONS OF CURB, GUTTER, AND DRIVE APPROACHES, AND THE PLACEMENT OF PAVEMENT MARKINGS THROUGHOUT THE PROJECT AND AN ENHANCED PEDESTRIAN CROSSING AT HOTOP AVE.

THE IMPROVEMENTS IN THIS PROPOSAL SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF THE MICHIGAN DEPARTMENT OF TRANSPORTATION'S (MDOT) STANDARD SPECIFICATIONS FOR CONSTRUCTION, AASHTO'S GREEN BOOK AND GUIDE FOR DESIGN OF PAVEMENT STRUCTURES, MICHIGAN'S MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD), THE CITY OF KALAMAZOO STANDARD DETAILS AND STREET DESIGN MANUAL, MDOT STANDARD AND SPECIAL DETAILS, THE NACTO URBAN STREET DESIGN GUIDE, AND THE SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS, AS SPECIFIED IN THIS LOG OF PROJECT.

### MAINTAINING TRAFFIC

MAINTENANCE OF TRAFFIC (MOT) SHALL BE DONE USING TRAFFIC REGULATORS, AS NEEDED FOR LOCAL DAY AND NIGHT TRAFFIC, PER THE SPECIAL PROVISION IN THIS LOG OF PROJECT.

CONTRACTOR SHALL NOTIFY AND COORDINATE WITH THE CITY OF KALAMAZOO'S METRO BUS SYSTEM FOR TEMPORARY CLOSURE OR RELOCATION OF BUS STOPS AND TO AVOID DISRUPTION OF SCHEDULED SERVICES.


### PUBLIC UTILITIES

FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 174, 2013, THE CONTRACTOR SHALL DIAL 1-800-482-7171, OR 811, A MINIMUM OF THREE (3) FULL WORKING DAYS, EXCLUDING SATURDAYS, SUNDAYS, AND HOLIDAYS, PRIOR TO BEGINNING EACH EXCAVATION. ALL "MISS DIG" PARTICIPATING 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.

ONCE THE ENGINEER HAS DETERMINED LOCATIONS FOR FULL DEPTH PAVEMENT REPAIRS, THE CONTRACTOR SHALL CONDUCT A MISS DIG INVESTIGATION (AS OUTLINED IN THIS LOG SET AND SPECIAL PROVISIONS) AND COORDINATE WITH ANY UTILITY COMPANIES, WITHIN THE PROJECT LIMITS, TO AVOID DAMAGE OR DISRUPTION TO THEIR FACILITIES.

### SITE CLEANUP

THE CONTRACTOR SHALL KEEP THE WORK SITE CLEAN OF TRASH AND OTHER DEBRIS. AT THE END OF EACH WORK DAY, THE PROJECT SHALL BE INSPECTED AND ALL TRASH REMOVED. NO PAYMENT SHALL BE MADE FOR THIS WORK.

 <b>HUBBELL, ROTH &amp; CLARK, INC</b> CONSULTING ENGINEERS SINCE 1915 1925 BRETON ROAD, SE SUITE 100 GRAND RAPIDS, MICH. 49506	HRC JOB NO. 20230591	RIVERVIEW DR 3" MILL AND RESURFACE PROJECT	SHEET NO.
	DATE 11/06/2023	PROJECT NOTES	02 OF 38

11/2/2023 10:51 AM

HRC\_OLW.ctb

V:\202305\20230591\C\Sheets\JN20230591\_notes.dwg

APPROVED

CHECKED

DRAWN

DESIGNED

**LOG OF PROJECT**

# RIVERVIEW DR 3" MILL AND RESURFACE PROJECT

HRC JOB NO. 20230591

LOCATED ALONG RIVERVIEW DR IN KALAMAZOO, MI, BETWEEN EAST MICHIGAN AVE AND GULL RD

**LOG SHEETS**

THE MEASUREMENTS USED IN THIS PROJECT LOG ARE BASED ON FIELD REVIEW, SURVEY, AND AERIAL PHOTOGRAPHY.

THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS BEFORE THE START OF CONSTRUCTION. THE ENGINEER SHALL BE IMMEDIATELY NOTIFIED OF ANY DISCREPANCIES BETWEEN THE PLANS AND ACTUAL FIELD DIMENSIONS.

**SIDE STREETS**


THE PROPOSED WORK ON SIDE STREETS SHALL INCLUDE MILLING AND RESURFACING UP TO THE SIDE STREET SPRING POINT.

**STANDARD PLANS & SPECIAL DETAILS**

WHERE THE FOLLOWING ITEMS ARE CALLED OUT, THEY ARE TO BE CONSTRUCTED ACCORDING TO THE MDOT STANDARD PLAN OR SPECIAL DETAIL LISTED BELOW, UNLESS OTHERWISE INDICATED.

STANDARD PLANS	
PLAN TITLE:	PLAN NO.:
DRAINAGE STRUCTURES	R-01-G
DRIVEWAY OPENINGS & APPROACHES, AND CONCRETE SIDEWALK	R-29-I
CONCRETE CURB AND CONCRETE CURB & GUTTER	R-30-G
PAVEMENT ARROW & MESSAGE DETAILS	PAVE-900-G
TEMPORARY LONGITUDINAL LINE TYPES & PLACEMENT	PAVE-904-B
LONGITUDINAL LINE TYPES & PLACEMENT	PAVE-905-E
LEFT LANE TURN MARKINGS	PAVE-935-E
INTERSECTION, STOP BAR & CROSSWALK MARKINGS	PAVE-945-D
STANDARD SIGN INSTALLATIONS	SIGN-100-G
STEEL POSTS	SIGN-200-E

SPECIAL DETAIL PLANS	
PLAN TITLE:	PLAN NO.:
CONCRETE PAVEMENT REPAIR	R-44-G (DET 8)

 <b>HUBBELL, ROTH &amp; CLARK, INC</b> CONSULTING ENGINEERS SINCE 1915 1925 BRETON ROAD, SE SUITE 100 GRAND RAPIDS, MICH. 49506	HRC JOB NO. 20230591	RIVERVIEW DR 3" MILL AND RESURFACE PROJECT	SHEET NO. 03 OF 38
	DATE 11/06/2023	PROJECT NOTES	

11/2/2023 10:51 AM

HRC\_OLW.ctb

V:\202305\20230591\C\Sheets\JN20230591\_quantities.dwg

APPROVED

CHECKED

DRAWN

DESIGNED

**LOG OF PROJECT**

**RIVERVIEW DR 3" MILL AND RESURFACE PROJECT**

HRC JOB NO. 20230591

LOCATED ALONG RIVERVIEW DR IN KALAMAZOO, MI, BETWEEN EAST MICHIGAN AVE AND GULL RD

MISCELLANEOUS QUANTITIES		
TOTAL	UNIT	DESCRIPTION
1	LSUM	Mobilization, Max
30	Ft	Curb and Gutter, Rem
75	Cyd	Excavation, Earth
26	Ea	Erosion Control, Inlet Protection, Fabric Drop
225	Syd	Aggregate Base, 12 inch
3	Ea	_Dr Structure Cover, Type Q, Modified
3	Ea	_Dr Structure Cover, Type S, Modified
29	Ea	Dr Structure Cover, Adj, Case 1
675	Ft	Pavt Joint and Crack Repr, Det 8
125	Ton	Hand Patching
9000	Ft	Asphalt Repr Mastic
44	Ft	Curb and Gutter, Conc, Det F4
300	Syd	_Surface Restoration, Modified
9	Ea	Gate Box, Adj, Case 1
1	Ea	_Gate Box, Reconstruct, Modified



1925 BRETON ROAD, SE SUITE 100  
 GRAND RAPIDS, MICH. 49506

HRC JOB NO.  
20230591

DATE  
11/06/2023

RIVERVIEW DR 3" MILL AND RESURFACE PROJECT

QUANTITIES - MISCELLANEOUS

SHEET NO.

04 OF 38

11/2/2023 10:51 AM

HRC\_OLW.ctb

I:\202305\20230591\C\Sheets\JN20230591\_quantities.dwg

APPROVED

CHECKED

DRAWN

DESIGNED

**LOG OF PROJECT**

**RIVERVIEW DR 3" MILL AND RESURFACE PROJECT**

HRC JOB NO. 20230591

LOCATED ALONG RIVERVIEW DR IN KALAMAZOO, MI, BETWEEN EAST MICHIGAN AVE AND GULL RD

MAINTENANCE OF TRAFFIC QUANTITIES		
TOTAL	UNIT	DESCRIPTION
510	Sft	Rem Spec Mrkg
20	Ea	Barricade, Type III, High Intensity, Double Sided, Lighted, Furn
20	Ea	Barricade, Type III, High Intensity, Double Sided, Lighted, Oper
100	Ea	Channelizing Device, 42 inch, Fluorescent, Furn
100	Ea	Channelizing Device, 42 inch, Fluorescent, Oper
4	Ea	Lighted Arrow, Type C, Furn
4	Ea	Lighted Arrow, Type C, Oper
1	LSUM	Ltg for Night Work
1	LSUM	Minor Traf Devices
5820	Ft	Pavt Mrkg, Longit, 6 inch or Less Width, Rem
3700	Ft	Pavt Mrkg, Wet Reflective, Type R, Tape, 4 inch, White, Temp
7400	Ft	Pavt Mrkg, Wet Reflective, Type R, Tape, 4 inch, Yellow, Temp
100	Ea	Plastic Drum, Fluorescent, Furn
100	Ea	Plastic Drum, Fluorescent, Oper
20	Ea	Sign Cover
3	Ea	Sign, Portable, Changeable Message, NTCIP-Compliant, Furn
3	Ea	Sign, Portable, Changeable Message, NTCIP-Compliant, Oper
400	Sft	Sign, Type B, Temp, Prismatic, Furn
400	Sft	Sign, Type B, Temp, Prismatic, Oper
400	Sft	Sign, Type B, Temp, Prismatic, Spec, Furn
400	Sft	Sign, Type B, Temp, Prismatic, Spec, Oper
1	LSUM	Traf Regulator Control



1925 BRETON ROAD, SE SUITE 100 GRAND RAPIDS, MICH. 49506

HRC JOB NO. 20230591

DATE 11/06/2023

RIVERVIEW DR 3" MILL AND RESURFACE PROJECT

QUANTITIES - MAINTENANCE OF TRAFFIC

SHEET NO.

05 OF 38

11/2/2023 10:51 AM

HRC\_OLW.ctb

I:\202305\20230591\C\Sheets\JN20230591\_quantities.dwg

APPROVED

CHECKED

DRAWN

DESIGNED

**LOG OF PROJECT**

**RIVERVIEW DR 3" MILL AND RESURFACE PROJECT**

HRC JOB NO. 20230591

LOCATED ALONG RIVERVIEW DR IN KALAMAZOO, MI, BETWEEN EAST MICHIGAN AVE AND GULL RD

REMOVAL QUANTITIES		
TOTAL	UNIT	DESCRIPTION
100	Ft	Curb and Gutter, Rem
112	Syd	Pavt, Rem
10053	Syd	Cold Milling HMA and Conc Pavt, Modified

CONSTRUCTION QUANTITIES		
TOTAL	UNIT	DESCRIPTION
1825	Ton	HMA, 5EML, High Stress
130	Syd	Driveway, Nonreinf Conc, 6 inch
50	Ft	Curb and Gutter, Conc, Det B2
36	Ft	Curb and Gutter, Conc, Det F4



1925 BRETON ROAD, SE SUITE 100  
 GRAND RAPIDS, MICH. 49506

HRC JOB NO.  
20230591

DATE  
11/06/2023

RIVERVIEW DR 3" MILL AND RESURFACE PROJECT

QUANTITIES - REMOVAL AND CONSTRUCTION

SHEET NO.

06 OF 38

11/2/2023 10:51 AM

HRC\_OLW.ctb

I:\202305\20230591\C\Sheets\JN20230591\_quantities.dwg

APPROVED

CHECKED

DRAWN

DESIGNED

**LOG OF PROJECT**


**RIVERVIEW DR 3" MILL AND RESURFACE PROJECT**

HRC JOB NO. 20230591

LOCATED ALONG RIVERVIEW DR IN KALAMAZOO, MI, BETWEEN EAST MICHIGAN AVE AND GULL RD

PAVEMENT MARKINGS QUANTITIES		
TOTAL	UNIT	DESCRIPTION
180	Ft	Pavt Mrkg, Ovly Cold Plastic, 6 inch, Crosswalk
180	Ft	Pavt Mrkg, Ovly Cold Plastic, 12 inch, Crosswalk
115	Ft	Pavt Mrkg, Ovly Cold Plastic, 24 inch, Stop Bar
3	Ea	Pavt Mrkg, Ovly Cold Plastic, Lt Turn Arrow Sym
6	Ea	Pavt Mrkg, Ovly Cold Plastic, Only
3	Ea	Pavt Mrkg, Ovly Cold Plastic, Thru Arrow Sym
375	Ft	Pavt Mrkg, Sprayable Thermopl, 6 inch, White
3800	Ft	Pavt Mrkg, Sprayable Thermopl, 6 inch, Yellow

SIGNAGE QUANTITIES		
TOTAL	UNIT	DESCRIPTION
288	Ft	Post, Steel, 3 pound
94	Sft	Sign, Type IIIB
256	Sft	Sign, Type VB
14	Ea	Reflective Panel for Permanent Sign Support, 6 foot

 <b>HUBBELL, ROTH &amp; CLARK, INC</b> CONSULTING ENGINEERS SINCE 1915 1925 BRETON ROAD, SE SUITE 100 GRAND RAPIDS, MICH. 49506	HRC JOB NO. 20230591	RIVERVIEW DR 3" MILL AND RESURFACE PROJECT	SHEET NO.  07 OF 38
	DATE 11/06/2023	QUANTITIES - PAVEMENT MARKINGS AND SIGNAGE	

11/2/2023 10:51 AM

HRC\_OLW.ctb

V:\202305\20230591\C\Sheets\JN20230591\_tables.dwg

APPROVED

CHECKED

DRAWN

DESIGNED

**LOG OF PROJECT**

**RIVERVIEW DR 3" MILL AND RESURFACE PROJECT**

HRC JOB NO. 20230591

LOCATED ALONG RIVERVIEW DR IN KALAMAZOO, MI, BETWEEN EAST MICHIGAN AVE AND GULL RD

**EX DRIVEWAY STATION TABLE**

THE FOLLOWING TABLE PROVIDES APPROXIMATE STATIONING FOR REMOVING AND REPLACING EX DRIVEWAYS ALONG RIVERVIEW DR. RECONSTRUCT EACH DRIVEWAY OPENING AND APPROACH PER THE CITY OF KALAMAZOO STREET DESIGN MANUAL AND THE MDOT R-29-I STANDARD PLAN FOR DRIVEWAY OPENINGS AND APPROACHES. RECONSTRUCTION MATERIAL SHALL BE IN-KIND WITH THE EXISTING OPENING AND / OR APPROACH, SEE TABLE. PAID FOR AS "PAVT, REM" AND "DRIVEWAY, NONREINF CONC, 6 INCH." STATIONS ARE APPROXIMATE CENTER OF DRIVEWAY LOCATIONS.

EX DRIVEWAY OPENING AND APPROACHES				
NUMBER	STATION	MATERIAL	AREA (SFT)	ST SIDE
01	102+53	CONC	146±	RIGHT
02	102+98	CONC	60±	LEFT
03	103+30	CONC	155±	LEFT
04	107+70	CONC	193±	RIGHT
05	109+63	SEED	144±	RIGHT
06	110+59	CONC	60±	RIGHT
07	113+79	CONC	153±	LEFT
08	114+39	CONC	92±	LEFT

**NOTES:**

1. DRIVEWAY PAY ITEMS SHALL INCLUDE PAYMENT FOR REMOVING AND REPLACING THE ADJACENT CURB AND GUTTER ASSOCIATED WITH DRIVEWAY REPLACEMENTS, PER MDOT STANDARD PLAN R-29-I.
2. CURB AND GUTTER DETAIL TYPE IS PROVIDED FOR REGISTERING A SIMILAR TYPE OF CURB AND GUTTER. CONTRACTOR SHALL FORM CURB AND GUTTER TO MATCH THE ADJACENT CURB AND GUTTER.
3. DRIVEWAY AT STA:109+63 - DO NOT REPLACE WITH CONCRETE, REGRADE TO MATCH EXISTING SIDEWALK AND REPLACE WITH NATIVE SEEDING. PAID FOR AS "PAVT, REM," AND "SURFACE RESTORATION, MODIFIED."
4. CURB AND GUTTER AT STA:109+48 - REMOVE DRIVEWAY APPROACH AS PART OF DRIVEWAY AT STA:109+63. CONSTRUCT CURB AND GUTTER AS TYPE B2, BUT FORM TO MATCH ADJACENT CURB AND GUTTER. PAID FOR AS "CURB AND GUTTER, CONC, DET B2."

③

**EX CONCRETE CURB AND GUTTER**

THE FOLLOWING TABLE PROVIDES APPROXIMATE STATIONING FOR REMOVING AND REPLACING EX CONCRETE CURB AND GUTTER ALONG RIVERVIEW DR. PAID FOR AS "CURB AND GUTTER, REM," "CURB AND GUTTER, CONC, DET B2," AND "CURB AND GUTTER, CONC, DET F4", RESPECTIVELY. STATIONS ARE APPROXIMATE BEGINNING OF CURB AND GUTTER.

EX CONCRETE CURB AND GUTTER				
NUMBER	STATION	LENGTH	ST SIDE	TYPE
01	109+48	30 FT±	RIGHT	DET B2
02	111+78	6 FT±	RIGHT	DET F4
03	112+86	10 FT±	LEFT	DET B2
04	113+91	12 FT±	RIGHT	DET F4
05	115+69	22 FT±	RIGHT	DET F4
06	118+01	6 FT±	RIGHT	DET F4

④



1925 BRETON ROAD, SE SUITE 100  
GRAND RAPIDS, MICH. 49506

HRC JOB NO.  
20230591

DATE  
11/06/2023

RIVERVIEW DR 3" MILL AND RESURFACE PROJECT

TABLE - EX DRIVEWAYS AND CURB & GUTTER

SHEET NO.

08 OF 38



11/2/2023 10:51 AM

HRC\_OLW.ctb

V:\202305\20230591\C\Sheets\JN20230591\_tables.dwg

APPROVED

CHECKED

DRAWN

DESIGNED

**LOG OF PROJECT**

**RIVERVIEW DR 3" MILL AND RESURFACE PROJECT**

HRC JOB NO. 20230591

LOCATED ALONG RIVERVIEW DR IN KALAMAZOO, MI, BETWEEN EAST MICHIGAN AVE AND GULL RD

**EX CONCRETE PATCH TABLE**

THE FOLLOWING TABLE PROVIDES APPROXIMATE STATIONING FOR WHERE EX CONCRETE PATCHES ARE LOCATED ALONG RIVERVIEW DR FOR MILLING AND RESURFACING. MILLING OF EACH EX CONCRETE PATCH SHALL BE FULL DEPTH (3") MILLING AND SHALL BE INCLUDED AND PAID FOR AS "COLD MILLING HMA AND CONC PAVT, MODIFIED."

EX CONCRETE PATCHES			
NUMBER	STATION	AREA	ST SIDE
01	102+07	152 SFT±	LEFT
02	102+60	123 SFT±	LEFT
03	103+70	534 SFT±	LEFT
04	105+71	151 SFT±	LEFT
05	107+51	129 SFT±	LEFT
06	109+40	152 SFT±	LEFT
07	109+89	148 SFT±	RIGHT
08	110+29	275 SFT±	RIGHT
09	110+69	197 SFT±	RIGHT
10	110+70	57 SFT±	LEFT
11	110+98	203 SFT±	LEFT
12	110+99	37 SFT±	RIGHT
13	113+37	285 SFT±	LEFT
14	114+52	401 SFT±	RIGHT
15	114+89	166 SFT±	LEFT



1925 BRETON ROAD, SE SUITE 100  
GRAND RAPIDS, MICH. 49506

HRC JOB NO.  
20230591

DATE  
11/06/2023

RIVERVIEW DR 3" MILL AND RESURFACE PROJECT

TABLE - EX CONCRETE PATCHES

SHEET NO.

09 OF 38

11/2/2023 10:51 AM

HRC\_OLW.ctb

v:\202305\20230591\C\Sheets\JN20230591\_tables.dwg

APPROVED

CHECKED

DRAWN

DESIGNED

**LOG OF PROJECT**

**RIVERVIEW DR 3" MILL AND RESURFACE PROJECT**

HRC JOB NO. 20230591

LOCATED ALONG RIVERVIEW DR IN KALAMAZOO, MI, BETWEEN EAST MICHIGAN AVE AND GULL RD

**EX SAN AND STM SEWER DR STRUCTURE REPLACE AND ADJUST TABLE**

THE FOLLOWING TABLE PROVIDES APPROXIMATE STATIONING AND OFFSETS FOR ADJUSTING EX SAN AND STM DR STRUCTURE COVERS ALONG RIVERVIEW DR. EACH EX COVER ADJUSTMENT SHALL BE PAID FOR AS "DR STRUCTURE COVER, ADJ, CASE 1." REPLACE EX SAN AND STM DR STRUCTURE COVERS, AS DIRECTED BY THE ENGINEER, AND SHALL BE PAID FOR AS "DR STRUCTURE COVER, TYPE \_\_, MODIFIED." ANY REPLACEMENT COVERS PROVIDED BY THE CITY OF KALAMAZOO SHALL BE CONSIDERED AS INCIDENTAL TO THE ADJUSTMENTS. EX CATCH BASIN COVERS SHALL NOT BE REPLACED, BUT ONLY BE ADJUSTED AND PAID FOR AS "DR STRUCTURE COVER, ADJ, CASE 1."

