

### Central County Transportation Authority Purchasing Division

241 W. South Street Kalamazoo, MI 49007 Phone: 269.337.8020 www.kmetro.com



MANDATORY PRE-BID MEETING/SITE INSPECTIONS Tuesday, October 31, 2023, at 11:00 a.m. Location: Metro Board Room, 459 N Rose Street, Kalamazoo, MI 49001

# REQUEST FOR QUOTE THIS IS NOT AN ORDER

PROJECT: Electrical Lighting Upgrades for 459 N Rose Street

**QUOTE REFERENCE NO: 98854-006.0** 

**DEPARTMENT CONTACT:** Rob Branch, Deputy Director of Fleet and Facilities (269) 337-8235

DEPT: Central County Transportation Authority (CCTA) ISSUE DATE: October 19, 2023

**QUOTE RETURN DATE:** November 21, 2023, by end of business day (4:30 p.m. Local Time ET)

SUBMITTAL INSTRUCTIONS: Return by mail, email or fax before date above.

Mark envelope – Quotation – CCTA Electrical Lighting Upgrades for 459 N Rose Street and due date.

This quote may be faxed to (269) 337-8500 or emailed to cokpurchasing@kalamazoocity.org

### STATEMENT OF NO QUOTE

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

	Specifications are unclear (ex	aplain below).			
	We are unable to meet specif	ications.			
	Our schedule would not perm	nit us to perform.			
	We do not offer this product	or service.			
	Remove us from your bidder	s list for this commodity	or service.		
REMARKS:					
			(Type or Prin		
TITLE:		DATE:	(Type of Tim	,	
FIRM NAME	E:				
ADDRESS:	(Street address)		(Stata)	(7:5)	
PHONE:	(Street address)	(City) FAX:	(State)	• •	
EMAIL:					

### SUBMITTAL INSTRUCTIONS FOR QUOTES

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**Bid Reference No: 98854-006.0** 

- 1. **EXAMINATION OF QUOTE DOCUMENT-**Before submitting a quote, bidders shall carefully examine the specifications and shall fully inform themselves as to all existing conditions and limitations. The bidder shall indicate in the quote the sum to cover the cost of all items included on the quote form.
- 2. **PREPARATION OF QUOTE**-The quote shall be legibly prepared in ink or typed. If a unit price or extension already entered by the bidder on the quote 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 quote shall be legally signed and the complete address of the bidder given thereon.
- 3. **EXPLANATION TO BIDDERS**-Any binding explanation desired by a bidder regarding the meaning or interpretation of the Quote and attachments must be requested in writing, and with sufficient time allowed for a reply to reach all prospective bidders before the submission of their quote. Any information given to prospective bidders concerning the Quote will be furnished to all prospective bidders as an amendment or addendum. Receipt of amendments or addenda by a bidder must be acknowledged in the quote by attachment, or by letter or fax received before the due date.
- 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 QUOTES**-Quotes may be withdrawn by a bidder or authorized representative, by written request, but only if the withdrawal request is made prior to the close of the business day set for receipt of quotes. Quotes may not be withdrawn for at least ninety (90) days after due date.
- 6. **UNIT PRICES**-If there is a discrepancy between unit prices and their extension, unit prices shall prevail.
- 7. **INFORMAL COMPETITION** The CCTA reserves the right to accept or reject any or all quotes and waive informalities and minor irregularities in the quotes received. The CCTA will consider all quotes and make the purchasing decision most advantageous to the CCTA and its interests.

### **QUOTE FORM**

Page 3

**Bid Reference No: 98854-006.0** 

The undersigned having become familiar with and understanding the contract requirements incorporated herein, agrees to provide services for purchasing and installation of electrical lighting and related items in Metro's short term parking lot, as specified as specified herein:

### **ELECTRICAL LIGHTING UPGRADES FOR 459 N ROSE STREET**

<u>DESCRIPTION</u>		TOTAL PRICE
Installation of lighting and related items in Metro Short Term Parking Lot per Specification She	eet (Attachment A)	\$
The deadline for completion is 30 business days after Noti provide estimate for completion.	ice to Proceed. If unable	e to meet this timeline, please
Time estimate for completion		
FOB destination: CCTA, 459 North Rose Street, Kalamazo	oo, MI 49007	
The CCTA reserves the right to award the contract to the MEETS SPECIFICATIONS.	e LOW RESPONSIVE,	RESPONSIBLE bidder who
Contact person for order releases shall be:		
NAME:	PHONE:	

### QUOTE FORM (cont.)

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**Bid Reference No: 98854-006.0** 

Bidders shall furnish with their bid a copy of the manufacturer's/supplier's current product catalog, corresponding current price list and sensor cross reference listing. 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.