EX SAN AND STM DR COVER ADJUSTMENTS			
NUMBER	STATION	OFFSET	ST SIDE
SAN04	101+00	5 FT±	RIGHT
STM05	101+07	13 FT±	RIGHT
SAN06	101+18	23 FT±	RIGHT
CB07	101+47	23 FT±	LEFT
CB08	101+52	22 FT±	RIGHT
SAN09	102+75	10 FT±	LEFT
STM10	102+90	5 FT±	RIGHT
CB11	104+45	23 FT±	LEFT
SAN12	104+74	10 FT±	LEFT
STM14	104+85	38 FT±	RIGHT
STM15	104+89	5 FT±	LEFT
CB16	105+23	23 FT±	LEFT
CB17	105+23	22 FT±	RIGHT
SAN18	106+67	10 FT±	LEFT
CB19	108+37	23 FT±	RIGHT

EX SAN AND STM DR COVER ADJUSTMENTS			
NUMBER	STATION	OFFSET	ST SIDE
CB20	108+40	22 FT±	LEFT
SAN23	108+76	8 FT±	LEFT
STM24	108+85	5 FT±	RIGHT
CB25	111+68	22 FT±	RIGHT
STM27	112+03	5 FT±	RIGHT
SAN28	112+09	9 FT±	LEFT
SAN29	112+20	30 FT±	LEFT
STM30	112+23	6 FT±	RIGHT
CB32	112+53	23 FT±	LEFT
SAN33	113+71	11 FT±	RIGHT
STM35	115+55	22 FT±	LEFT
CB36	115+55	6 FT±	RIGHT
CB37	115+55	22 FT±	RIGHT
SAN38	117+90	8 FT±	LEFT



1925 BRETON ROAD, SE SUITE 100  
GRAND RAPIDS, MICH. 49506

HRC JOB NO.  
20230591

DATE  
11/06/2023

RIVERVIEW DR 3" MILL AND RESURFACE PROJECT

TABLE - EX DR STRUCTURE

SHEET NO.

10 OF 38

11/2/2023 10:52 AM  
 HRC\_OLW.ctb  
 I:\202305\20230591\C\Sheets\JN20230591\_tables.dwg  
 APPROVED  
 CHECKED  
 DRAWN  
 DESIGNED

**LOG OF PROJECT**

**RIVERVIEW DR 3" MILL AND RESURFACE PROJECT**

HRC JOB NO. 20230591

LOCATED ALONG RIVERVIEW DR IN KALAMAZOO, MI, BETWEEN EAST MICHIGAN AVE AND GULL RD

**EX WATER MAIN GATE BOX COVER ADJUSTMENT TABLE**

THE FOLLOWING TABLE PROVIDES APPROXIMATE STATIONING AND OFFSETS FOR ADJUSTING EX WATER MAIN GATE BOX COVERS, ALONG RIVERVIEW DR. EACH EX COVER ADJUSTMENT SHALL BE PAID FOR AS "GATE BOX, ADJ, CASE 1."


EX GATE BOX ADJUSTMENTS			
NUMBER	STATION	OFFSET	ST SIDE
GA01	100+83	13 FT±	LEFT
GA02	100+86	38 FT±	RIGHT
GA03	100+88	23 FT±	LEFT
GA13	104+84	1 FT±	LEFT
GA21	108+59	17 FT±	LEFT

EX GATE BOX ADJUSTMENTS			
NUMBER	STATION	OFFSET	ST SIDE
GA22	108+71	38 FT±	LEFT
GA26	111+98	28 FT±	LEFT
GA31	112+27	35 FT±	LEFT
GA34	113+73	26 FT±	LEFT

**EX WATER MAIN GATE BOX RECONSTRUCT TABLE**

THE FOLLOWING TABLE PROVIDES APPROXIMATE STATIONING AND OFFSETS FOR RECONSTRUCTING EX WATER MAIN GATE BOX, ALONG RIVERVIEW DR. EACH RECONSTRUCT SHALL BE PAID FOR AS "GATE BOX, RECONSTRUCT, MODIFIED." ADDITIONAL EX GATE BOXES MAY BE RECONSTRUCTED AS DIRECTED BY THE ENGINEER.

EX GATE BOX RECONSTRUCT			
NUMBER	STATION	OFFSET	ST SIDE
GA39	116+86	11 FT±	LEFT

 <b>HUBBELL, ROTH &amp; CLARK, INC</b> CONSULTING ENGINEERS SINCE 1915 1925 BRETON ROAD, SE SUITE 100 GRAND RAPIDS, MICH. 49506	HRC JOB NO. 20230591	RIVERVIEW DR 3" MILL AND RESURFACE PROJECT	SHEET NO.
	DATE 11/06/2023	TABLE - EX GATE BOX	11 OF 38

11/2/2023 10:52 AM

HRC\_OLW.ctb

V:\202305\20230591\C\Sheets\JN20230591\_ex-typs.dwg

APPROVED

CHECKED

DRAWN

DESIGNED

# LOG OF PROJECT

# RIVERVIEW DR 3" MILL AND RESURFACE PROJECT

HRC JOB NO. 20230591

LOCATED ALONG RIVERVIEW DR IN KALAMAZOO, MI, BETWEEN EAST MICHIGAN AVE AND GULL RD


## PROJECT BEGINNING AND END

POINT OF BEGINNING (POB) STA: 100+21

POINT OF ENDING (POE) STA: 118+22

## EXISTING TYPICAL NOTES:

1. CONC CURB AND GUTTER -
  - 1.1. EX CONC GUTTER PANS ARE ASSUMED TO BE BELOW THE EX PAVT ALONG RIVERVIEW DR. CONTRACTOR SHALL CONFIRM GUTTER PANS EXIST BENEATH THE EX PAVT. IF GUTTER PANS ARE NOT FOUND, NOTIFY THE ENGINEER IMMEDIATELY.
2. COLD MILLING HMA AND CONC PAVT -
  - 2.1. CONC PATCHES EXIST ALONG RIVERVIEW DR, SEE "EX CONCRETE PATCHES" TABLE FOR LOCATIONS. EX CONC PATCHES SHALL BE MILLED IN CONJUNCTION WITH THE MILLING OF EX HMA PAVT, TO THE FULL 3" DEPTH, AND WITHIN THE MILLING LIMITS, AS SHOWN ON THE EX TYPICAL SECTIONS AND PER THE PROJECT SPECIAL PROVISIONS. (PAID FOR AS "COLD MILLING HMA AND CONC PAVT, MODIFIED.")
  - 2.2. FULL (3") DEPTH MILLING SHALL BE CONDUCTED ALONG RIVERVIEW DR AND UP TO THE IMMEDIATE SPRING POINTS ON THE SIDE STREETS THAT INTERSECT RIVERVIEW DR. THE MILLED MATERIALS WILL INCLUDE HMA AND CONC PAVT, WITH EACH MATERIAL DEPTH VARYING THROUGHOUT RIVERVIEW DR. SPECIFICATIONS OF THIS WORK ARE INCLUDED IN THE MILLING SPECIAL PROVISION. (PAID FOR AS "COLD MILLING HMA AND CONC PAVT, MODIFIED.")
  - 2.3. WHEN THE FULL (3") DEPTH MILLING DOES NOT MILL / REMOVE ALL EX HMA PAVT ABOVE THE EX CONC, THE CONTRACTOR SHALL REMOVE THE REMAINING HMA PAVT ABOVE THE EX CONC. THIS SHALL BE CONSIDERED INCIDENTAL TO THE "COLD MILLING HMA AND CONC PAVT, MODIFIED" PAY ITEM.
  - 2.4. REMOVE EX EXCESS PAVT ABOVE EX GUTTER PANS AS PART OF THE COLD MILLING. THIS REMOVAL SHALL BE INCLUDED AND PAID FOR AS "COLD MILLING HMA AND CONC PAVT, MODIFIED."

 <b>HUBBELL, ROTH &amp; CLARK, INC</b> CONSULTING ENGINEERS SINCE 1915 1925 BRETON ROAD, SE SUITE 100 GRAND RAPIDS, MICH. 49506	HRC JOB NO. 20230591	RIVERVIEW DR 3" MILL AND RESURFACE PROJECT	SHEET NO. 12 OF 38
	DATE 11/06/2023	EXISTING TYPICALS - NOTES	

11/2/2023 10:52 AM

HRC\_OLW.ctb

V:\202305\20230591\C\Sheets\JN20230591\_ex-typs.dwg

APPROVED

CHECKED

DRAWN

DESIGNED

**LOG OF PROJECT**

**RIVERVIEW DR 3" MILL AND RESURFACE PROJECT**

HRC JOB NO. 20230591

LOCATED ALONG RIVERVIEW DR IN KALAMAZOO, MI, BETWEEN EAST MICHIGAN AVE AND GULL RD

**PROJECT BEGINNING AND END**


POINT OF BEGINNING (POB) STA: 100+21

POINT OF ENDING (POE) STA: 118+22

**EXISTING TYPICAL NOTES (CONT):**

3.0 FULL DEPTH PAVT REPAIR -

- 3.1 REPAIR LOCATIONS SHALL BE DETERMINED BY THE ENGINEER AFTER THE FULL (3") DEPTH MILLING.
- 3.2 REPAIR LENGTH IS ASSUMED TO EXTEND THE ENTIRE ROADWAY WIDTH.
- 3.3 REPAIR WIDTHS SHALL BE WIDE ENOUGH TO ALLOW THOROUGH VIBRATORY COMPACTION OF THE MATERIAL THAT LIES BENEATH THE PR WORK, INCLUDING SUBBASE, AGGREGATE BASE, HMA, ETC.
- 3.4 REPAIR DEPTHS AS SHOWN ON THE "FULL DEPTH PAVEMENT REPAIR DETAIL." EXCAVATION SHALL INCLUDE REMOVING SUBBASE TO THE REQUIRED DEPTH AND BE PAID FOR AS "EXCAVATION, EARTH."

 <b>HUBBELL, ROTH &amp; CLARK, INC</b> CONSULTING ENGINEERS SINCE 1915 1925 BRETON ROAD, SE SUITE 100 GRAND RAPIDS, MICH. 49506	HRC JOB NO. 20230591	RIVERVIEW DR 3" MILL AND RESURFACE PROJECT	SHEET NO. 13 OF 38
	DATE 11/06/2023	EXISTING TYPICALS - NOTES	

11/2/2023 10:52 AM

HRC\_OLW.ctb

v:\202305\20230591\C\Sheets\JN20230591\_ex-typs.dwg

APPROVED

CHECKED

DRAWN

DESIGNED

# LOG OF PROJECT

# RIVERVIEW DR 3" MILL AND RESURFACE PROJECT

HRC JOB NO. 20230591

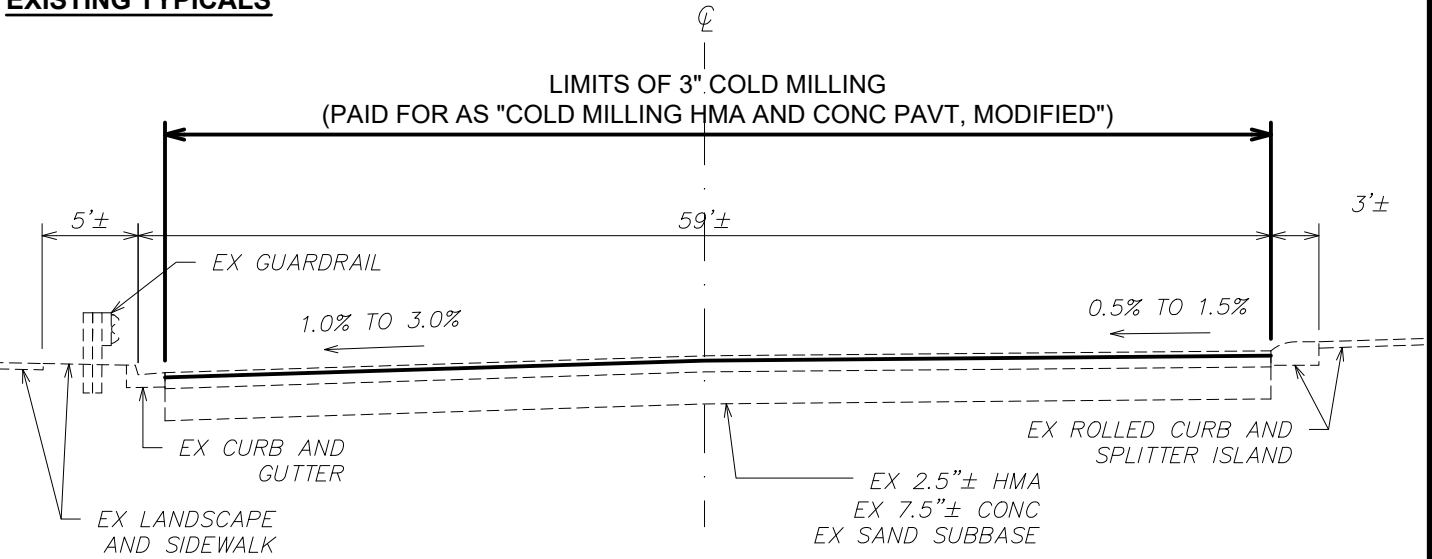
LOCATED ALONG RIVERVIEW DR IN KALAMAZOO, MI, BETWEEN EAST MICHIGAN AVE AND GULL RD

## PROJECT BEGINNING AND END

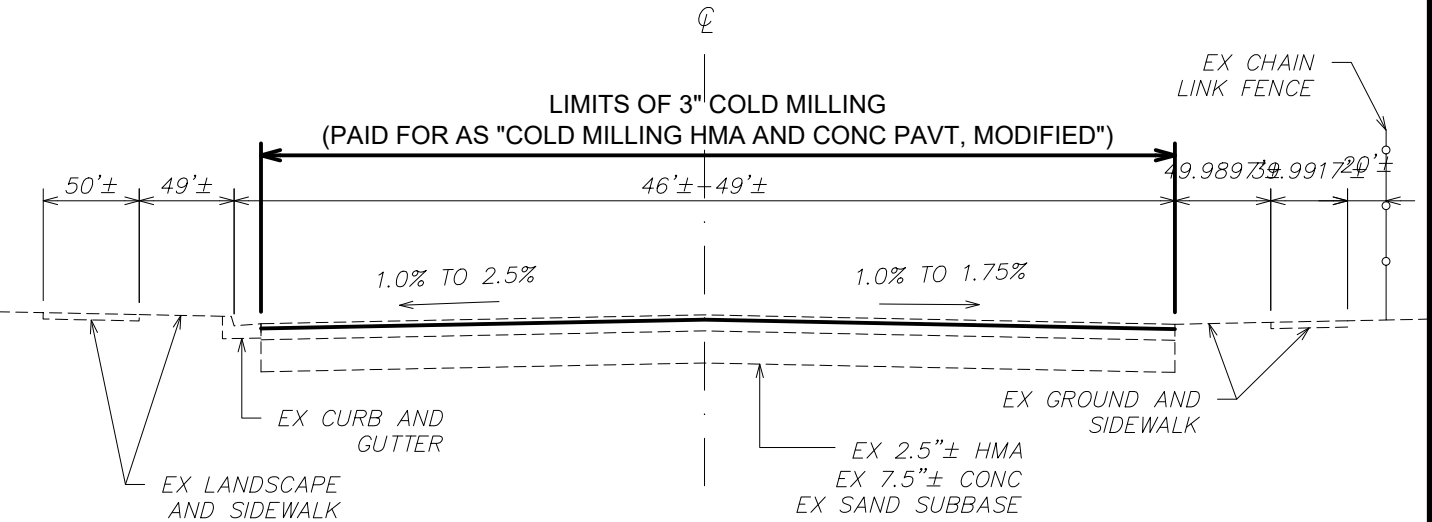
POINT OF BEGINNING (POB) STA: 100+21

POINT OF ENDING (POE) STA: 118+22

## EXISTING TYPICALS



**EXISTING TYPICAL SECTION**  
POB TO STA 101+50



**EXISTING TYPICAL SECTION**  
STA 101+50 TO STA 103+49

**HRC**  
**HUBBELL, ROTH & CLARK, INC**  
 CONSULTING ENGINEERS SINCE 1915  
 1925 BRETON ROAD, SE SUITE 100  
 GRAND RAPIDS, MICH. 49506

HRC JOB NO.  
20230591

DATE  
11/06/2023

RIVERVIEW DR 3" MILL AND RESURFACE PROJECT

EXISTING TYPICALS

SHEET NO.  
14 OF 38

11/2/2023 10:52 AM

HRC\_OLW.ctb

V:\202305\20230591\C\Sheets\JN20230591\_ex-typs.dwg

APPROVED

CHECKED

DRAWN

DESIGNED

# LOG OF PROJECT

# RIVERVIEW DR 3" MILL AND RESURFACE PROJECT

HRC JOB NO. 20230591

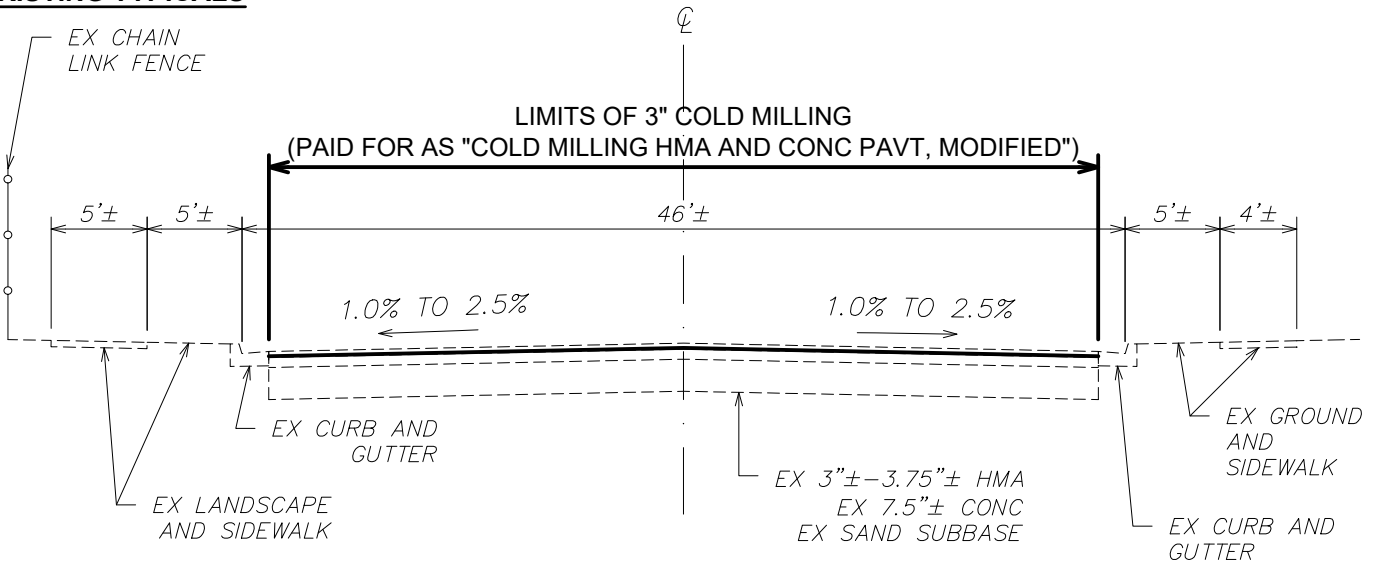
LOCATED ALONG RIVERVIEW DR IN KALAMAZOO, MI, BETWEEN EAST MICHIGAN AVE AND GULL RD

## PROJECT BEGINNING AND END

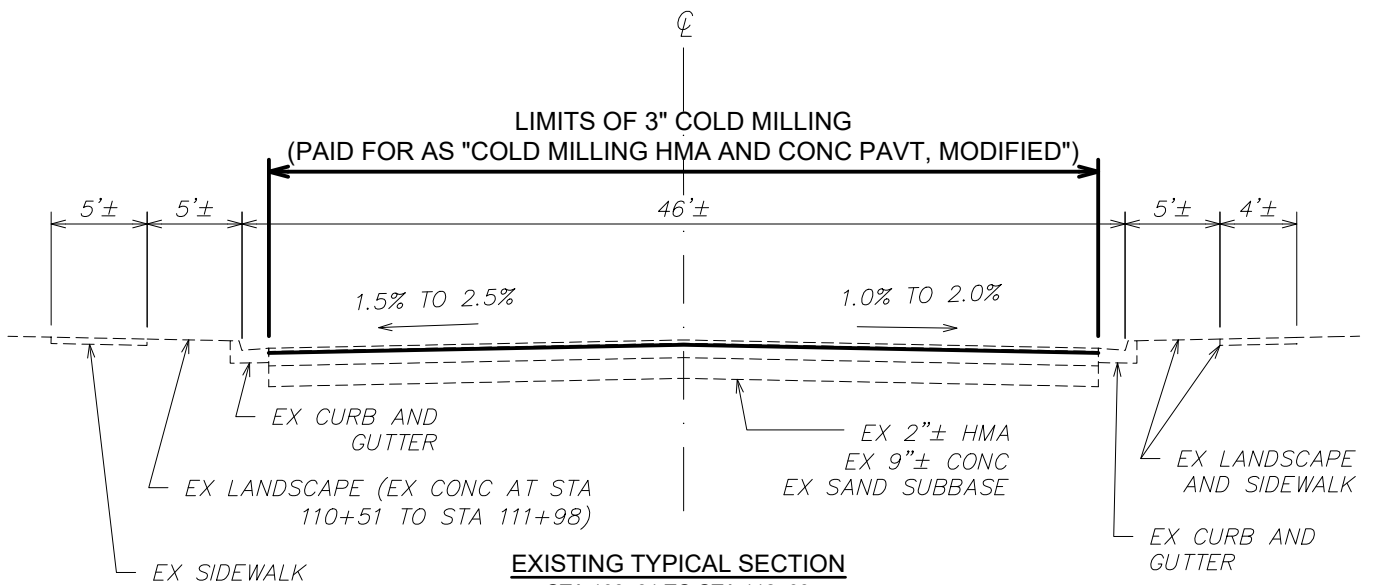
POINT OF BEGINNING (POB) STA: 100+21

POINT OF ENDING (POE) STA: 118+22

## EXISTING TYPICALS



**EXISTING TYPICAL SECTION**  
STA 103+49 TO STA 108+81



**EXISTING TYPICAL SECTION**  
STA 108+81 TO STA 112+03

**HRC**  
**HUBBELL, ROTH & CLARK, INC**  
 CONSULTING ENGINEERS SINCE 1915  
 1925 BRETON ROAD, SE SUITE 100  
 GRAND RAPIDS, MICH. 49506

HRC JOB NO.  
20230591

DATE  
11/06/2023

RIVERVIEW DR 3" MILL AND RESURFACE PROJECT

EXISTING TYPICALS

SHEET NO.  
15 OF 38

11/2/2023 10:52 AM

HRC\_OLW.ctb

V:\202305\20230591\C\Sheets\JN20230591\_ex-typs.dwg

APPROVED

CHECKED

DRAWN

DESIGNED

# LOG OF PROJECT

# RIVERVIEW DR 3" MILL AND RESURFACE PROJECT

HRC JOB NO. 20230591

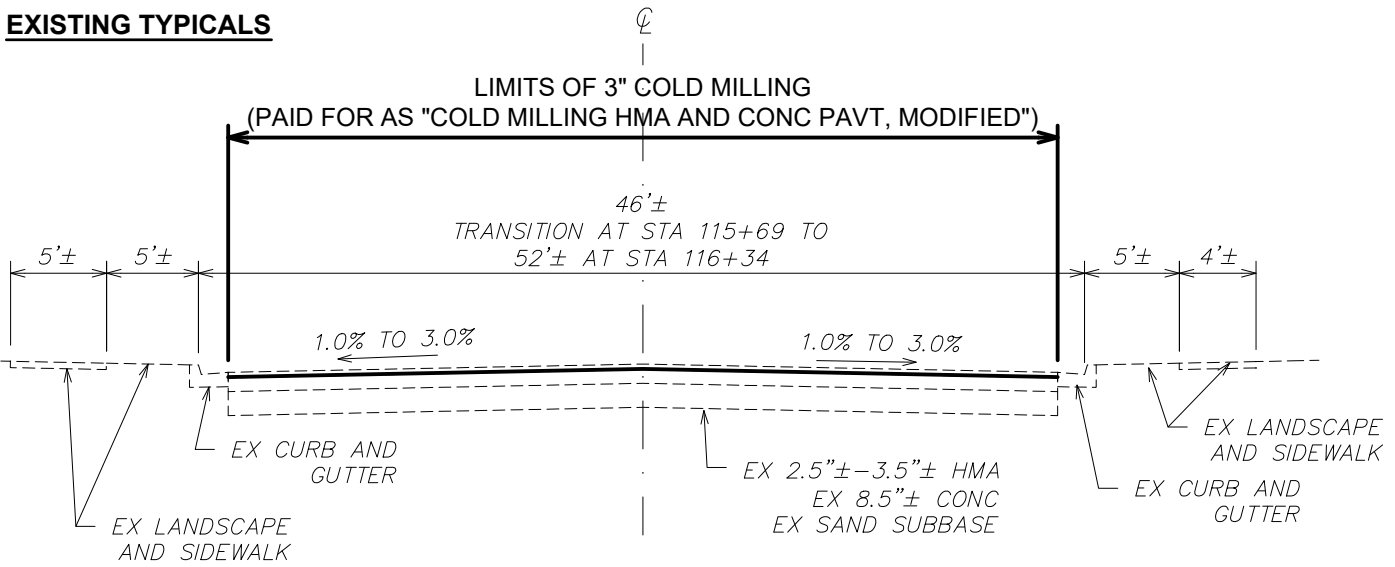
LOCATED ALONG RIVERVIEW DR IN KALAMAZOO, MI, BETWEEN EAST MICHIGAN AVE AND GULL RD

## PROJECT BEGINNING AND END

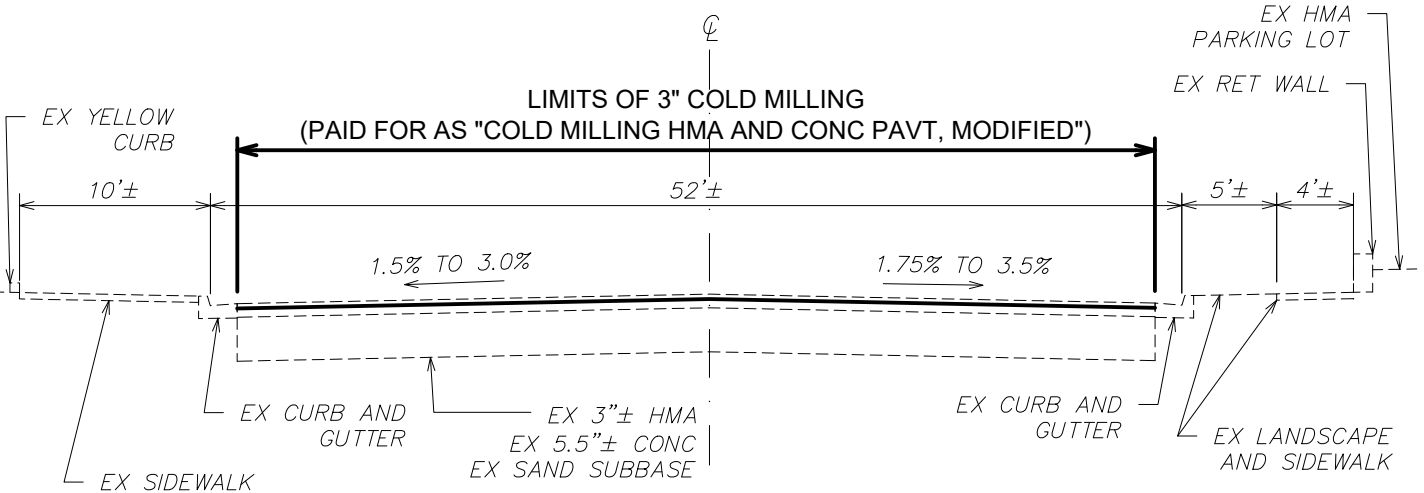
POINT OF BEGINNING (POB) STA: 100+21

POINT OF ENDING (POE) STA: 118+22

## EXISTING TYPICALS



**EXISTING TYPICAL SECTION**  
STA 112+03 TO STA 116+34



**EXISTING TYPICAL SECTION**  
STA 116+34 TO POE

**HRC**  
**HUBBELL, ROTH & CLARK, INC**  
 CONSULTING ENGINEERS SINCE 1915  
 1925 BRETON ROAD, SE SUITE 100  
 GRAND RAPIDS, MICH. 49506

HRC JOB NO.  
20230591

DATE  
11/06/2023

RIVERVIEW DR 3" MILL AND RESURFACE PROJECT

EXISTING TYPICALS

SHEET NO.  
16 OF 38



11/2/2023 10:52 AM

HRC\_OLW.ctb

V:\202305\20230591\C\Sheets\JN20230591\_pr-typs.dwg

APPROVED

CHECKED

DRAWN

DESIGNED

**LOG OF PROJECT****RIVERVIEW DR 3" MILL AND RESURFACE PROJECT**

HRC JOB NO. 20230591

LOCATED ALONG RIVERVIEW DR IN KALAMAZOO, MI, BETWEEN EAST MICHIGAN AVE AND GULL RD

**PROJECT BEGINNING AND END**

POINT OF BEGINNING (POB) STA: 100+21

POINT OF ENDING (POE) STA: 118+22

**PROPOSED TYPICAL NOTES:**

1. THE SHOWN CONC THICKNESS IS THE REMAINING THICKNESS AFTER THE FULL (3") DEPTH MILLING.
2. THE FULL DEPTH PAVEMENT REPAIR SHALL CONSIST OF 8.5" HMA (ONE LIFT: 2.5" HMA, 4EML, OVER TWO LIFTS: 3" HMA, 3EML PER SPECIAL DETAIL "CONCRETE PAVEMENT REPAIR": DETAIL 8, CASE V") OVER 12" AGG BASE, 21 AA, OVER COMPACTED SUBBASE, AS SHOWN ON THE "FULL DEPTH PAVEMENT REPAIR DETAIL."
3. THE FULL DEPTH PAVEMENT REPAIR LOCATIONS SHALL BE DETERMINED AFTER THE FULL (3") DEPTH MILLING. CONTRACTOR SHALL SET-UP AN ON-SITE MEETING AFTER THE MILLING, WITH THE CITY OF KALAMAZOO AND HRC REPRESENTATIVE, TO DISCUSS THE LOCATIONS. THIS MEETING SHALL BE INCLUDED IN THE PROJECT SCHEDULE AND SHALL BE CONSIDERED AS INCIDENTAL TO THE PAVEMENT REPAIR PAY ITEMS.

**PAVEMENT APPLICATION TABLE**

ITEM	RATE: LBS/ SYD	PERFORMANCE GRADE	REMARKS
HMA, 5EML, HIGH STRESS	165	70-28P	TOP COURSE
HMA, 5EML, HIGH STRESS	165	70-28P	LEVELING COURSE
"HAND PATCHING" HMA, 4EML	275	64-28	("CONCRETE PAVEMENT REPAIR" - DET 8) LEVELING COURSE
"HAND PATCHING" HMA, 3EML	330	58-22	("CONCRETE PAVEMENT REPAIR" - DET 8) BASE COURSE
"HAND PATCHING" HMA, 3EML	330	58-22	("CONCRETE PAVEMENT REPAIR" - DET 8) BASE COURSE



1925 BRETON ROAD, SE SUITE 100  
GRAND RAPIDS, MICH. 49506

HRC JOB NO.  
20230591

DATE  
11/06/2023

RIVERVIEW DR 3" MILL AND RESURFACE PROJECT

PROPOSED TYPICALS - NOTES

SHEET NO.

17 OF 38

11/2/2023 10:52 AM

HRC\_OLW.ctb

V:\202305\20230591\C\Sheets\JN20230591\_pr-typs.dwg

APPROVED

CHECKED

DRAWN

DESIGNED

# LOG OF PROJECT

# RIVERVIEW DR 3" MILL AND RESURFACE PROJECT

HRC JOB NO. 20230591

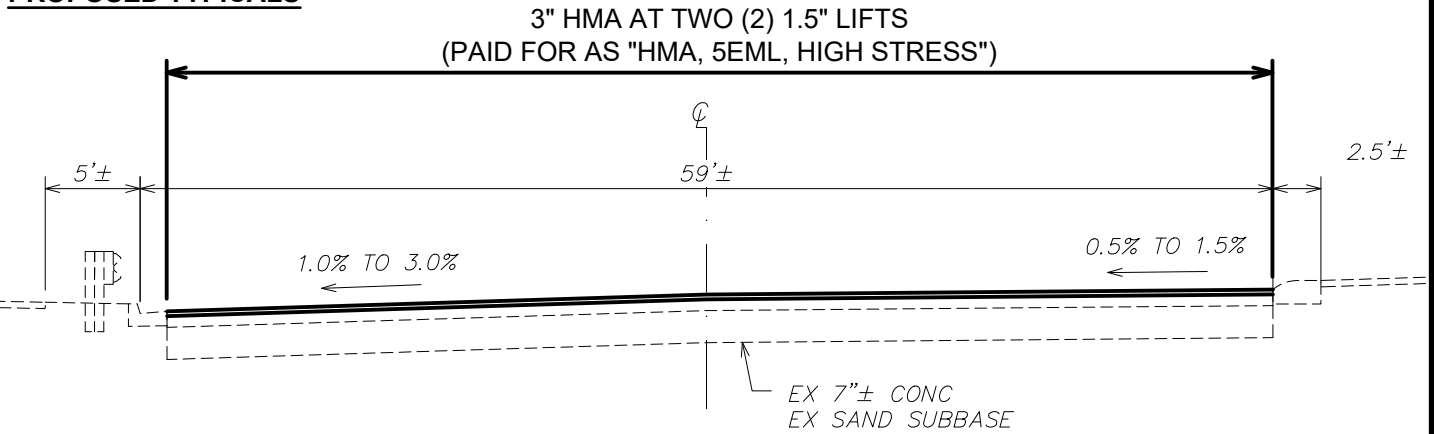
LOCATED ALONG RIVERVIEW DR IN KALAMAZOO, MI, BETWEEN EAST MICHIGAN AVE AND GULL RD

## PROJECT BEGINNING AND END

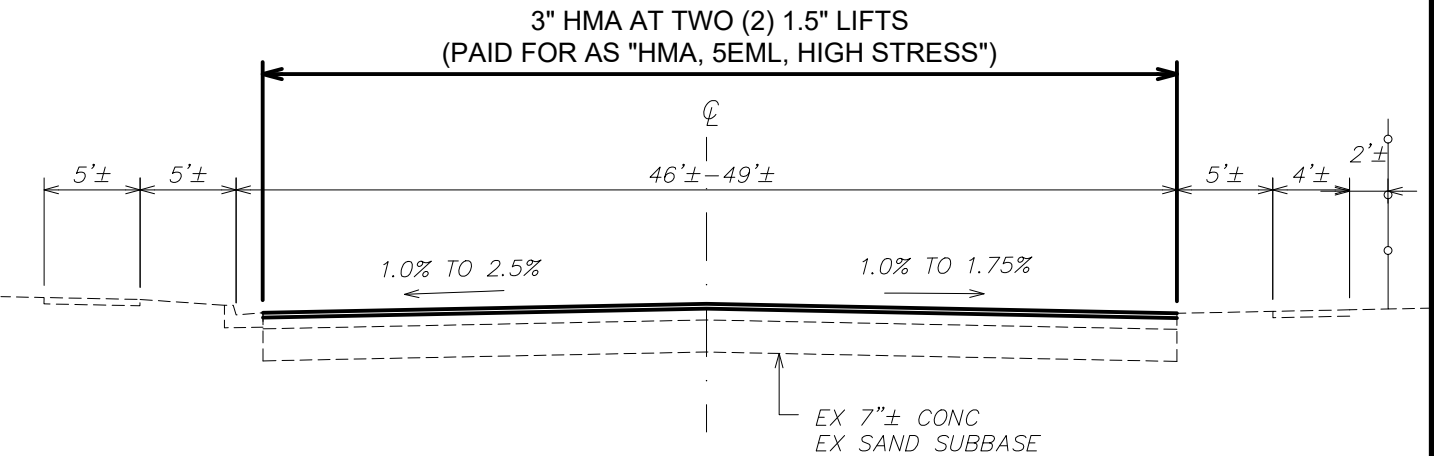
POINT OF BEGINNING (POB) STA: 100+21

POINT OF ENDING (POE) STA: 118+22

## PROPOSED TYPICALS



PROPOSED TYPICAL SECTION  
POB TO STA 101+50



PROPOSED TYPICAL SECTION  
STA 101+50 TO STA 103+49



1925 BRETON ROAD, SE SUITE 100  
GRAND RAPIDS, MICH. 49506

HRC JOB NO.  
20230591

DATE  
11/06/2023

RIVERVIEW DR 3" MILL AND RESURFACE PROJECT

PROPOSED TYPICALS

SHEET NO.

18 OF 38

11/2/2023 10:52 AM

HRC\_OLW.ctb

V:\202305\20230591\C\Sheets\JN20230591\_pr--types.dwg

APPROVED

CHECKED

DRAWN

DESIGNED

# LOG OF PROJECT

# RIVERVIEW DR 3" MILL AND RESURFACE PROJECT

HRC JOB NO. 20230591

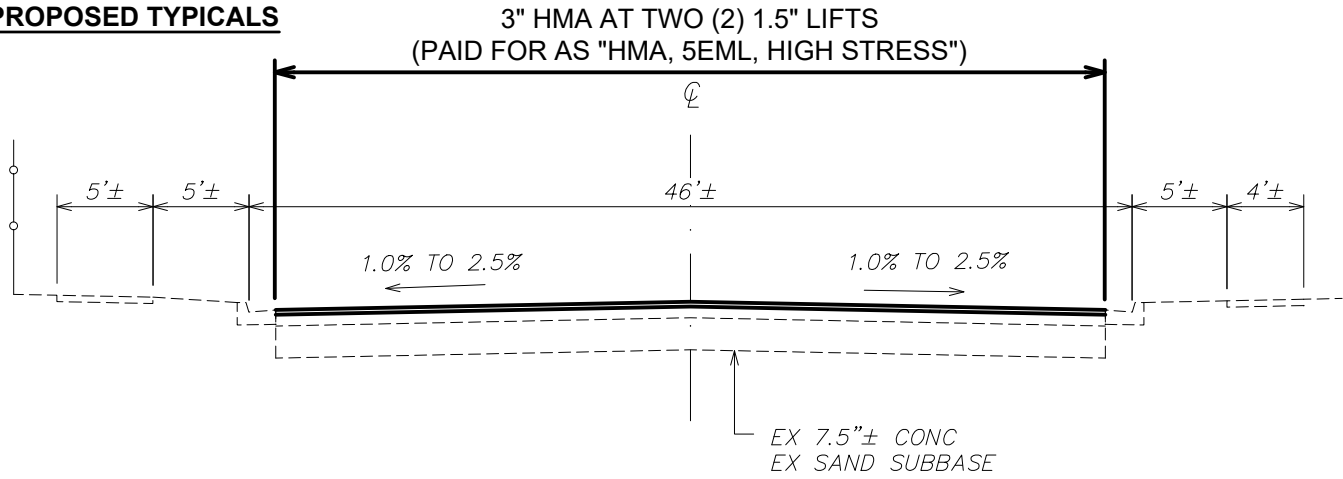
LOCATED ALONG RIVERVIEW DR IN KALAMAZOO, MI, BETWEEN EAST MICHIGAN AVE AND GULL RD

## PROJECT BEGINNING AND END

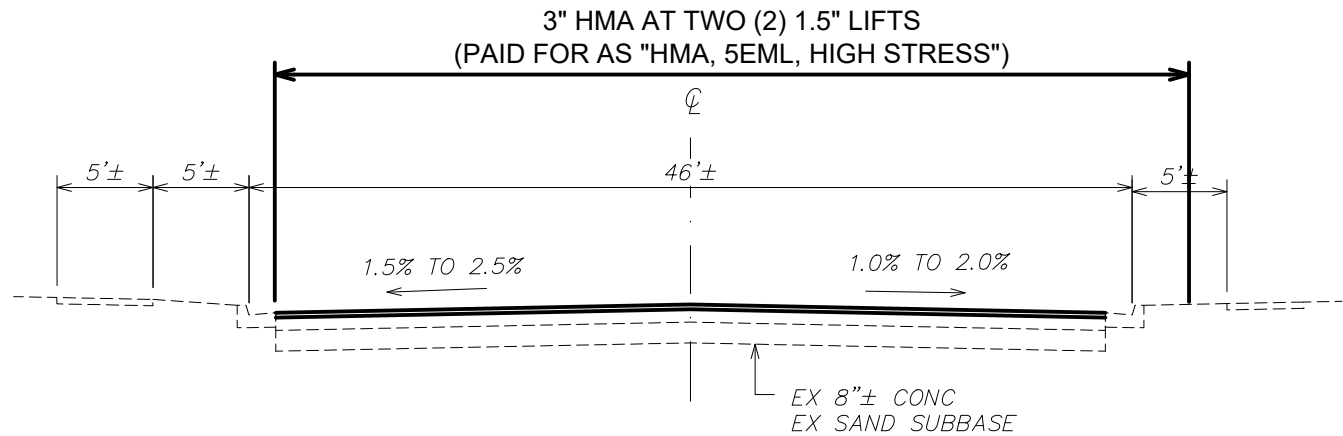
POINT OF BEGINNING (POB) STA: 100+21

POINT OF ENDING (POE) STA: 118+22

## PROPOSED TYPICALS



**PROPOSED TYPICAL SECTION**  
STA 103+49 TO STA 108+81



**PROPOSED TYPICAL SECTION**  
STA 108+81 TO STA 112+03



1925 BRETON ROAD, SE SUITE 100  
GRAND RAPIDS, MICH. 49506

HRC JOB NO.  
20230591

DATE  
11/06/2023

RIVERVIEW DR 3" MILL AND RESURFACE PROJECT

PROPOSED TYPICALS

SHEET NO.

19 OF 38

11/2/2023 10:52 AM

HRC\_OLW.ctb

V:\202305\20230591\C\Sheets\JN20230591\_pr-typs.dwg

APPROVED

CHECKED

DRAWN

DESIGNED

# LOG OF PROJECT

# RIVERVIEW DR 3" MILL AND RESURFACE PROJECT

HRC JOB NO. 20230591

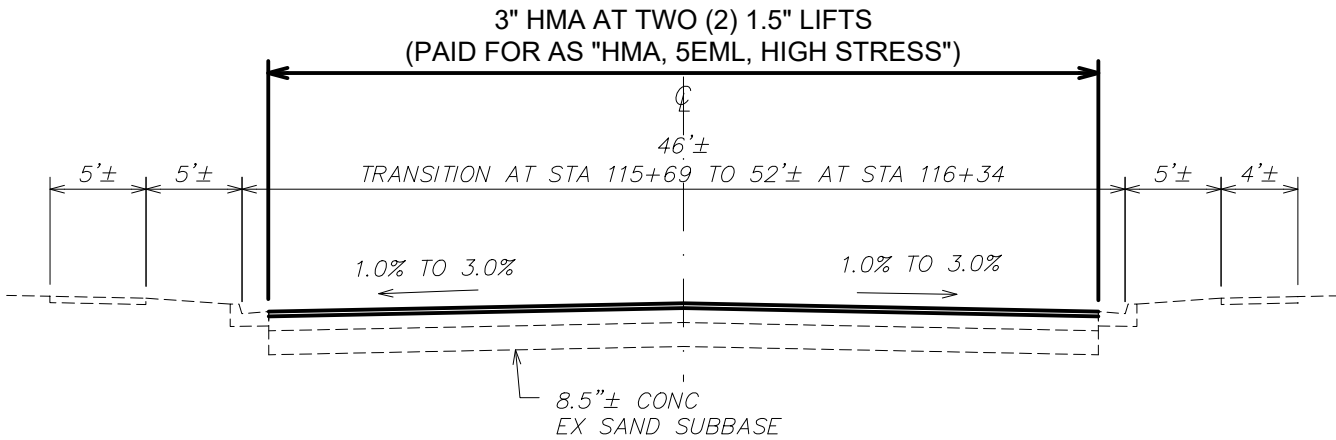
LOCATED ALONG RIVERVIEW DR IN KALAMAZOO, MI, BETWEEN EAST MICHIGAN AVE AND GULL RD

## PROJECT BEGINNING AND END

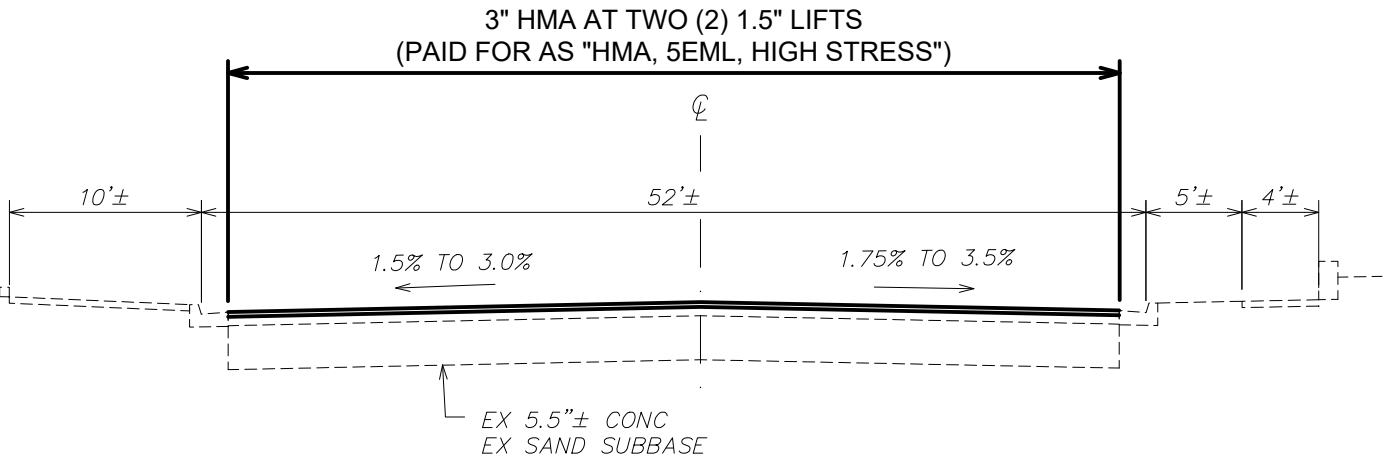
POINT OF BEGINNING (POB) STA: 100+21

POINT OF ENDING (POE) STA: 118+22

## PROPOSED TYPICALS



PROPOSED TYPICAL SECTION  
STA 112+03 TO STA 116+34



PROPOSED TYPICAL SECTION  
STA 116+34 TO POE



1925 BRETON ROAD, SE SUITE 100  
GRAND RAPIDS, MICH. 49506

HRC JOB NO.  
20230591

DATE  
11/06/2023

RIVERVIEW DR 3" MILL AND RESURFACE PROJECT

PROPOSED TYPICALS

SHEET NO.

20 OF 38

11/2/2023 10:53 AM

HRC\_OLW.ctb

V:\202305\20230591\C\Sheets\JN20230591\_pr-typs.dwg

APPROVED

CHECKED

DRAWN

DESIGNED

# LOG OF PROJECT

# RIVERVIEW DR 3" MILL AND RESURFACE PROJECT

HRC JOB NO. 20230591

LOCATED ALONG RIVERVIEW DR IN KALAMAZOO, MI, BETWEEN EAST MICHIGAN AVE AND GULL RD

## PROJECT BEGINNING AND END

POINT OF BEGINNING (POB) STA: 100+21

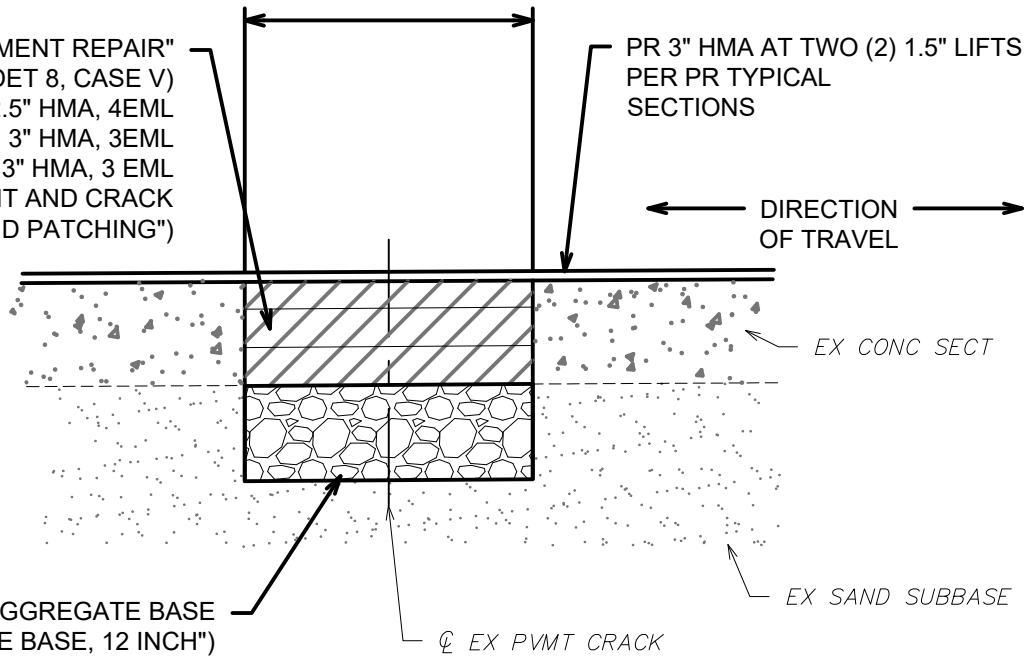
POINT OF ENDING (POE) STA: 118+22

SEE SPECIAL DETAIL  
"CONCRETE PAVEMENT REPAIR"  
(DETAIL 8, CASE V)

"CONCRETE PAVEMENT REPAIR"  
(DET 8, CASE V)  
2.5" HMA, 4EML  
3" HMA, 3EML  
3" HMA, 3 EML  
(PAID FOR AS "PAVT JOINT AND CRACK  
REPR, DET 8" AND "HAND PATCHING")

PR 3" HMA AT TWO (2) 1.5" LIFTS  
PER PR TYPICAL  
SECTIONS

← DIRECTION  
OF TRAVEL →



12" AGGREGATE BASE  
(PAID FOR AS "AGGREGATE BASE, 12 INCH")

EX CONC SECT

EX SAND SUBBASE

EX PVMT CRACK

FULL DEPTH PAVEMENT REPAIR DETAIL  
TO BE APPLIED AS DIRECTED BY ENGINEER

### NOTE:

THE REMOVAL OF 12" EXISTING SAND SUBBASE MATERIAL WILL BE NEEDED BEFORE INSTALLATION AND COMPACTION OF THE 12" AGGREGATE BASE. PAID FOR AS "EXCAVATION, EARTH."



1925 BRETON ROAD, SE SUITE 100  
GRAND RAPIDS, MICH. 49506

HRC JOB NO.  
20230591

DATE  
11/06/2023

RIVERVIEW DR 3" MILL AND RESURFACE PROJECT

FULL DEPTH PAVEMENT REPAIR DETAIL

SHEET NO.

21 OF 38

11/2/2023 10:53 AM

HRC\_OLW.ctb

V:\202305\20230591\C\Sheets\JN20230591\_tables.dwg

APPROVED

CHECKED

DRAWN

DESIGNED

**LOG OF PROJECT**

**RIVERVIEW DR 3" MILL AND RESURFACE PROJECT**

HRC JOB NO. 20230591

LOCATED ALONG RIVERVIEW DR IN KALAMAZOO, MI, BETWEEN EAST MICHIGAN AVE AND GULL RD

**PROJECT BEGINNING AND END**

POINT OF BEGINNING (POB) STA: 100+21

POINT OF ENDING (POE) STA: 118+22

**PAVEMENT MARKING TABLE**

THE FOLLOWING TABLE PROVIDES STATIONING FOR THE APPROXIMATE LOCATION OF PAVEMENT MARKING WORK ALONG RIVERVIEW DR.

THE CONTRACTOR SHALL INSTALL TEMPORARY PAVEMENT MARKING, "PAVT MRKG, WET REFLECTIVE, TYPE R, TAPE, 4 INCH, YELLOW, TEMP" AT THE TEMPORARY CENTERLINE FOLLOWING EACH NIGHT OF PAVING, IN ACCORDANCE WITH SECTION 812 OF THE 2020 MDOT STANDARD SPECIFICATION.


QUANTITIES FOR TEMPORARY TAPE TO BE PLACED ARE BASED ON 4 INCH STRIPS, 4 FOOT LONG, SPACED AT 25 FOOT INTERVALS CENTER TO CENTER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ALL TEMPORARY PAVEMENT MARKINGS ADHERE TO THE PAVEMENT SURFACE UNTIL PERMANENT MARKINGS ARE INSTALLED.

ALL PERMANENT MARKINGS, SHAPES, AND DIMENSIONS SHALL CONFORM TO THE MDOT PAVEMENT MARKING STANDARD PLANS AND SPECIAL DETAILS.

PROPOSED PAVEMENT MARKINGS SHALL BE AS OUTLINED ON THE PAVEMENT MARKING SHEETS. CONTRACTOR TO COORDINATE WITH THE CITY OF KALAMAZOO FOR VERIFICATION UTILIZING EXISTING PAVEMENT MARKING LOGS.

PROPOSED PAVEMENT MARKINGS THAT MATCH INTO EXISTING MARKINGS SHALL MATCH THE EXISTING PAVEMENT MARKING WIDTH, THROUGHOUT THE PROPOSED MARKING.

PAVEMENT MARKING - CENTERLINE		
BEG STA	END STA	DESCRIPTION
POB	100+23	DOUBLE YELLOW SOLID
101+49	104+47	DOUBLE YELLOW SOLID
105+83	108+47	DOUBLE YELLOW SOLID
108+47	108+53	SEE PED CROSSING DTL
108+53	109+07	DOUBLE YELLOW SOLID
109+07	109+13	SEE PED CROSSING DTL
109+13	POE	DOUBLE YELLOW SOLID

 <b>HUBBELL, ROTH &amp; CLARK, INC</b> CONSULTING ENGINEERS SINCE 1915 1925 BRETON ROAD, SE SUITE 100 GRAND RAPIDS, MICH. 49506	HRC JOB NO. 20230591	RIVERVIEW DR 3" MILL AND RESURFACE PROJECT	SHEET NO. 22 OF 38
	DATE 11/06/2023	TABLE - PAVEMENT MARKINGS - CL	

11/2/2023 10:53 AM

HRC\_OLW.ctb

V:\202305\20230591\C\Sheets\JN20230591\_tables.dwg

APPROVED

CHECKED

DRAWN

DESIGNED

**LOG OF PROJECT**

**RIVERVIEW DR 3" MILL AND RESURFACE PROJECT**

HRC JOB NO. 20230591

LOCATED ALONG RIVERVIEW DR IN KALAMAZOO, MI, BETWEEN EAST MICHIGAN AVE AND GULL RD

**PROJECT BEGINNING AND END**


POINT OF BEGINNING (POB) STA: 100+21

POINT OF ENDING (POE) STA: 118+22

**PAVEMENT MARKING TABLE (CONTINUED)**

PAVEMENT MARKING - NORTHBOUND				
BEG STA	CL OFFSET	END STA	CL OFFSET	DESCRIPTION
POB	22'±	100+29	23'	SINGLE WHITE SOLID
100+22	0'	100+22	23'	2' WIDE, WHITE, STOP BAR
101+48	11'	POE	11'	SINGLE WHITE DASHED
117+40	11'	POE	22'	SINGLE WHITE SOLID
118+19	0'	118+19	36'	2' WIDE, WHITE, STOP BAR

PAVEMENT MARKING - SOUTHBOUND				
BEG STA	CL OFFSET	END STA	CL OFFSET	DESCRIPTION
POB	9.75'±	100+23	9.75'±	DOUBLE YELLOW SOLID
101+49	0'	101+49	23'	2' WIDE, WHITE, STOP BAR
101+49	11'	104+47	11'	SINGLE WHITE SOLID
101+79	16.5'			SOUTHBOUND WHITE ARROW
101+79	5.5'			EAST-TURN WHITE ARROW
102+34	16.5'			"ONLY" PAVEMENT MARKING
102+34	5.5'			"ONLY" PAVEMENT MARKING
102+84	16.5'			SOUTHBOUND WHITE ARROW
102+84	5.5'			EAST-TURN WHITE ARROW
103+39	16.5'			"ONLY" PAVEMENT MARKING
103+39	5.5'			"ONLY" PAVEMENT MARKING
103+89	16.5'			SOUTHBOUND WHITE ARROW
103+89	5.5'			EAST-TURN WHITE ARROW
104+44	16.5'			"ONLY" PAVEMENT MARKING
104+44	5.5'			"ONLY" PAVEMENT MARKING
104+47	11'	POE	11'	SINGLE WHITE DASHED

 <b>HUBBELL, ROTH &amp; CLARK, INC</b> CONSULTING ENGINEERS SINCE 1915 1925 BRETON ROAD, SE SUITE 100 GRAND RAPIDS, MICH. 49506	HRC JOB NO. 20230591	RIVERVIEW DR 3" MILL AND RESURFACE PROJECT	SHEET NO. 23 OF 38
	DATE 11/06/2023	TABLE - PAVEMENT MARKINGS - DIRECTIONAL	

11/2/2023 10:53 AM

HRC\_OLW.ctb

V:\202305\20230591\C\Sheets\JN20230591\_Hotop\_Det.dwg

APPROVED

CHECKED

DRAWN

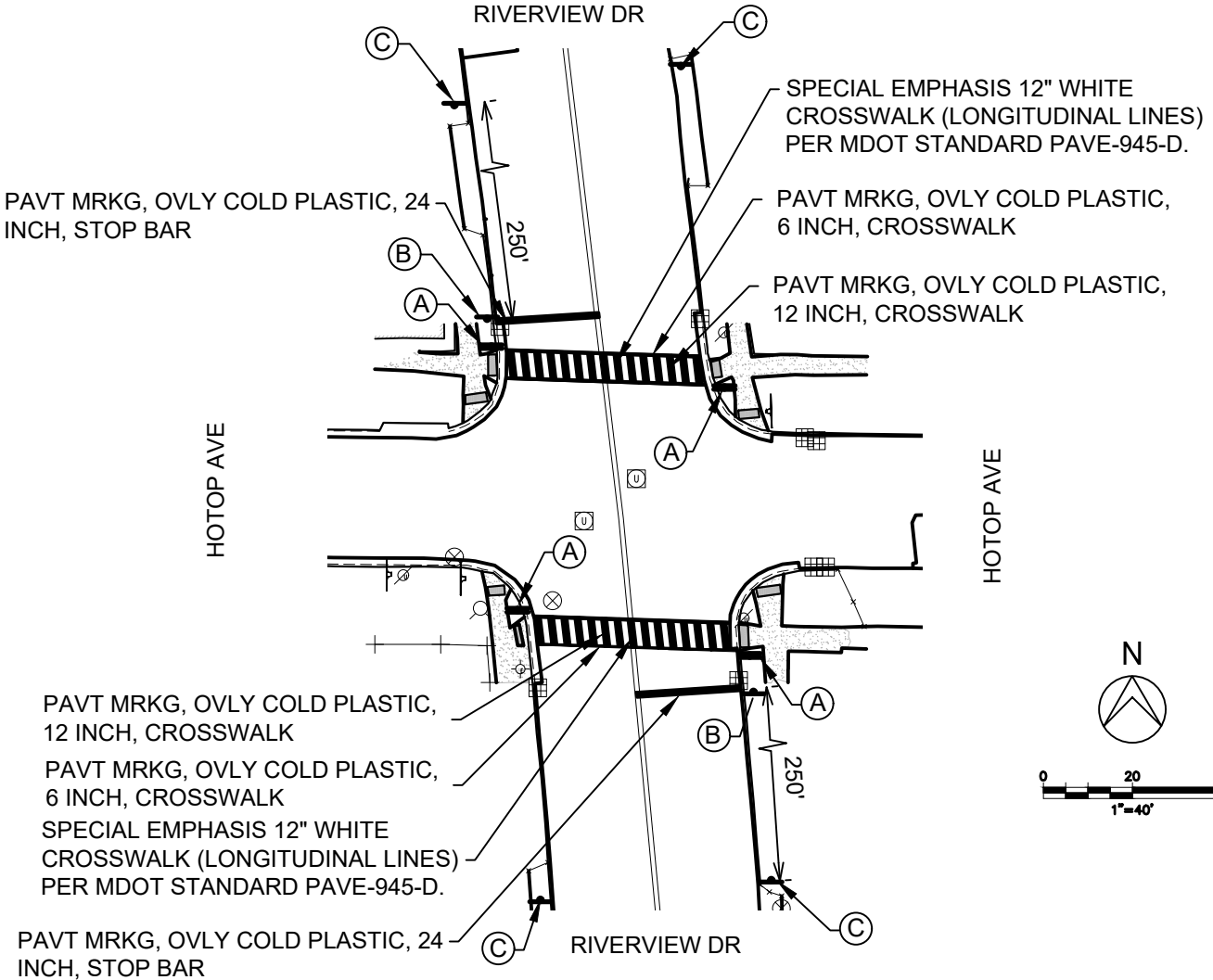
DESIGNED

# LOG OF PROJECT

# RIVERVIEW DR 3" MILL AND RESURFACE PROJECT

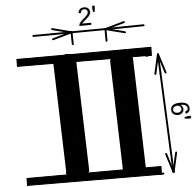
HRC JOB NO. 20230591

LOCATED ALONG RIVERVIEW DR IN KALAMAZOO, MI, BETWEEN EAST MICHIGAN AVE AND GULL RD



**NOTE:**

ADA RAMPS AND SIDEWALK WORK ARE NOT TO BE INCLUDED AS PART OF THIS PROJECT.



**SPECIAL EMPHASIS CROSSWALK**



1925 BRETON ROAD, SE SUITE 100  
GRAND RAPIDS, MICH. 49506

HRC JOB NO.  
20230591

DATE  
11/06/2023

RIVERVIEW DR 3" MILL AND RESURFACE PROJECT

ENHANCED PEDESTRIAN CROSSING DETAIL

SHEET NO.

24 OF 38



11/2/2023 10:53 AM

HRC\_OLW.ctb

V:\202305\20230591\C\Sheets\JN20230591\_Hotop\_Det.dwg

APPROVED

CHECKED

DRAWN

DESIGNED

# LOG OF PROJECT

# RIVERVIEW DR 3" MILL AND RESURFACE PROJECT

HRC JOB NO. 20230591

LOCATED ALONG RIVERVIEW DR IN KALAMAZOO, MI, BETWEEN EAST MICHIGAN AVE AND GULL RD

**A**

NOTE: THESE SIGNS ARE DOUBLE SIDED.



PLACE SIGN, TYPE VB

W11-2 (48")  
16 SFT SIGN, TYPE VB  
32 FT 2- POST, STEEL, 3 POUND  
2- 6 FT REFLECTIVE PANEL FOR PERMANENT SIGN SUPPORT



PLACE SIGN, TYPE VB

W11-2 (48")  
16 SFT SIGN, TYPE VB  
32 FT 2- POST, STEEL, 3 POUND  
2- 6 FT REFLECTIVE PANEL FOR PERMANENT SIGN SUPPORT



PLACE SIGN, TYPE IIIB

W16-7PR (36" X 18")  
4.5 SFT SIGN, TYPE IIIB



PLACE SIGN, TYPE IIIB

W16-7PL (36" X 18")  
4.5 SFT SIGN, TYPE IIIB

**B**



PLACE SIGN, TYPE IIIB

R1-9 MOD (30"x10")  
2.1 SFT SIGN, TYPE IIIB



PLACE SIGN, TYPE IIIB

R1-5bL (30")  
9 SFT SIGN, TYPE IIIB  
16 FT 1-POST, STEEL, 3 POUND  
1- 6 FT REFLECTIVE PANEL FOR PERMANENT SIGN SUPPORT

**C**



PLACE SIGN, TYPE VB

W11-2 (48")  
16 SFT SIGN, TYPE VB  
32 FT 2- POST, STEEL, 3 POUND  
1-6 FT REFLECTIVE PANEL FOR PERMANENT SIGN SUPPORT



PLACE SIGN, TYPE IIIB

W16-9p (36"x18")  
4.5 SFT SIGN, TYPE IIIB

**NOTE:**

W11-2, W16-7PL, W16-7PR, W16-9P SIGNS ARE TO BE FLUORESCENT YELLOW-GREEN.



1925 BRETON ROAD, SE SUITE 100 GRAND RAPIDS, MICH. 49506

HRC JOB NO. 20230591

DATE 11/06/2023

RIVERVIEW DR 3" MILL AND RESURFACE PROJECT

ENHANCED PEDESTRIAN CROSSING SIGNS

SHEET NO.

25 OF 38

# RIVERVIEW DR 3" MILL AND RESURFACE PROJECT / HRC JOB NO. 20230591

DocuSign Envelope ID: 48B1A4FF-085C-4E02-A578-CD7D9039649B



## BORING LOG TERMINOLOGY

UNIFIED SOIL CLASSIFICATION AND SYMBOL CHART		
COARSE-GRAINED SOIL (more than 50% of material is larger than No. 200 sieve size.)		
Clean Gravel (Less than 5% fines)		
GRAVEL More than 50% of coarse fraction larger than No. 4 sieve size		GW Well-graded gravel; gravel-sand mixtures, little or no fines
		GP Poorly-graded gravel; gravel-sand mixtures, little or no fines
Gravel with fines (More than 12% fines)		
		GM Silty gravel; gravel-sand-silt mixtures
		GC Clayey gravel; gravel-sand-clay mixtures
Clean Sand (Less than 5% fines)		
SAND 50% or more of coarse fraction smaller than No. 4 sieve size		SW Well-graded sand; sand-gravel mixtures, little or no fines
		SP Poorly graded sand; sand-gravel mixtures, little or no fines
Sand with fines (More than 12% fines)		
		SM Silty sand; sand-silt-gravel mixtures
		SC Clayey sand; sand-clay-gravel mixtures
FINE-GRAINED SOIL (50% or more of material is smaller than No. 200 sieve size)		
SILT AND CLAY Liquid limit less than 50%		ML Inorganic silt; sandy silt or gravelly silt with slight plasticity
		CL Inorganic clay of low plasticity; lean clay, sandy clay, gravelly clay
		OL Organic silt and organic clay of low plasticity
SILT AND CLAY Liquid limit 50% or greater		MH Inorganic silt of high plasticity, elastic silt
		CH Inorganic clay of high plasticity, fat clay
		OH Organic silt and organic clay of high plasticity
		PT Peat and other highly organic soil

OTHER MATERIAL SYMBOLS		
	Topsoil	
	Void	
	Sandstone	
	Asphalt Concrete	
	Glacial Till	
	Siltstone	
	Aggregate Base	
	Coal	
	Limestone	
	Portland Cement Concrete	
	Shale	
	Fill	

LABORATORY CLASSIFICATION CRITERIA	
GW	$C_u = \frac{D_{60}}{D_{10}}$ greater than 4; $C_c = \frac{D_{30}^2}{D_{10} \times D_{60}}$ between 1 and 3
GP	Not meeting all gradation requirements for GW
GM	Atterberg limits below "A" line or PI less than 4
GC	Atterberg limits above "A" line with PI greater than 7
SW	$C_u = \frac{D_{60}}{D_{10}}$ greater than 6; $C_c = \frac{D_{30}^2}{D_{10} \times D_{60}}$ between 1 and 3
SP	Not meeting all gradation requirements for SW
SM	Atterberg limits below "A" line or PI less than 4
SC	Atterberg limits above "A" line with PI greater than 7

Determine percentages of sand and gravel from grain-size curve. Depending on percentage of fines (fraction smaller than No. 200 sieve size), coarse-grained soils are classified as follows:

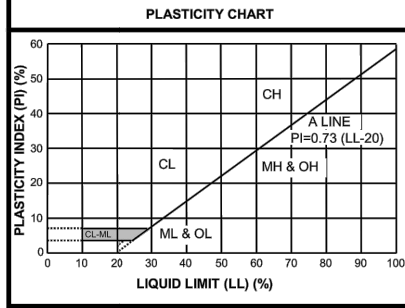
Less than 5 percent.....GW, GP, SW, SP  
 More than 12 percent.....GM, GC, SM, SC  
 5 to 12 percent.....Cases requiring dual symbols

- SP-SM or SW-SM (SAND with Silt or SAND with Silt and Gravel)
- SP-SC or SW-SC (SAND with Clay or SAND with Clay and Gravel)
- GP-GM or GW-GM (GRAVEL with Silt or GRAVEL with Silt and Sand)
- GP-GC or GW-GC (GRAVEL with Clay or GRAVEL with Clay and Sand)

If the fines are CL-ML:

- SC-SM (SILTY CLAYEY SAND or SILTY CLAYEY SAND with Gravel)
- SM-SC (CLAYEY SILTY SAND or CLAYEY SILTY SAND with Gravel)
- GC-GM (SILTY CLAYEY GRAVEL or SILTY CLAYEY GRAVEL with Sand)

PARTICLE SIZES	
Boulders	- Greater than 12 inches
Cobbles	- 3 inches to 12 inches
Gravel- Coarse	- 3/4 inches to 3 inches
Gravel- Fine	- No. 4 to 3/4 inches
Sand- Coarse	- No. 10 to No. 4
Sand- Medium	- No. 40 to No. 10
Sand- Fine	- No. 200 to No. 40
Silt and Clay	- Less than (0.074 mm)



CLASSIFICATION TERMINOLOGY AND CORRELATIONS	
<b>Cohesionless Soils</b>	
Relative Density	$N_{60}$ (N-Value) (Blows per foot)
Very Loose	0 to 4
Loose	5 to 10
Medium Dense	11 to 30
Dense	31 to 50
Very Dense	51 to 80
Extremely Dense	Over 81

	<b>Cohesive Soils</b>
Consistency	$N_{60}$ (N-Value) (Blows per foot)
Very Soft	<2
Soft	2 - 4
Medium	5 - 8
Stiff	9 - 15
Very Stiff	16 - 30
Hard	> 30

Standard Penetration 'N-Value' = Blows per foot of a 140-pound hammer falling 30 inches on a 2-inch O.D. split barrel sampler, except where noted. N60 values as reported on boring logs represent raw N-values corrected for hammer efficiency only.

**VISUAL MANUAL PROCEDURE**

When laboratory tests are not performed to confirm the classification of soils exhibiting borderline classifications, the two possible classifications would be separated with a slash, as follows:

For soils where it is difficult to distinguish if it is a coarse or fine-grained soil:

- SC/CL (CLAYEY SAND to SANDY LEAN CLAY)
- SM/ML (SILTY SAND to SANDY SILT)
- GC/CL (CLAYEY GRAVEL to GRAVELLY LEAN CLAY)
- GM/ML (SILTY GRAVEL to GRAVELLY SILT)

For soils where it is difficult to distinguish if it is sand or gravel, poorly or well-graded sand or gravel, silt or clay, or plastic or non-plastic silt or clay:

- SP/GP or SW/GW (SAND with Gravel to GRAVEL with Sand)
- SC/GC (CLAYEY SAND with Gravel to CLAYEY GRAVEL with Sand)
- SM/GM (SILTY SAND with Gravel to SILTY GRAVEL with Sand)
- SW/SP (SAND or SAND with Gravel)
- GP/GW (GRAVEL or GRAVEL with Sand)
- SC/SM (CLAYEY to SILTY SAND)
- GM/GC (SILTY to CLAYEY GRAVEL)
- CL/ML (SILTY CLAY)
- ML/CL (CLAYEY SILT)
- CH/MH (FAT CLAY to ELASTIC SILT)
- CL/CH (LEAN to FAT CLAY)
- MH/ML (ELASTIC SILT to SILT)

DRILLING AND SAMPLING ABBREVIATIONS	
2ST	- Shelby Tube - 2" O.D.
3ST	- Shelby Tube - 3" O.D.
AS	- Auger Sample
GS	- Grab Sample
LS	- Liner Sample
NR	- No Recovery
PM	- Pressuremeter
RC	- Rock Core diamond bit. NX size, except where noted
SB	- Split Barrel Sample 1-3/8" I.D., 2" O.D., except where noted
VS	- Vane Shear
WS	- Wash Sample

OTHER ABBREVIATIONS	
WOH	- Weight of Hammer
WOR	- Weight of Rods
SP	- Soil Probe
PID	- Photo Ionization Device
FID	- Flame Ionization Device

DEPOSITIONAL FEATURES	
Parting	- as much as 1/16 inch thick
Seam	- 1/16 inch to 1/2 inch thick
Layer	- 1/2 inch to 12 inches thick
Stratum	- greater than 12 inches thick
Pocket	- deposit of limited lateral extent
Lens	- lenticular deposit
Hardpan/Till	- an unstratified, consolidated or cemented mixture of clay, silt, sand and/or gravel, the size/shape of the constituents vary widely
Lacustrine	- soil deposited by lake water
Mottled	- soil irregularly marked with spots of different colors that vary in number and size
Varved	- alternating partings or seams of silt and/or clay
Occasional	- one or less per foot of thickness
Frequent	- more than one per foot of thickness
Interbedded	- strata of soil or beds of rock lying between or alternating with other strata of a different nature

**DESCRIPTION OF RELATIVE QUANTITIES**

The visual-manual procedure uses the following terms to describe the relative quantities of notable foreign materials, gravel, sand or fines:

Trace - particles are present but estimated to be less than 5%  
 Few - 5 to 10%  
 Little - 15 to 25%  
 Some - 30 to 45%  
 Mostly - 50 to 100%

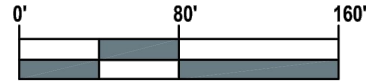
Revised 10/06/20

**HRC**  
**HUBBELL, ROTH & CLARK, INC**  
 CONSULTING ENGINEERS SINCE 1915

1925 BRETON ROAD, SE SUITE 100  
 GRAND RAPIDS, MICH. 49506

HRC JOB NO. 20230591	RIVERVIEW DR 3" MILL AND RESURFACE PROJECT	SHEET NO. 26 OF 38
DATE 11/06/2023	BORE LEGEND	

# RIVERVIEW DR 3" MILL AND RESURFACE PROJECT / HRC JOB NO. 20230591



GRAPHIC SCALE: 1" = 80'

## LEGEND

 APPROXIMATE BORING LOCATION

### NOTE:

1. AERIAL IMAGE TAKEN FROM GOOGLE EARTH PRO WITH AN IMAGE DATE OF 06-30-2022.



1925 BRETON ROAD, SE SUITE 100  
 GRAND RAPIDS, MICH. 49506

HRC JOB NO.  
20230591

DATE  
11/06/2023

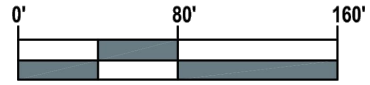
RIVERVIEW DR 3" MILL AND RESURFACE PROJECT

BORE LOCATIONS

SHEET NO.

27 OF 38

# RIVERVIEW DR 3" MILL AND RESURFACE PROJECT / HRC JOB NO. 20230591



GRAPHIC SCALE: 1" = 80'

## LEGEND

 APPROXIMATE BORING LOCATION

### NOTE:

1. AERIAL IMAGE TAKEN FROM GOOGLE EARTH PRO WITH AN IMAGE DATE OF 06-30-2022.



1925 BRETON ROAD, SE SUITE 100  
 GRAND RAPIDS, MICH. 49506

HRC JOB NO.  
20230591

DATE  
11/06/2023

RIVERVIEW DR 3" MILL AND RESURFACE PROJECT

BORE LOCATIONS

SHEET NO.

28 OF 38



11/2/2023 10:54 AM

HRC\_OLW.ctb

V:\202305\20230591\C\Sheets\JN20230591\_bores.dwg

APPROVED

CHECKED

DRAWN

DESIGNED

# RIVERVIEW DR 3" MILL AND RESURFACE PROJECT / HRC JOB NO. 20230591

DocuSign Envelope ID: 48B1A4FF-085C-4E02-A578-CD7D9039649B



## BORING DATA SHEET

PROJECT NAME: Riverview Drive Resurfacing  
 PROJECT NO.: 093806.00  
 LOCATION: Kalamazoo, Michigan  
 CLIENT: Hubbell, Roth & Clark, Inc.  
 DATE: 8/23/23  
 DRILLED BY: TMB / JWM  
 LOGGED BY: JWM / ZLM

BORING: B1  
 STREET: Riverview Drive  
 LANE: Northbound Right Turn Lane  
 OFFSET: 26 Feet East of Centerline  
 GROUND EL: Not Determined

### PAVEMENT AND SUBSURFACE CONDITIONS

Layer, in.		Layer Thickness, in.	Description	Comment
From	To			
0	3	3	ASPHALT PAVEMENT	Intact - Layer Change at 1.5"
3	8 1/2	5 1/2	PORTLAND CEMENT CONCRETE	Intact - No Resteele Observed
8 1/2	36	27 1/2	FILL - Fine to Medium SAND with Silt - Brown - Moist (SP-SM)	
36	48	12	Fine to Medium SILTY SAND - Brown - Moist (SM)	
48	54	6	SILT - Brown (ML)	
54	60	6	Fine to Medium SAND - Brown - Moist (SP)	
End of Boring at 5 Feet				

Depth to Groundwater From Ground Surface  
 Upon Completion: Not Encountered

#### NOTES:

- The indicated stratification lines are approximate. In situ, the transition between materials may be gradual.
- HP = Hand Penetrometer. KSF = Kips per Square Foot (Shear Strength). MC = Moisture Content.

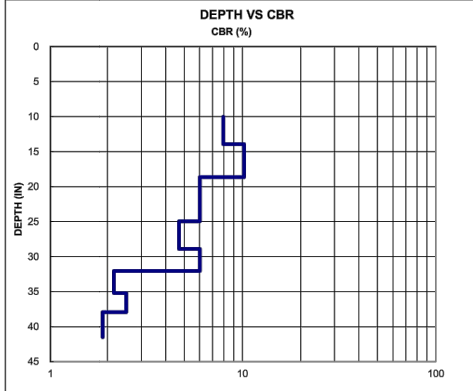
### DCP TEST RESULTS

Depth to start of test from ex. ground surface: 10 inches

No. of Blows	Pen. (mm)	Blow Set (mm)	Pen./Blow (mm)	Blow Factor	Depth from Surface (inches)	CBR (%)	Comment	Soil Type	Average CBR (%)
0	370								
8	470	100	13	2	13.9	7.9	Marginal	Subgrade	
6	530	60	10	2	16.3	10.2	Good	Subgrade	
6	590	60	10	2	18.7	10.2	Good	Subgrade	
5	670	80	16	2	21.8	6.0	Marginal	Subgrade	
5	750	80	16	2	25.0	6.0	Marginal	Subgrade	7.8
5	850	100	20	2	28.9	4.7	Poor	Subgrade	
5	930	80	16	2	32.0	6.0	Marginal	Subgrade	
2	1010	80	40	2	35.2	2.2	Very Poor	Subgrade	
2	1080	70	35	2	38.0	2.5	Very Poor	Subgrade	
2	1170	90	45	2	41.5	1.9	Very Poor	Subgrade	3.5

Hammer Blow Factor: 1 for 17.6 lb Hammer and 2 for 10.1 lb Hammer

\*CBR breaklines are based on blow counts performed prior to sampling. Depths are approximate.



Support Conditions	CBR Range for Aggregate Base Materials (%)	CBR Range for Subgrade Soils (%)
Good	>80	>10
Marginal	60 to 80	5 to 10
Poor	30 to 60	3 to 5
Very Poor	<30	<3



\*\*Core picture shows approximate thickness  
 CORE LOG DCP 1 meter rod (standard).XLS ver. 2/7/14 - Sand DCP

© 2023 SME

**HRC**  
**HUBBELL, ROTH & CLARK, INC**  
 CONSULTING ENGINEERS SINCE 1915  
 1925 BRETON ROAD, SE SUITE 100  
 GRAND RAPIDS, MICH. 49506

HRC JOB NO. 20230591	RIVERVIEW DR 3" MILL AND RESURFACE PROJECT	SHEET NO. 29 OF 38
DATE 11/06/2023	BORE - B1	

11/2/2023 10:54 AM

HRC\_OLW.ctb

V:\202305\20230591\C\Sheets\JN20230591\_bores.dwg

APPROVED

CHECKED

DRAWN

DESIGNED

# RIVERVIEW DR 3" MILL AND RESURFACE PROJECT / HRC JOB NO. 20230591

DocuSign Envelope ID: 48B1A4FF-085C-4E02-A578-CD7D9039649B



## BORING DATA SHEET

PROJECT NAME: Riverview Drive Resurfacing  
 PROJECT NO.: 093806.00  
 LOCATION: Kalamazoo, Michigan  
 CLIENT: Hubbell, Roth & Clark, Inc.  
 DATE: 8/23/23  
 DRILLED BY: TMB / JWM  
 LOGGED BY: JWM / ZLM

BORING: B2  
 STREET: Riverview Drive  
 LANE: Northbound Inside Lane  
 OFFSET: 5 Feet East of Centerline  
 GROUND EL: Not Determined

### PAVEMENT AND SUBSURFACE CONDITIONS

Layer, in.		Layer Thickness, in.	Description	Comment
From	To			
0	3 1/2	3 1/2	ASPHALT PAVEMENT	Intact - Layer Change at 1.5"
3 1/2	12	8 1/2	PORTLAND CEMENT CONCRETE	Intact - Resteel Observed at 7.5"
12	72	60	FILL - Fine to Medium SAND with Silt - Brown - Moist (SP-SM)	
72	120	48	Fine to Coarse SAND - Occasional Silt Layers - Brown and Gray - Moist to Wet (SP)	Petroleum Odor Noted in Sample
120	192	72	Fine to Coarse SAND - Brown and Dark Brown - Wet (SP)	Petroleum Odor Noted in Sample
End of Boring at 16 Feet				

Depth to Groundwater From Ground Surface  
 Upon Completion: 7 Feet

NOTES:  
 1) The indicated stratification lines are approximate. In situ, the transition between materials may be gradual.  
 2) HP = Hand Penetrometer. KSF = Kips per Square Foot (Shear Strength). MC = Moisture Content.

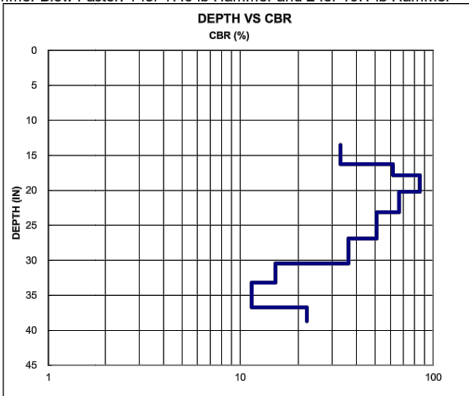
### DCP TEST RESULTS

Depth to start of test from ex. ground surface: 13.5 inches

No. of Blows	Pen. (mm)	Blow Set (mm)	Pen./Blow (mm)	Blow Factor	Depth from Surface (inches)	CBR (%)	Comment	Soil Type	Average CBR (%)
0	470	0							
10	540	70	7	1	16.3	33.0	Good	Subgrade	
10	580	40	4	1	17.8	61.8	Good	Subgrade	
10	610	30	3	1	19.0	85.3	Good	Subgrade	
10	640	30	3	1	20.2	85.3	Good	Subgrade	
20	715	75	4	1	23.1	66.4	Good	Subgrade	
20	810	95	5	1	26.9	51.0	Good	Subgrade	
14	900	90	6	1	30.4	36.3	Good	Subgrade	
5	970	70	14	1	33.2	15.2	Good	Subgrade	
5	1060	90	18	1	36.7	11.5	Good	Subgrade	
5	1110	50	10	1	38.7	22.2	Good	Subgrade	40.9

Hammer Blow Factor: 1 for 17.6 lb Hammer and 2 for 10.1 lb Hammer

\*CBR breaklines are based on blow counts performed prior to sampling. Depths are approximate.



© 2023 SME

Support Conditions	CBR Range for Aggregate Base Materials (%)	CBR Range for Subgrade Soils (%)
Good	>80	>10
Marginal	60 to 80	5 to 10
Poor	30 to 60	3 to 5
Very Poor	<30	<3



\*\*Core picture shows approximate thickness  
 CORE LOG DCP 1 meter rod (standard).XLS ver. 2/7/14- Sand DCP



1925 BRETON ROAD, SE SUITE 100  
 GRAND RAPIDS, MICH. 49506

HRC JOB NO.  
20230591

DATE  
11/06/2023

RIVERVIEW DR 3" MILL AND RESURFACE PROJECT

BORE - B2

SHEET NO.

30 OF 38

11/2/2023 10:54 AM

HRC\_OLW.ctb

V:\202305\20230591\C\Sheets\JN20230591\_bores.dwg

APPROVED

CHECKED

DRAWN

DESIGNED

# RIVERVIEW DR 3" MILL AND RESURFACE PROJECT / HRC JOB NO. 20230591

DocuSign Envelope ID: 48B1A4FF-085C-4E02-A578-CD7D9039649B



## BORING DATA SHEET

PROJECT NAME: Riverview Drive Resurfacing  
 PROJECT NO.: 093806.00  
 LOCATION: Kalamazoo, Michigan  
 CLIENT: Hubbell, Roth & Clark, Inc.  
 DATE: 8/23/23  
 DRILLED BY: TMB / JWM  
 LOGGED BY: JWM / ZLM

BORING: B3  
 STREET: Riverview Drive  
 LANE: Southbound Inside Lane  
 OFFSET: 4 Feet West of Centerline  
 GROUND EL: Not Determined

### PAVEMENT AND SUBSURFACE CONDITIONS

Layer, in.		Layer Thickness, in.	Description	Comment
From	To			
0	3 1/4	3 1/4	ASPHALT PAVEMENT	Intact - Layer Change at 1.75"
3 1/4	11 1/2	8 1/4	PORTLAND CEMENT CONCRETE	Intact - Re-steel Observed at 7.5"
11 1/2	54	42 1/2	FILL - Fine to Medium SILTY SAND - Occasional Silt Layers - Dark Brown - Moist (SM)	
54	66	12	Fine to Medium CLAYEY SAND - Frequent Clay and Topsoil Seams - Dark Brown - Moist (SC)	Loss-on-ignition = 3.9% at 56" - Petroleum Odor Noted in Sample
66	96	30	Fine to Medium SILTY to CLAYEY SAND - Brown and Gray - Moist to Wet (SM/SC)	
96	132	36	Fine to Medium SAND with Silt - Brown and Gray - Wet (SP-SM)	Petroleum Odor Noted in Sample
132	156	24	Fine to Coarse SAND with Gravel - Brown - Wet (SP)	
<b>End of Boring at 13 Feet</b>				

Depth to Groundwater From Ground Surface  
 Upon Completion: 7 Feet

#### NOTES:

- 1) The indicated stratification lines are approximate. In situ, the transition between materials may be gradual.
- 2) HP = Hand Penetrometer. KSF = Kips per Square Foot (Shear Strength). MC = Moisture Content.

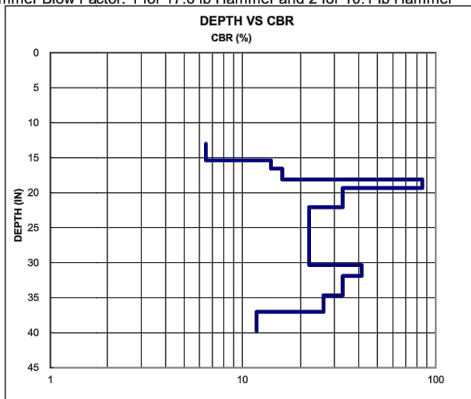
### DCP TEST RESULTS

Depth to start of test from ex. ground surface: 13 inches

No. of Blows	Pen. (mm)	Blow Set (mm)	Pen./Blow (mm)	Blow Factor	Depth from Surface (inches)	CBR (%)	Comment	Soil Type	Average CBR (%)
0	450	0							
2	510	60	30	1	15.4	6.5	Marginal	Subgrade	
2	540	30	15	1	16.5	14.1	Good	Subgrade	
3	580	40	13	1	18.1	16.0	Good	Subgrade	
10	610	30	3	1	19.3	85.3	Good	Subgrade	
10	680	70	7	1	22.1	33.0	Good	Subgrade	
7	750	70	10	1	24.8	22.2	Good	Subgrade	
7	820	70	10	1	27.6	22.2	Good	Subgrade	
7	890	70	10	1	30.3	22.2	Good	Subgrade	
7	930	40	6	1	31.9	41.5	Good	Subgrade	
10	1000	70	7	1	34.7	33.0	Good	Subgrade	
7	1060	60	9	1	37.0	26.3	Good	Subgrade	
4	1130	70	18	1	39.8	11.8	Good	Subgrade	25.5

Hammer Blow Factor: 1 for 17.6 lb Hammer and 2 for 10.1 lb Hammer

\*CBR breaklines are based on blow counts performed prior to sampling. Depths are approximate.



Support Conditions	CBR Range for Aggregate Base Materials (%)	CBR Range for Subgrade Soils (%)
Good	>80	>10
Marginal	60 to 80	5 to 10
Poor	30 to 60	3 to 5
Very Poor	<30	<3



\*\*Core picture shows approximate thickness  
 CORE LOG DCP 1 meter rod (standard).XLS ver. 2/7/14- Sand DCP

© 2023 SME



1925 BRETON ROAD, SE SUITE 100  
 GRAND RAPIDS, MICH. 49506

HRC JOB NO.  
20230591

DATE  
11/06/2023

RIVERVIEW DR 3" MILL AND RESURFACE PROJECT

BORE - B3

SHEET NO.

31 OF 38

11/2/2023 10:54 AM

HRC\_OLW.ctb

V:\202305\20230591\C\Sheets\JN20230591\_bores.dwg

APPROVED

CHECKED

DRAWN

DESIGNED

# RIVERVIEW DR 3" MILL AND RESURFACE PROJECT / HRC JOB NO. 20230591

DocuSign Envelope ID: 48B1A4FF-085C-4E02-A578-CD7D9039649B



## BORING DATA SHEET

PROJECT NAME: Riverview Drive Resurfacing  
 PROJECT NO.: 093806.00  
 LOCATION: Kalamazoo, Michigan  
 CLIENT: Hubbell, Roth & Clark, Inc.  
 DATE: 8/23/23  
 DRILLED BY: TMB / JWM  
 LOGGED BY: JWM / ZLM

BORING: B4  
 STREET: Riverview Drive  
 LANE: Southbound Outside Lane  
 OFFSET: 19 Feet West of Centerline  
 GROUND EL: Not Determined

### PAVEMENT AND SUBSURFACE CONDITIONS

Layer, in.		Layer Thickness, in.	Description	Comment
From	To			
0	2 1/2	2 1/2	ASPHALT PAVEMENT	Vertical Cracks - Delaminated at Bottom
2 1/2	11	8 1/2	PORTLAND CEMENT CONCRETE	Deteriorated into Pieces above 8" - Re-steel Observed at 9.5"
11	26	15	FILL - Fine to Medium SAND with Silt - Dark Brown and Brown - Moist (SP-SM)	
26	48	22	Fine to Medium SAND with Silt - Brown - Moist (SP-SM)	
48	60	12	Fine to Medium SAND - Brown - Moist (SP)	
End of Boring at 5 Feet				

Depth to Groundwater From Ground Surface  
 Upon Completion: Not Encountered

#### NOTES:

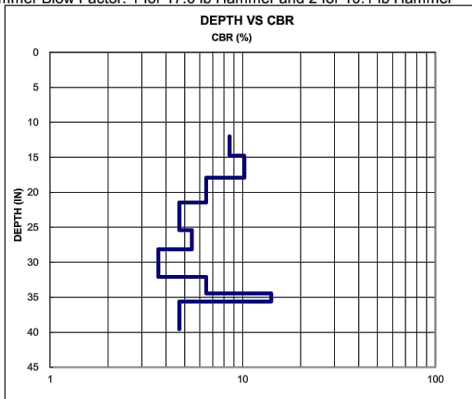
- The indicated stratification lines are approximate. In situ, the transition between materials may be gradual.
- HP = Hand Penetrometer. KSF = Kips per Square Foot (Shear Strength). MC = Moisture Content.

### DCP TEST RESULTS

No. of Blows	Pen. (mm)	Blow Set (mm)	12 inches		Depth from Surface (inches)	CBR (%)	Comment	Soil Type	Average CBR (%)
			Pen./Blow (mm)	Blow Factor					
0	440	0							
6	510	70	12	2	14.8	8.6	Marginal	Subgrade	
8	590	80	10	2	17.9	10.2	Good	Subgrade	
6	680	90	15	2	21.4	6.5	Marginal	Subgrade	8.3
5	780	100	20	2	25.4	4.7	Poor	Subgrade	
4	850	70	18	2	28.1	5.4	Marginal	Subgrade	
4	950	100	25	2	32.1	3.7	Poor	Subgrade	4.5
4	1010	60	15	2	34.4	6.5	Marginal	Subgrade	
4	1040	30	8	2	35.6	14.1	Good	Subgrade	
5	1140	100	20	2	39.6	4.7	Poor	Subgrade	6.7

Hammer Blow Factor: 1 for 17.6 lb Hammer and 2 for 10.1 lb Hammer

\*CBR breaklines are based on blow counts performed prior to sampling. Depths are approximate.



© 2023 SME

Support Conditions	CBR Range for Aggregate Base Materials (%)	CBR Range for Subgrade Soils (%)
Good	>80	>10
Marginal	60 to 80	5 to 10
Poor	30 to 60	3 to 5
Very Poor	<30	<3



\*\*Core picture shows approximate thickness  
 CORE LOG DCP 1 meter rod (standard).XLS ver. 2/7/1 4- Sand DCP



1925 BRETON ROAD, SE SUITE 100  
 GRAND RAPIDS, MICH. 49506

HRC JOB NO.  
20230591

DATE  
11/06/2023

RIVERVIEW DR 3" MILL AND RESURFACE PROJECT

BORE - B4

SHEET NO.

32 OF 38



11/2/2023 10:54 AM

HRC\_OLW.ctb

V:\202305\20230591\C\Sheets\JN20230591\_bores.dwg

APPROVED

CHECKED

DRAWN

DESIGNED

# RIVERVIEW DR 3" MILL AND RESURFACE PROJECT / HRC JOB NO. 20230591

DocuSign Envelope ID: 48B1A4FF-085C-4E02-A578-CD7D9039649B



## BORING DATA SHEET

PROJECT NAME: Riverview Drive Resurfacing  
 PROJECT NO.: 093806.00  
 LOCATION: Kalamazoo, Michigan  
 CLIENT: Hubbell, Roth & Clark, Inc.  
 DATE: 8/23/23  
 DRILLED BY: TMB / JWM  
 LOGGED BY: JWM / ZLM

BORING: B5  
 STREET: Riverview Drive  
 LANE: Northbound Outside Lane  
 OFFSET: 14 Feet East of Centerline  
 GROUND EL: Not Determined

### PAVEMENT AND SUBSURFACE CONDITIONS

Layer, in.		Layer Thickness, in.	Description	Comment
From	To			
0	2	2	ASPHALT PAVEMENT	Partially Deteriorated - Delaminated at Bottom
2	11	9	PORTLAND CEMENT CONCRETE	Horizontal Crack at 5.5" - Resteel Observed at 5.5"
11	24	13	FILL - Fine to Medium SILTY SAND - Dark Brown and Brown - Moist (SM)	
24	60	36	Fine to Medium SAND - Brown - Moist (SP)	
End of Boring at 5 Feet				

Depth to Groundwater From Ground Surface  
 Upon Completion: Not Encountered

#### NOTES:

- 1) The indicated stratification lines are approximate. In situ, the transition between materials may be gradual.
- 2) HP = Hand Penetrometer. KSF = Kips per Square Foot (Shear Strength). MC = Moisture Content.

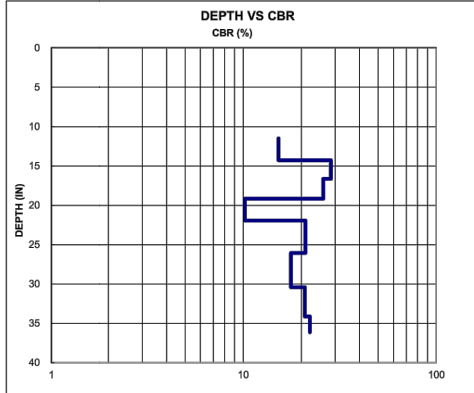
### DCP TEST RESULTS

Depth to start of test from ex. ground surface: 11.5 inches

No. of Blows	Pen. (mm)	Blow Set (mm)	Pen./Blow (mm)	Blow Factor	Depth from Surface (inches)	CBR (%)	Comment	Soil Type	Average CBR (%)
0	445	0							
10	515	70	7	2	14.3	15.2	Good	Subgrade	
15	575	60	4	2	16.6	28.4	Good	Subgrade	
15	640	65	4	2	19.2	26.0	Good	Subgrade	
7	710	70	10	2	21.9	10.2	Good	Subgrade	
20	815	105	5	2	26.1	21.0	Good	Subgrade	
18	925	110	6	2	30.4	17.7	Good	Subgrade	
18	1020	95	5	2	34.1	20.8	Good	Subgrade	
10	1070	50	5	2	36.1	22.2	Good	Subgrade	19.9

Hammer Blow Factor: 1 for 17.6 lb Hammer and 2 for 10.1 lb Hammer

\*CBR breaklines are based on blow counts performed prior to sampling. Depths are approximate.



Support Conditions	CBR Range for Aggregate Base Materials (%)	CBR Range for Subgrade Soils (%)
Good	>80	>10
Marginal	60 to 80	5 to 10
Poor	30 to 60	3 to 5
Very Poor	<30	<3



\*\*Core picture shows approximate thickness  
 CORE LOG DCP 1 meter rod (standard).XLS ver. 2/7/14 - Sand DCP

© 2023 SME

**HRC**  
**HUBBELL, ROTH & CLARK, INC**  
 CONSULTING ENGINEERS SINCE 1915  
 1925 BRETON ROAD, SE SUITE 100  
 GRAND RAPIDS, MICH. 49506

HRC JOB NO. 20230591	RIVERVIEW DR 3" MILL AND RESURFACE PROJECT	SHEET NO. 33 OF 38
DATE 11/06/2023	BORE - B5	

11/2/2023 10:54 AM

HRC\_OLW.ctb

V:\202305\20230591\C\Sheets\JN20230591\_bores.dwg

APPROVED

CHECKED

DRAWN

DESIGNED

# RIVERVIEW DR 3" MILL AND RESURFACE PROJECT / HRC JOB NO. 20230591

DocuSign Envelope ID: 48B1A4FF-085C-4E02-A578-CD7D9039649B



## BORING DATA SHEET

PROJECT NAME: Riverview Drive Resurfacing  
 PROJECT NO.: 093806.00  
 LOCATION: Kalamazoo, Michigan  
 CLIENT: Hubbell, Roth & Clark, Inc.  
 DATE: 8/23/23  
 DRILLED BY: TMB / JWM  
 LOGGED BY: JWM / ZLM

BORING: B6  
 STREET: Riverview Drive  
 LANE: Northbound Inside Lane  
 OFFSET: 3 Feet East of Centerline  
 GROUND EL.: Not Determined

### PAVEMENT AND SUBSURFACE CONDITIONS

Layer, in.		Layer Thickness, in.	Description	Comment
From	To			
0	3 1/2	3 1/2	ASPHALT PAVEMENT	Intact - Layer Change at 1.75" - Delaminated at Bottom
3 1/2	11	7 1/2	PORTLAND CEMENT CONCRETE	Intact - No Resteele Observed
11	30	19	FILL - Fine to Medium SILTY SAND - Occasional Topsoil Seams and Asphalt Pieces - Dark Brown - Moist (SM)	
30	54	24	FILL - Fine to Coarse SAND with Silt - Brown - Moist (SP-SM)	
54	60	6	Fine to Medium SAND - Brown - Moist (SP)	
End of Boring at 5 Feet				

Depth to Groundwater From Ground Surface  
 Upon Completion: Not Encountered

#### NOTES:

- The indicated stratification lines are approximate. In situ, the transition between materials may be gradual.
- HP = Hand Penetrometer. KSF = Kips per Square Foot (Shear Strength). MC = Moisture Content.

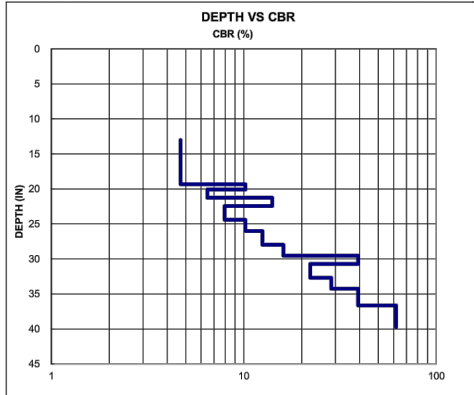
### DCP TEST RESULTS

Depth to start of test from ex. ground surface: 13 inches

No. of Blows	Pen. (mm)	Blow Set (mm)	Pen./Blow (mm)	Blow Factor	Depth from Surface (inches)	CBR (%)	Comment	Soil Type	Average CBR (%)
0	450	0							
1	490	40	40	1	14.6	4.7	Poor	Subgrade	
1	530	40	40	1	16.1	4.7	Poor	Subgrade	
1	570	40	40	1	17.7	4.7	Poor	Subgrade	
1	610	40	40	1	19.3	4.7	Poor	Subgrade	4.7
1	630	20	20	1	20.1	10.2	Good	Subgrade	
1	660	30	30	1	21.3	6.5	Marginal	Subgrade	
2	690	30	15	1	22.4	14.1	Good	Subgrade	
2	740	50	25	1	24.4	7.9	Marginal	Subgrade	
2	780	40	20	1	26.0	10.2	Good	Subgrade	
3	830	50	17	1	28.0	12.5	Good	Subgrade	
3	870	40	13	1	29.5	16.0	Good	Subgrade	
5	900	30	6	1	30.7	39.3	Good	Subgrade	
5	950	50	10	1	32.7	22.2	Good	Subgrade	
5	990	40	8	1	34.3	28.4	Good	Subgrade	
10	1050	60	6	1	36.6	39.3	Good	Subgrade	
10	1090	40	4	1	38.2	61.8	Good	Subgrade	
10	1130	40	4	1	39.8	61.8	Good	Subgrade	26.2

Hammer Blow Factor: 1 for 17.6 lb Hammer and 2 for 10.1 lb Hammer

\*CBR breaklines are based on blow counts performed prior to sampling. Depths are approximate.



© 2023 SME

Support Conditions	CBR Range for Aggregate Base Materials (%)	CBR Range for Subgrade Soils (%)
Good	>80	>10
Marginal	60 to 80	5 to 10
Poor	30 to 60	3 to 5
Very Poor	<30	<3



\*\*Core picture shows approximate thickness  
CORE LOG DCP 1 meter rod (standard).XLS ver. 2/7/14 - Sand DCP



1925 BRETON ROAD, SE SUITE 100  
 GRAND RAPIDS, MICH. 49506

HRC JOB NO. 20230591

DATE 11/06/2023

RIVERVIEW DR 3" MILL AND RESURFACE PROJECT

BORE - B6

SHEET NO.

34 OF 38

11/2/2023 10:54 AM

HRC\_OLW.ctb

V:\202305\20230591\C\Sheets\JN20230591\_bores.dwg

APPROVED

CHECKED

DRAWN

DESIGNED

# RIVERVIEW DR 3" MILL AND RESURFACE PROJECT / HRC JOB NO. 20230591

DocuSign Envelope ID: 48B1A4FF-085C-4E02-A578-CD7D9039649B



## BORING DATA SHEET

PROJECT NAME: Riverview Drive Resurfacing  
 PROJECT NO.: 093806.00  
 LOCATION: Kalamazoo, Michigan  
 CLIENT: Hubbell, Roth & Clark, Inc.  
 DATE: 8/23/23  
 DRILLED BY: TMB / JWM  
 LOGGED BY: JWM / ZLM

BORING: B7  
 STREET: Riverview Drive  
 LANE: Southbound Inside Lane  
 OFFSET: 5 Feet West of Centerline  
 GROUND EL: Not Determined

### PAVEMENT AND SUBSURFACE CONDITIONS

Layer, in.		Layer Thickness, in.	Description	Comment
From	To			
0	3	3	ASPHALT PAVEMENT	Intact - Layer Change at 1.5" - Delaminated at Bottom
3	11 1/2	8 1/2	PORTLAND CEMENT CONCRETE	Intact - Resteel Observed at 6.75"
11 1/2	52	40 1/2	FILL - Fine to Medium SILTY SAND with Gravel - Dark Brown and Brown - Moist (SM)	
52	60	8	Fine to Medium SAND - Brown - Moist (SP)	
End of Boring at 5 Feet				

Depth to Groundwater From Ground Surface  
 Upon Completion: Not Encountered

#### NOTES:

- 1) The indicated stratification lines are approximate. In situ, the transition between materials may be gradual.
- 2) HP = Hand Penetrometer. KSF = Kips per Square Foot (Shear Strength). MC = Moisture Content.

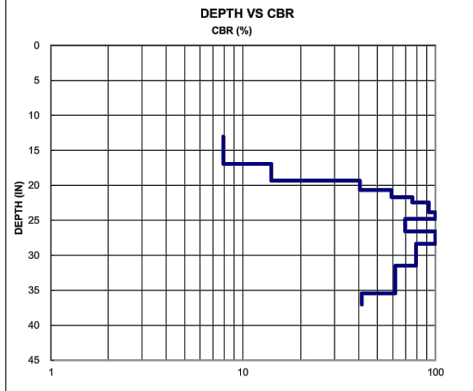
### DCP TEST RESULTS

Depth to start of test from ex. ground surface: 13 inches

No. of Blows	Pen. (mm)	Blow Set (mm)	Pen./Blow (mm)	Blow Factor	Depth from Surface (inches)	CBR (%)	Comment	Soil Type	Average CBR (%)
0	450	0		2					
8	550	100	13	2	16.9	7.9	Marginal	Subgrade	
8	610	60	8	2	19.3	14.1	Good	Subgrade	
12	645	35	3	2	20.7	40.5	Good	Subgrade	
12	670	25	2	2	21.7	59.0	Good	Subgrade	
12	690	20	2	2	22.4	75.8	Good	Subgrade	
25	725	35	1	2	23.8	92.2	Good	Subgrade	
25	750	25	1	2	24.8	100.0	Good	Subgrade	
25	795	45	2	2	26.6	69.6	Good	Subgrade	
25	820	25	1	2	27.6	100.0	Good	Subgrade	
16	840	20	1	2	28.4	100.0	Good	Subgrade	
25	920	80	3	1	31.5	79.4	Good	Subgrade	
25	1020	100	4	1	35.4	61.8	Good	Subgrade	
7	1060	40	6	1	37.0	41.5	Good	Subgrade	55.1

Hammer Blow Factor: 1 for 17.6 lb Hammer and 2 for 10.1 lb Hammer

\*CBR breaklines are based on blow counts performed prior to sampling. Depths are approximate.



Support Conditions	CBR Range for Aggregate Base Materials (%)	CBR Range for Subgrade Soils (%)
Good	>80	>10
Marginal	60 to 80	5 to 10
Poor	30 to 60	3 to 5
Very Poor	<30	<3



\*\*Core picture shows approximate thickness  
 CORE LOG DCP 1 meter rod (standard).XLS ver. 2/7/14-Sand DCP

© 2023 SME

**HRC**  
**HUBBELL, ROTH & CLARK, INC**  
 CONSULTING ENGINEERS SINCE 1915  
 1925 BRETON ROAD, SE SUITE 100  
 GRAND RAPIDS, MICH. 49506

HRC JOB NO.  
20230591  
 DATE  
11/06/2023

RIVERVIEW DR 3" MILL AND RESURFACE PROJECT  
 BORE - B7

SHEET NO.  
35 OF 38

11/2/2023 10:54 AM

HRC\_OLW.ctb

V:\202305\20230591\C\Sheets\JN20230591\_bores.dwg

APPROVED

CHECKED

DRAWN

DESIGNED

# RIVERVIEW DR 3" MILL AND RESURFACE PROJECT / HRC JOB NO. 20230591

DocuSign Envelope ID: 48B1A4FF-085C-4E02-A578-CD7D9039649B



## BORING DATA SHEET

PROJECT NAME: Riverview Drive Resurfacing  
 PROJECT NO.: 093806.00  
 LOCATION: Kalamazoo, Michigan  
 CLIENT: Hubbell, Roth & Clark, Inc.  
 DATE: 8/23/23  
 DRILLED BY: TMB / JWM  
 LOGGED BY: JWM / ZLM

BORING: B8  
 STREET: Riverview Drive  
 LANE: Northbound Outside Lane  
 OFFSET: 16 Feet East of Centerline  
 GROUND EL: Not Determined

### PAVEMENT AND SUBSURFACE CONDITIONS

Layer, in.		Layer Thickness, in.	Description	Comment
From	To			
0	3 3/4	3 3/4	ASPHALT PAVEMENT	Partially Deteriorated - Deteriorated Below 2"
3 3/4	11	7 1/4	PORTLAND CEMENT CONCRETE	Vertical Cracks - Resteel at 7" - Deteriorated into Pieces Below 7.5"
11	36	25	FILL - Fine to Medium SILTY SAND with Gravel - Brown - Moist (SM)	
36	60	24	Fine to Medium SAND - Brown - Moist (SP)	
End of Boring at 5 Feet				

Depth to Groundwater From Ground Surface  
 Upon Completion: Not Encountered

#### NOTES:

- The indicated stratification lines are approximate. In situ, the transition between materials may be gradual.
- HP = Hand Penetrometer. KSF = Kips per Square Foot (Shear Strength). MC = Moisture Content.

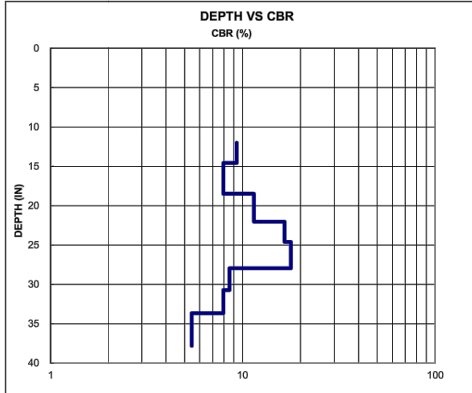
### DCP TEST RESULTS

Depth to start of test from ex. ground surface: 12 inches

No. of Blows	Pen. (mm)	Blow Set (mm)	Pen./Blow (mm)	Blow Factor	Depth from Surface (inches)	CBR (%)	Comment	Soil Type	Average CBR (%)
0	465	0							
3	530	65	22	1	14.6	9.3	Marginal	Subgrade	
4	630	100	25	1	18.5	7.9	Marginal	Subgrade	
5	720	90	18	1	22.0	11.5	Good	Subgrade	
5	785	65	13	1	24.6	16.5	Good	Subgrade	
7	870	85	12	1	27.9	17.8	Good	Subgrade	
3	940	70	23	1	30.7	8.6	Marginal	Subgrade	
3	1015	75	25	1	33.7	7.9	Marginal	Subgrade	
3	1120	105	35	1	37.8	5.4	Marginal	Subgrade	10.4

Hammer Blow Factor: 1 for 17.6 lb Hammer and 2 for 10.1 lb Hammer

\*CBR breaklines are based on blow counts performed prior to sampling. Depths are approximate.



Support Conditions	CBR Range for Aggregate Base Materials (%)	CBR Range for Subgrade Soils (%)
Good	>80	>10
Marginal	60 to 80	5 to 10
Poor	30 to 60	3 to 5
Very Poor	<30	<3



\*\*Core picture shows approximate thickness  
 CORE LOG DCP 1 meter rod (standard).XLS ver. 2/7/14-Sand DCP

© 2023 SME

**HRC**  
**HUBBELL, ROTH & CLARK, INC**  
 CONSULTING ENGINEERS SINCE 1915  
 1925 BRETON ROAD, SE SUITE 100  
 GRAND RAPIDS, MICH. 49506

HRC JOB NO.  
 20230591  
 DATE  
 11/06/2023

RIVERVIEW DR 3" MILL AND RESURFACE PROJECT  
 BORE - B8

SHEET NO.  
 36 OF 38



11/2/2023 10:54 AM

HRC\_OLW.ctb

V:\202305\20230591\C\Sheets\JN20230591\_bores.dwg

APPROVED

CHECKED

DRAWN

DESIGNED

# RIVERVIEW DR 3" MILL AND RESURFACE PROJECT / HRC JOB NO. 20230591

DocuSign Envelope ID: 48B1A4FF-085C-4E02-A578-CD7D9039649B



## BORING DATA SHEET

PROJECT NAME: Riverview Drive Resurfacing  
 PROJECT NO.: 093806.00  
 LOCATION: Kalamazoo, Michigan  
 CLIENT: Hubbell, Roth & Clark, Inc.  
 DATE: 8/23/23  
 DRILLED BY: TMB / JWM  
 LOGGED BY: JWM / ZLM

BORING: B9  
 STREET: Riverview Drive  
 LANE: Southbound Outside Lane  
 OFFSET: 16 Feet West of Centerline  
 GROUND EL: Not Determined

### PAVEMENT AND SUBSURFACE CONDITIONS

Layer, in.		Layer Thickness, in.	Description	Comment
From	To			
0	2 1/2	2 1/2	ASPHALT PAVEMENT	Intact - Layer Change at 1.75"
2 1/2	10	7 1/2	PORTLAND CEMENT CONCRETE	Intact - Resteeel Observed at 5.5"
10	30	20	FILL - Fine to Medium SAND with Silt - Occasional Clay Layers - Dark Brown and Brown - Moist (SP-SM)	
30	48	18	FILL - Fine SAND - Brown - Moist (SP)	
48	60	12	FILL - Fine to Medium SILTY SAND - Occasional Topsoil Layers - Brown to Dark Brown - Moist (SM)	Loss-on-ignition = 3.5% at 58" (Test performed on a topsoil layer)
			<b>End of Boring at 5 Feet</b>	

Depth to Groundwater From Ground Surface  
 Upon Completion: Not Encountered

#### NOTES:

- The indicated stratification lines are approximate. In situ, the transition between materials may be gradual.
- HP = Hand Penetrometer. KSF = Kips per Square Foot (Shear Strength). MC = Moisture Content.

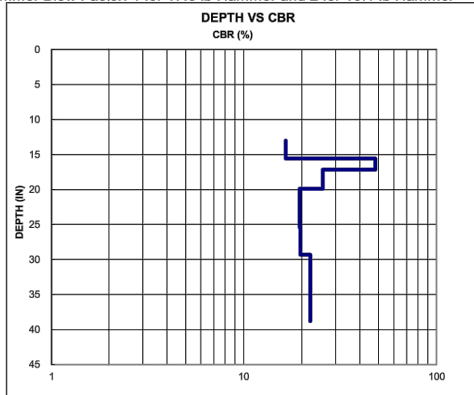
### DCP TEST RESULTS

Depth to start of test from ex. ground surface: 13 inches

No. of Blows	Pen. (mm)	Blow Set (mm)	Pen./Blow (mm)	Blow Factor	Depth from Surface (inches)	CBR (%)	Comment	Soil Type	Average CBR (%)
0	425	0							
10	490	65	7	2	15.6	16.5	Good	Subgrade	
16	530	40	3	2	17.1	48.1	Good	Subgrade	
16	600	70	4	2	19.9	25.7	Good	Subgrade	
25	740	140	6	2	25.4	19.5	Good	Subgrade	
18	840	100	6	2	29.3	19.7	Good	Subgrade	
20	940	100	5	2	33.3	22.2	Good	Subgrade	
8	980	40	5	2	34.9	22.2	Good	Subgrade	
10	1030	50	5	2	36.8	22.2	Good	Subgrade	
10	1080	50	5	2	38.8	22.2	Good	Subgrade	22.6

Hammer Blow Factor: 1 for 17.6 lb Hammer and 2 for 10.1 lb Hammer

\*CBR breaklines are based on blow counts performed prior to sampling. Depths are approximate.



Support Conditions	CBR Range for Aggregate Base Materials (%)	CBR Range for Subgrade Soils (%)
Good	>80	>10
Marginal	60 to 80	5 to 10
Poor	30 to 60	3 to 5
Very Poor	<30	<3



\*\*Core picture shows approximate thickness  
 CORE LOG DCP 1 meter rod (standard).XLS ver. 2/7/14 - Sand DCP

© 2023 SME

**HRC**  
**HUBBELL, ROTH & CLARK, INC**  
 CONSULTING ENGINEERS SINCE 1915  
 1925 BRETON ROAD, SE SUITE 100  
 GRAND RAPIDS, MICH. 49506

HRC JOB NO. 20230591	RIVERVIEW DR 3" MILL AND RESURFACE PROJECT	SHEET NO. 37 OF 38
DATE 11/06/2023	BORE - B9	

11/2/2023 10:54 AM

HRC\_OLW.ctb

V:\202305\20230591\C\Sheets\JN20230591\_bores.dwg

APPROVED

CHECKED

DRAWN

DESIGNED

# RIVERVIEW DR 3" MILL AND RESURFACE PROJECT / HRC JOB NO. 20230591

DocuSign Envelope ID: 48B1A4FF-085C-4E02-A578-CD7D9039649B



## BORING DATA SHEET

PROJECT NAME: Riverview Drive Resurfacing  
 PROJECT NO.: 093806.00  
 LOCATION: Kalamazoo, Michigan  
 CLIENT: Hubbell, Roth & Clark, Inc.  
 DATE: 8/23/23  
 DRILLED BY: TMB / JWM  
 LOGGED BY: JWM / ZLM

BORING: B10  
 STREET: Riverview Drive  
 LANE: Northbound Outside Lane  
 OFFSET: 15 Feet East of Centerline  
 GROUND EL: Not Determined

### PAVEMENT AND SUBSURFACE CONDITIONS

Layer, in.		Layer Thickness, in.	Description	Comment
From	To			
0	3	3	ASPHALT PAVEMENT	Intact - Layer Change at 1.5" - Delaminated at Bottom
3	10 1/2	7 1/2	PORTLAND CEMENT CONCRETE	Intact - Resteel Observed at 5"
10 1/2	22	11 1/2	FILL - Fine to Medium SILTY SAND - Brown and Dark Brown - Moist (SM)	
22	36	14	FILL - CLAYEY SILT - Occasional Topsoil and Sand Layers - Dark Gray - Very Stiff (CL/ML)	LOI = 4.6% at 32" (See Note 3) HP = 2.25 KSF & MC = 23% at 32"
36	60	24	Fine to Medium SILTY SAND - Trace Organics - Gray - Moist (SM)	Loss-on-ignition = 3.0% at 54"
<b>End of Boring at 5 Feet</b>				

Depth to Groundwater From Ground Surface  
 Upon Completion: Not Encountered

#### NOTES:

- 1) The indicated stratification lines are approximate. In situ, the transition between materials may be gradual.
- 2) HP = Hand Penetrometer. KSF = Kips per Square Foot (Shear Strength). MC = Moisture Content.
- 3) LOI = Loss-on-ignition. Test performed on a topsoil layer.

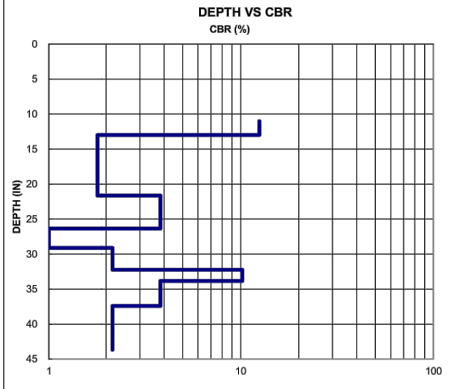
### DCP TEST RESULTS

Depth to start of test from ex. ground surface: 11 inches

No. of Blows	Pen. (mm)	Blow Set (mm)	Pen./Blow (mm)	Blow Factor	Depth from Surface (inches)	CBR (%)	Comment	Soil Type	Average CBR (%)
0	280	0							
3	330	50	17	1	13.0	12.5	Good	Subgrade	12.5
5	550	220	44	1	21.6	1.8	Very Poor	Subgrade	
4	670	120	30	1	26.4	3.8	Poor	Subgrade	
1	740	70	70	1	29.1	0.7	Very Poor	Subgrade	
2	820	80	40	1	32.3	2.2	Very Poor	Subgrade	
2	860	40	20	1	33.8	10.2	Good	Subgrade	
3	950	90	30	1	37.4	3.8	Poor	Subgrade	
2	1030	80	40	1	40.5	2.2	Very Poor	Subgrade	
2	1110	80	40	1	43.7	2.2	Very Poor	Subgrade	2.8

Hammer Blow Factor: 1 for 17.6 lb Hammer and 2 for 10.1 lb Hammer

\*CBR breaklines are based on blow counts performed prior to sampling. Depths are approximate.



Support Conditions	CBR Range for Aggregate Base Materials (%)	CBR Range for Subgrade Soils (%)
Good	>80	>10
Marginal	60 to 80	5 to 10
Poor	30 to 60	3 to 5
Very Poor	<30	<3



\*\*Core picture shows approximate thickness  
 CORE LOG DCP 1 meter rod (standard) XLS ver. 2/7/1 4-Clay DCP

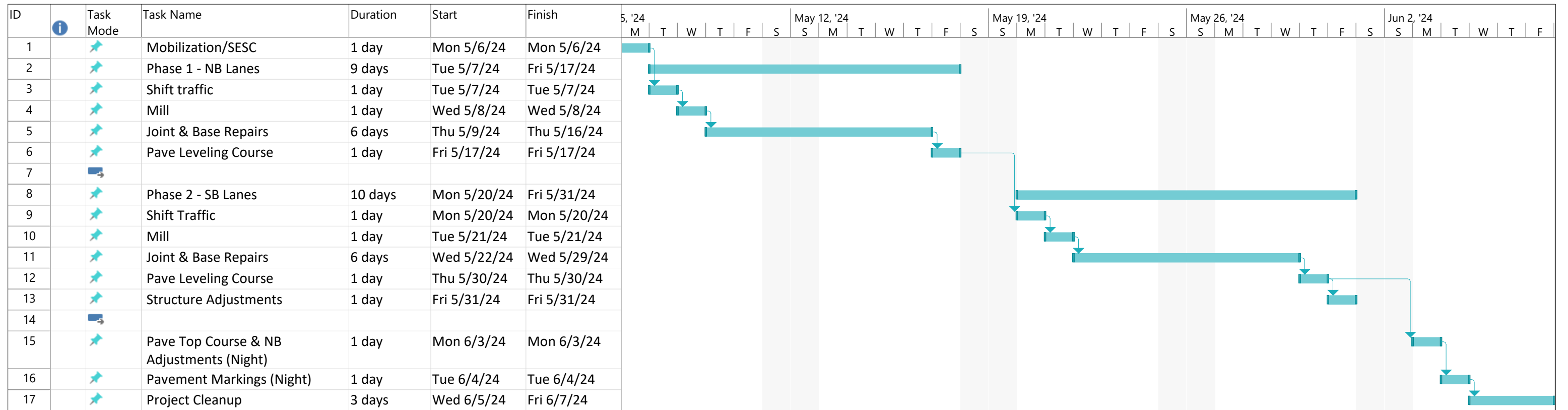
© 2023 SME

**HRC**  
**HUBBELL, ROTH & CLARK, INC**  
 CONSULTING ENGINEERS SINCE 1915  
 1925 BRETON ROAD, SE SUITE 100  
 GRAND RAPIDS, MICH. 49506

HRC JOB NO.  
20230591  
 DATE  
11/06/2023

RIVERVIEW DR 3" MILL AND RESURFACE PROJECT  
 BORE - B10

SHEET NO.  
38 OF 38



Project: Riverview_Construction Date: Thu 10/26/23	Task		Project Summary		Manual Task		Start-only		Deadline	
	Split		Inactive Task		Duration-only		Finish-only		Progress	
	Milestone		Inactive Milestone		Manual Summary Rollup		External Tasks		Manual Progress	
	Summary		Inactive Summary		Manual Summary		External Milestone			

**APPENDIX D  
SPECIAL PROVISIONS**



**THE CITY OF KALAMAZOO  
DEPARTMENT OF PUBLIC SERVICES  
ENGINEERING DIVISION**

**SPECIAL PROVISIONS**

**Riverview Drive Resurfacing**

**Bid Reference #: 91396-019.0**



CITY OF KALAMAZOO

**PROGRESS CLAUSE**

HRC

1 of 1

10/11/2023

**a.** The Contractor shall submit a complete, detailed and signed, Progress Schedule, to the Engineer, utilizing MDOT form number 1130.

**b.** The progress schedule shall include, at a minimum, the controlling work items for the completion of the project and the planned dates that the work items will be the controlling operations. All contract dates including open to traffic, project completion, interim completion and any other controlling dates in the contract must be included in the progress schedule.

**c.** After receiving Notice of Award, start work 10 calendar days after award or on a date approved by the Engineer. In no case may any work be commenced prior to receipt of formal notice of award by the City. The Engineer anticipates that construction can begin no earlier than **May 06, 2024**.

**d.** The project must be open to traffic, including final site restoration, permanent pavement markings and signs, punch-list, and/or project clean-up on or before **June 7, 2024**.

**e.** After award, and prior to the start of work, the Contractor must attend a preconstruction meeting with the Engineer. The Engineer will determine the day, time, and place for the preconstruction meeting. The meeting will be conducted after the project award and may be rescheduled if there are delays in the award of the project. The named subcontractor(s) for, Designated and/or Specialty Items, as shown in the proposal, is recommended to be at the preconstruction meeting if such items materially affect the work schedule.

**f.** Liquidated Damages shall be assessed in accordance with Section 108.10 for the 2020 Standard Specifications for Construction.

**g.** The Contractor may be required to meet for a post-construction review meeting, as directed by the Engineer. The Engineer will schedule the meeting.

**h.** Failure on the part of the Contractor to carry out the provisions of this Progress Clause may be considered sufficient cause to prevent bidding on future projects with the City.

CITY OF KALAMAZOO  
**COORDINATION CLAUSE**

HRC

1 of 1

10/11/2023

Other contracts or work activities may commence within the immediate area during the life of this contract.

The Contractor will conduct operations to cooperate with and interfere as little as possible with activities of other Contractors, Utilities, or other Public Agencies working within or adjacent to the construction limits of the project in accordance with the latest edition of the Michigan Department of Transportation's Standard Specifications for Construction.

The Contractor will take due account of all work, and will coordinate the work, along with storage of materials and equipment to cause minimum interference with the work being performed by others and City events.

No claims, extra compensation, or adjustment will be allowed on account of a delay or failure of others to complete work as scheduled.

After completing the milling and removal of existing pavement, and after the Engineer has determined the locations for full depth pavement repairs, the Contractor shall conduct a MISS DIG investigation (as outlined in the log or the plan set and these special provisions) and coordinate with any utility companies, within the project limits, to avoid disruption or damage to their facilities.

The Contractor shall notify and coordinate with the City of Kalamazoo's METRO bus system for temporary closure or relocation of bus stops and to avoid disruption of scheduled services.

CITY OF KALAMAZOO

NOTICE TO BIDDERS

**UTILITY COORDINATION**

HRC

1 of 1

10/11/23

For protection of underground utilities and in conformance with Public Act 174 of 2013, the Contractor will dial 1-800-482-7171 a minimum of three (3) 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.

Public Utilities

The following Public Utilities have facilities located within the right-of-way:

<b>Company</b>	<b>Contact</b>	<b>Phone</b>
AT&T	Philip Bardocz	(269) 823-3339
Charter Communications	Gary Wilson	(269) 792-0638
City of Kalamazoo – Sanitary	Ryan Stoughton	(269) 337-8736
City of Kalamazoo – Traffic	Dennis Randolph	(269) 337-8612
City of Kalamazoo –Water	Anna Crandall	(269) 337-8055
Consumers Energy – Electric	Andre Taylor	(269) 337-2245
Consumers Energy – Gas	Kyle Oak	(248) 249-7175
Lumen	Dave Huckfeldt	(517) 812-2592

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

The contractor will cooperate and coordinate construction activities with the owners of utilities as stated in section 104 for the 2020 MDOT Standard Specifications for Construction. In addition, for the protection of underground utilities, the contractor will follow the requirements in section 107 of the 2020 MDOT Standard Specifications for Construction. Contractor delay claims, resulting from a utility, will be determined based upon section 108 of the 2020 MDOT Standard - Specifications for Construction.

CITY OF KALAMAZOO  
SPECIAL PROVISION  
FOR  
**RELATIONS AND RESPONSIBILITY TO THE PUBLIC**

COK

1 of 1

09-18-23

- a. **Description.** The Contractor shall notify the Engineer when the first day of construction is planned no less than ten (10) business days prior to the start of the work. Following this correspondence, the City will issue a press release, media notice or other general form of notification to all the City's residents of the planned work. No work shall be performed prior to the issuance of this notice.

Additional notification shall be provided to the residents directly affected via door hanger notices no less than 72 hours before their street is planned to receive work. The Contractor will provide preprinted door hanger material to carry the Contractor's message. Message content must be approved by the Engineer prior to printing and distribution. The responsibility for filling out the door hangers and distributing them will be the Contractor's. Payment for this work will not be paid separately, but payment will be considered as having been included in the contract unit prices bid for other contract items. No work shall be performed prior to the distribution of these door hangers.

72 hours before every construction operation that will substantially affect a resident or business adjacent to the project site, (such as driveway closures, mailbox relocation, etc.) the Contractor will notify residents or businesses affected. The Contractor shall assist the City in coordination of work and mitigating impacts to the extent possible while maintaining construction schedules and ensuring project completion.

CITY OF KALAMAZOO  
SPECIAL PROVISION  
FOR  
**MAINTAINING TRAFFIC**

HRC

1 of 4

10-26-23

**a. Description.** This work shall consist of maintaining construction zone traffic and placing traffic control devices for Riverview Drive Resurface and any affected side streets as described in this special provision and as directed by the Engineer in the City of Kalamazoo, Michigan.

1. Phase 1:
  - A. Shift traffic utilizing Southbound travel lanes. Mill Northbound Riverside Drive to expose concrete for joint and base repairs. Perform Detail 8 and Asphalt Mastic repairs. Pave Northbound Riverside Drive leveling course after Repairs completed. Coordinate with the Metro to maintain bus stops.
  - B. Maximum closure length shall be no greater than 10 business days.
2. Phase 2:
  - A. Shift traffic utilizing Northbound travel lanes. Mill Southbound Riverside Drive to expose concrete for joint and base repairs. Perform Detail 8 and Asphalt Mastic repairs. Pave Southbound Riverside Drive leveling course after repairs completed. Coordinate with the Metro to maintain bus stops.
  - B. Maximum closure length shall be no greater than 10 business days.
  - C. After leveling, adjust drainage structures within Phase 2 limits.
3. Phase 3:
  - A. After Phase 2 has been completed, the Contractor shall proceed with Phase 3, no more than one (1) business day afterwards.
  - B. Adjust drainage structures within Phase 1 limits.
  - C. Pave Southbound and Northbound Riverside Drive Top Course at night. Install permanent pavement markings for Southbound and Northbound Riverside Drive at night. Two-way traffic shall be maintained at all times. Coordinate with the Metro to maintain bus stops.

**b. Materials.** Provide material in accordance with Sections 812 and 922 of the Michigan Department of Transportation (MDOT) Standard Specifications for Construction.

**c. Storage of Materials.** Location for storage of materials shall be addressed by the contractor in the City ROW permit and approved by the Engineer prior to the commencement of work. All maintenance of traffic materials shall be stored in the approved location(s). Any items not stored in the proper location shall be corrected no later than 24 hours after notice is given by the Engineer. Items found not stored in the approved locations or not corrected within the allotted time shall be grounds for the City to withhold payment for maintenance of traffic until corrected.

**d. Construction.** Traffic shall be maintained according to Chapter 6 of the Michigan Manual on Uniform Traffic Control Devices (MMUTCD) Guide to Sections 104.07, 104.11, 812, and 922 of the MDOT Standard Specifications for Construction, including any Supplemental Specifications, and as specified here.

1. The Contractor shall place Portable Changeable Message Signs (PCMS) two (2) weeks prior to the start of construction.
2. The Contractor shall notify the Project Engineer a minimum of 72 hours prior to the implementation of any detours, road closures, shoulder closures, or lane closures.
3. The Contractor shall coordinate his operations with Contractors performing work on other projects within or adjacent to the Construction Influence Area (CIA).
4. City of Kalamazoo (City), maintenance crews and/or Contract Maintenance Agencies may perform maintenance work within or adjacent to the CIA. The City and/or Contract Maintenance Agency will coordinate their operations with the Engineer to minimize the interference to the Contractor. No additional payment will be made to the Contractor for the joint use of the traffic control items.
5. The Contractor shall provide a traffic control plan for each phase of the project to the Engineer for approval by the Traffic Safety Department and the Engineer prior to beginning work requiring traffic control. The traffic control plan shall include all temporary signage, type II barricades, type III barricades, plastic drums, etc. and appropriate temporary pavement markings where needed.
6. Construction Influence Area (CIA). The CIA shall include the right-of-way of the following roadways, within the approximate limits described below:
  - A. 500 feet north/south and east/west of Riverview Drive from Gull Road to E. Michigan Avenue.
7. Traffic Restrictions and Construction Requirements.
  - A. All work for stage 1 and 2 shall be conducted during daytime hours unless otherwise specified herein or approved by the Engineer. Night work is permitted at the discretion of the Engineer. However, any additional cost for such work shall be borne by the Contractor.
  - B. All work for stage 3 shall be conducted during nighttime hours unless otherwise specified herein or approved by the Engineer. Day work may be permitted at the discretion of the Engineer. However, any additional cost for such work shall be borne by the Contractor.
  - C. Access for construction vehicles between the travel lanes and work areas will be restricted to specific locations. The number of access points and their locations will require the prior approval of the Engineer.
  - D. Undercuts or excavations immediately adjacent to active traffic lanes shall be restored to no less than a 1 on 4 slope at the end of each working period unless otherwise approved by the Engineer. Fencing shall be required to protect open trenches during non- working hours and shall be provided by the Contractor as

part of the trenching item utilized.

- E. Duration of driveway and alley closures shall be minimized. Contractor shall provide property owners with written notice a minimum of three (3) business days prior to the anticipated driveway and alley closure, and shall inform residents of the anticipated duration of the driveway or alley closure.
  - F. The Contractor shall maintain and coordinate daily waste pickup and deliveries to all business buildings affected by driveway, alley and road closures for this project.
  - G. Sidewalks or pathways in the project area shall be maintained at all times except in areas where sidewalk or pathway removal and replacement are ongoing. Sidewalk or pathways removed shall be replaced as soon as is feasibly possible.
  - H. Ingress and egress to all buildings and parking areas for pedestrians and vehicles shall be maintained.
  - I. Keep all side streets and alleys free of construction related materials, equipment, and activities to allow clear visibility and access to all properties and businesses.
  - J. Contractors, employees, and subcontractors shall not park vehicles or store equipment in areas that are needed for residential or adjacent commercial parking and at no time shall vehicles be parked or equipment stored on private property unless written permission is obtained from the property owner. Also, Contractors, employees and subcontractors shall not drive construction equipment of any kind on private property without written permission of the property owner.
  - K. Construction equipment and material storage shall not be allowed on top of existing areaways, pathways or sidewalks.
  - L. Street name signs shall be maintained within the construction area for the duration of the project. Street name signs shall be visible from all intersection corners. If the existing street name sign and support are to be removed, and there is no alternate support available, the Contractor shall erect a separate post & street name sign for this purpose. The cost for this work shall not be paid for separately but considered incidental to the pay items included for maintaining traffic.
  - M. Removing, obstructing, relocating or otherwise tampering with a regulatory traffic sign is prohibited unless approved by the Engineer and the City Traffic Safety Department. Where a conflict is foreseen or encountered, the sign(s) may be removed by the Contractor only upon installation of temporary signs(s) placed in accordance with the Michigan Manual of Uniform Traffic Control Devices (MMUTCD) at location(s) approved by the Engineer. Temporary signs shall be maintained by the Contractor until the existing permanent signs are reinstalled. The cost for this work shall be incidental to the pay items included for maintaining traffic.
8. Traffic Control Devices.
- A. General
    - i. All traffic control devices and their usage shall conform to the most current

revision of Part 6 of the Michigan Manual of Uniform Traffic Control Devices (MMUTCD).

- ii. During non-working periods, any work site with uncompleted work shall have advance signs (W21-4 - "Road Work Ahead") and plastic drums, at specific locations, as directed by the Engineer.

#### B. Temporary Signs

- i. Tables for "L", "D" and "B" values are provided in MDOT Traffic and Safety Typical 101-GEN-SPACING-CHARTS.
- ii. Temporary signs shall be on ground driven sign supports as shown in MDOT Traffic and Safety Figure WZD-100-A.
- iii. The signing for a one or two lane closure and traffic shift shall be as shown in the MDOT Traffic and Safety Typical 123-NFW-1LC-(R) and 122-NFW-SHL-(R).
- iv. All diamond-shaped warning signs shall be 48 inch x 48 inch mounted at a 7 foot minimum bottom height in curbed or pedestrian areas.
- v. Distances between construction warning, regulatory and guide signs shown on the Figures are approximate and may require field adjustment, as directed by the Engineer.
- vi. All temporary signs shall be constructed with legends and symbols flush to the sign face and not extending beyond the sign borders or edges.
- vii. All temporary signs shall be faced with prismatic retroreflective sheeting.
- viii. If necessary, the City will provide temporary neighborhood business signage (sign board only) for the purpose of directing the public to the various businesses within the Construction area. The Contractor shall be responsible for the installation, maintenance, and relocation of these signs as necessary to coincide with the various phases of the project. If included in the contract, the cost to install, maintain, and relocate these signs will be paid for under the item "Install and Maintain Temporary Neighborhood Business Signs".
- ix. Whenever a lane or obstruction is removed, all related construction signs shall be removed, turned away from traffic or otherwise made not visible to traffic.

#### C. Channelizing Devices

- i. Channeling devices required for maintaining one lane of traffic in each direction shall be Channelizing Device, 42 inch.

**e. Measurement and Payment.** The completed work shall be paid for at the contract unit price which shall include all materials, equipment and labor required to complete this work. Pay items are listed in the contract and invitation for bid documents.



CITY OF KALAMAZOO  
SPECIAL PROVISION  
FOR  
**COLD MILLING HMA AND CONCRETE PAVEMENT, MODIFIED**

HRC

1 of 1

09-14-23

**a. Description.** This work consists of accurately removing the top portion of an existing pavement section, whether hot mix asphalt, concrete, or a combination, to the depth and cross section shown on the log or plans, and as directed by the Engineer.

**b. Equipment.** Use cold milling machine(s) equipped with positive depth control adjustments and a positive means for controlling the cross slope. Equip the milling machine with an integral pickup and conveying device to immediately remove material being milled from the surface of the roadway and discharge the millings into a truck in one operation. Provide a machine with a means of effectively limiting the amount of dust escaping from the milling and removal process.

**c. Construction.** Cold mill the existing hot mix asphalt (HMA) and / or concrete pavement to the depth and cross section indicated on the log or plans, and as directed by the Engineer. When HMA pavement depth is greater than the indicated depth and cross section, remove additional HMA pavement until the underlying concrete is exposed. Collect and dispose of the excess material resulting from the operations as specified in subsections 104.07.D and 204.03.B of the MDOT Standard Specifications for Construction.

Provide a final surface texture that is reasonably smooth and free of gouges, holes, or large depressions. Prevent damage to the adjacent and below concrete. Where material is removed below the depth specified, due to poor cold-milling practice, backfill and compact the resulting holes or depressions by hand patching in accordance with subsection 501.03.C.9 of the MDOT Standard Specifications for Construction. Repair all damage to adjacent surfaces as directed by the Engineer. All costs associated with this corrective work will be borne by the Contractor.

Provide protection around existing manholes, catch basin inlets, utility valve boxes, and any similar structures. Ensure any damage to such structures because of the milling operation is repaired at no additional cost to the contract. Prevent the milled material from falling into inlet openings. Remove any milled material that does fall into inlet openings.

**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:

<b>Pay Item</b>	<b>Pay Unit</b>
Cold Milling HMA and Conc Pavt, Modified .....	Square Yard

**Cold Milling HMA and Conc Pavt, Modified** includes removing HMA and concrete pavement as described herein, loading removed debris, hauling debris, and disposal of the debris. Material picked up by sweeping after cold milling will not be paid for separately. This work will be measured by area in square yards, regardless of the number of passes required to remove the HMA and / or concrete to the required depth or exposure.

CITY OF KALAMAZOO  
SPECIAL PROVISION  
FOR  
**SURFACE RESTORATION**

COK

1 of 2

09-18-23

**a. Description.** This work shall be done in accordance with the City of Kalamazoo standards. The requirements of the special provision include a one-year warranty period from the date of final inspection performed by the City of Kalamazoo or its designated representative.

**b. Materials.** The materials and application rates specified in Sections 816 and 917 of the 2020 Michigan Department of Transportation (MDOT) Standard Specifications for Construction apply unless modified by this special provision or otherwise directed by the Engineer.

Materials included in Surface Restoration:

1. Topsoil Surface, Furn, 3 inch
2. Fertilizer, Chemical Nutrient, CI A (12-12-12)
3. Seeding, Mixture THM
4. Paper mulch shall be used for hydroseeding
5. Mulch Blanket
6. Water, Sodding/Seeding/Hydroseeding
7. Tackifier shall be MDOT approved from the QPL
8. The hydro-seeding slurry shall consist of a mixture of the following materials:
  - Mulch: 2,000lbs./acre
  - Fertilizer: 400lbs./acre
  - Tackifier: 25lbs./acre
  - Seed: 220lbs./acre
  - Water: As required

**c. Construction Methods.** Prior to placing topsoil, shape and compact all areas to be seeded and hydroseeded. Place topsoil to the minimum depth indicated above, to meet proposed finished grade. If the area being restored requires more than the minimum depth of topsoil to meet finished grade, this additional depth may be filled with approved excavated material. Furnishing and placing this additional material is considered incidental in patching sections.

In areas of hydroseeding, the Contractor shall protect site features from overspray. These features shall include, but not be limited to, fire hydrants, mailboxes (including posts), private properties, sidewalks, driveways, pavements, or other surfaces that the Engineer may designate as needing to be protected from the hydroseeding operation. Where directed by the Engineer, the Contractor will be responsible to remove all unwanted or unintended overspray. The cost of this work will be the sole responsibility of the Contractor.

Areas within existing drainage channels shall be restored using mulch blankets with appropriate anchors as recommended by the manufacturer. All other areas shall be restored using mulch. Mulch shall be bladed into the prepared earth to provide proper anchoring.

If a restored area washes out after this work has been properly completed and approved by the Engineer, make the required corrections to prevent future washouts and replace the topsoil, fertilizer, seed, and mulch. This replacement shall be paid for as additional work. If an area washes out for reasons attributable to the Contractor's activity or failure to take proper precautions, replacement shall be at the Contractor's expense.

All areas disturbed by the Contractor and/or their Subcontractors beyond the normal construction limits of this project shall be restored as directed by the Engineer. No additional payment or compensation will be allowed for this activity.

By October 15, only those areas for which work for Surface Restoration has already begun shall be completed. After October 15, any remaining areas shall be graded and covered by mulch blanket, temporary seeding and restored the following April 15, or as soon as weather permits.

The Contractor shall establish a dense lawn of permanent grasses, free from lumps and depressions or any bare spots, none of which is larger than one foot of area up to a maximum of 3% of the total seeded lawn area. Any part of the seeded lawn that fails to show a uniform germination shall be reseeded until a dense grass cover is established.

Repair, rework, re-seed all areas that have washed out, are eroded, or do not catch.

**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:

<b>Pay Item</b>	<b>Pay Unit</b>
Surface Restoration, Modified.....	Square Yard

**Surface Restoration, Modified** will be measured in place. Payment for restoration shall include all materials, equipment, and labor required to complete the work as described.

CITY OF KALAMAZOO  
SPECIAL PROVISION  
FOR  
**DR STRUCTURE COVER, TYPE \_\_, MODIFIED**

COK

1 of 1

09/19/2023

**a. Description.** This work consists of furnishing City of Kalamazoo sanitary and storm sewer structure covers during construction operations in accordance with Section 403 of the MDOT Standard Specifications for Construction.

**b. Materials.** Provide materials in accordance with the following:

**i. Cover and Casting:** Supply a Dr Structure Cover, Type \_\_ and Modified in accordance with City of Kalamazoo Specifications for Sanitary and Storm sewer meeting the requirements of Section 908 of the MDOT Standard Specifications for Construction.

**ii. Cover Q (Storm Sewer)** – shall consist of an EJIW 1045ZPT (bolted) frame with a 1040A (non-bolted) **Non-Vented** Cover with 2 inch “STORM SEWER” lettering or approved equal.

**iii. Cover S (Sanitary Sewer)** – shall consist of an EJIW 1045ZPT (bolted) frame with a 1040A (non-bolted) Cover with 2 inch “SANITARY SEWER” lettering or approved equal.

**iv. Mortar Type R-2:** Use mortar meeting the requirement of Section 1005.

**c. Construction Methods.** Refer to the latest edition of the “MDOT Standard Specification for Construction” for construction methods.

**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:

<b>Pay Item</b>	<b>Pay Unit</b>
Dr Structure Cover, Type __, Modified.....	Each

The unit price for **Dr Structure Cover, Type \_\_, Modified** includes supplying the new cover and adjustment rings to be placed and adjusted per the latest edition of the MDOT Standard Specification for Construction.

CITY OF KALAMAZOO  
SPECIAL PROVISION  
FOR  
**GATE BOX, RECONSTRUCT, MODIFIED**

HRC/LNM

1 of 1

01/12/2022

**a. Description.** This work consists of furnishing and placing a gate box centered, plumbed, and adjusted to the required pavement grade over the existing gate valve.

**b. Materials.** Provide materials in accordance with the following:

1. **Gate Box:** Shall be an adjustable length screw type for 5-foot depth of cover. The gate box shall be a malleable iron casting conforming to Subsection 908.03 of the Michigan Department of Transportation (MDOT) *Standard Specification for Construction*. This valve box shall be either a two or three-piece screw type and the cover shall be inscribed with the word "water". Valve box shall be EJ 8550 Series (two piece) or EJ 8560 Series (three piece), or Bingham & Taylor, capable of being mounted directly to the gate valve box.

2. **Masonry Unit:** Use Masonry units meeting the requirements of Section 913.

3. **Granular Material Class II:** Use Granular Material Class II meeting the requirements of Section 902.

**c. Construction Methods.** Remove pavement around the existing gate box and remove gate box in accordance with Section 204. Salvage existing gate box and place in a secure location for pick up and notify the Engineer when all gate boxes are ready for pick up. Place four (4) evenly spaced masonry units around gate valve ensuring the gate box rests on the masonry units and not the gate valve. Install gate box level and plumb. Backfill in accordance with Subsection 204.03 ensuring the gate box does not shift during backfilling. Adjust cover to final grade, flush with the top of the pavement surface.

**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:

<b>Pay Item</b>	<b>Pay Unit</b>
Gate Box, Reconstruct, Modified.....	Each

The unit price for **Gate Box, Reconstruct, Modified** includes all labor, equipment, and materials to remove the existing pavement, supply and install the gate box, backfill, and compact for a fully furnished and functional gate box. Reconstruction of the gate box shall be done per this special provision and the latest edition of the MDOT Standard Specification for Construction.

MICHIGAN  
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION  
FOR  
**ASPHALT REPAIR MASTIC**

CFS:TGH

1 of 2

APPR:CRB:NDM:08-02-23

**a. Description.** This work consists of cleaning, filling, and leveling the longitudinal construction joints, transverse joints, longitudinal and transverse cracks, and spalls with asphalt repair mastic material.

Clean and fill joints, cracks and spalls at the locations shown in the contract, or as directed by the Engineer.

**b. Materials.** Furnish applied, pre-packaged, pourable, aggregate filled, polymer modified asphalt repair mastic for both concrete and HMA pavement repairs. Use Deery Level, Go Repair Mastic; Crafcoc Mastic One; RightPointe Pave Patch Black; Fibrecrete SAMIscreed; Maxwell Gap Mastic Mod 201; P&T Products Dura-Fill Mastic T2; Pure Asphalt Mastic SR; or an approved equal, as determined by the Engineer.

For concrete pavement, use one of the following 100 percent solids silane primer products: Baracade Silane 100C, Hydrozo® 100, Sikagard® 705L, or an approved equal 100 percent solids silane material, as determined by the Engineer. Do not use silane primer material for HMA pavement repairs.

**c. Equipment.** Heat the asphalt repair mastic material in a thermostatically controlled hot oil jacketed mastic mixer equipped with a full sweep horizontal agitator that can maintain a uniformly mixed product. The mixer must have an effective means of dispensing the thoroughly mixed mastic material.

**d. Surface Preparation and Installation.** Prepare all surfaces by ensuring they are free from dust, dirt, oil, grease, and loose material prior to application of the mastic using clean, dry, oil free compressed air at 90 psi minimum. Sound substrate surfaces and remove delaminated material prior to final cleaning. Ensure the surfaces of the pavement are completely dry and clean at the time of mastic application.

Artificial heat may be used to warm the substrate surface provided it does not apply a direct flame to the substrate surface, as recommended by the mastic manufacturer. Do not overheat pavement surfaces.

1. HMA. Apply asphalt repair mastic when pavement temperature is above 40 °F. Place and finish asphalt repair mastic within 10 minutes after warming the pavement area.

2. Concrete. Apply asphalt repair mastic when pavement temperature is above 40 °F. Prior to placing the asphalt repair mastic material, apply silane primer onto the repair area and a minimum of 6 inches onto the adjacent pavement surface at a rate of no less than one gallon per 200 square feet. Allow a minimum of 1 hour for the primer to cure (more time may be necessary depending on weather conditions) prior to placing asphalt repair mastic.

Ensure the Contractor is trained and approved by the mastic manufacturer.

Heat and uniformly mix the asphalt repair mastic to the appropriate installation temperature using a mastic mixer. The product application temperature range is 350-400 °F, verify with specific manufacturer's requirements. At application temperature, material is a thick, grainy appearing mastic.

Place the mastic onto the properly prepared pavement surface in accordance with the mastic manufacturer recommendations.

Apply the mastic to the joint, crack or spall from the bottom up in lifts appropriate to the specific application. Mastic should be applied to open joints, cracks and spalls that are wider than 1¼ inches width. If multiple lifts are required, product should be installed in layers not to exceed 2½ inches, with cooling to 200 °F maximum before applying the next layer. Fill the uppermost 1/2 to 1 inch with the final lift.

Use a heated ironing wand and or shoe box to level and smooth the mastic until the material has formed a durable, well-bonded, level repair as directed by the Engineer.

Place temporary pavement markings if permanent markings are more than fifty percent covered before opening the road to traffic.

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

<b>Pay Item</b>	<b>Pay Unit</b>
Asphalt Repr Mastic .....	Foot

**Asphalt Repr Mastic** will be measured in feet based on in-place quantities. Payment includes all surface preparation, temporary pavement markings, furnishing, hauling, placing, and finishing of all materials, removal, and disposal of all debris.