### If your quotation is not returned and completed on this form, it may be rejected.

This contract shall be governed by the laws of the State of Michigan.

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

Addendum No:

Dated:

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 CCTA's Non-Discrimination Clause found in Appendix A and as updated by CCTA Ordinance 1856.

Signed:

Name:

Name:

### **Bidder's Form**

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**Bid Reference No: 98854-006.0** 

(Please return this form with your bid submission.)

Firm Name:		
Address:	City	State Zip
Website:		
Contact:	Title	
Phone: ()		
Fax: ()		
Email:		_
Years in Business:		
Number of Employees:		
Annual Gross Receipts of your firm:  ☐ under \$150,000  ☐ \$150,001 to \$300,000		
□ \$300,001 to \$500,000		
□ \$500,001 and up		
Special Status:		
□ DRF □ Small Business		

**Electrical Lighting Upgrades for 459 N Rose Street** 

Page 6 Bid Reference No: 98854-006.0

BLANK forms are NOT acceptable. If DBE subcontractor opportunities are available, please fill out sections 1 thru 5. If no subcontractor opportunities available fill out section 6. <u>SIGNATURES ARE REQUIRED.</u>

### **DBE PARTICIPATION FORM**

-	ate information is required for each DBE subcontractor. This form may be duplicated as necessar DBE Firm Name:
	Address:
2)	Dollar amount awarded:
3)	1
_	
4)	CONTRACTOR'S COMMITMENT TO USE DBE FIRM
	is committed to utilize the DBE contractor
	(Name of Contractor) in the manner and amount described on this form.
	Dated
	(Authorized Signature)
5)	DBE'S COMMITMENT TO PARTICIPATE
_	, as a DBE firm, is committed to perform
	(Name of subcontractor/supplier)
tl	he work as described above for the amount specified.
D	ated (Authorized Signature)
6)	NO SUBCONTRACT OPPORTUNITIES, AVAILABLE.
_	, has no subcontractor opportunities
	(Name of subcontractor/supplier)
	available for work to be performed.
	Dated
	(Authorized Signature)

Dated \_\_\_\_\_

### **DBE PARTICIPATION FORM**

Instruction Diagram

E	T' M			
	Firm Name:	<ul> <li>Sub contractor nam and address</li> </ul>	me	
	Address:			
1)	) Dollar amount aw	varded:	Amount awarded to Sub contractor	
2)	) Description of wo	ork to be performed:	Work description.	
	CONTRACTOR'	S COMMITMENT TO	Prime contractor fills ou	ıt.
_			nmitted to utilize the DBE contractor to	
	(Name of Co	ontractor)	<i></i>	
			/	
ι	itilize the above name	d DBE subcontractor/sup	oplier in the manner and amount described on this f	orm.
	_			
]	Oated(Authorized Signature)			
	(Figure 5 gradure)			
	DBE'S COMMITM	IENT TO PARTICIPAT	FE Sub contractor fills out.	
		4		
_			DBE firm, is committed to perform the	
	Name of subcontractor/s	supplier)	/	
(		ve for the amount specifie	ed.	
	work as described abo	-	<b>*</b>	
•	_			
•	work as described abo			(Auth
•	_	Signature)		(Auth
•	Dated	Signature) ACT OPPORTUNITIE	ES, AVAILABLE. Prime contractor fills ou	`
•	Dated	ACT OPPORTUNITH		`
١	Dated	ACT OPPORTUNITIE	ES, AVAILABLE. Prime contractor fills ou pas no subcontractor opportunities	(Autho
1	Dated NO SUBCONTRA	ACT OPPORTUNITIE		

(Authorized Signature)

### DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS

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**Bid Reference No: 98854-006.0** 

As required by U.S. Department of Transportation regulations on Government and Suspension at 49 CFR 29.510, the Contractor certifies to the best of its knowledge and belief, that it and its principals:

- (1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency.
- (2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, state, or local) transaction or contract under a public transaction; violation of Federal or state anti-trust statutes; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property.
- (3) Are not presently indicted or otherwise criminally or civilly charged by a government entity (Federal, state, or local) with the commission of any of the offenses listed in paragraph (2) of this certification.
- (4) Have not within a three-year period preceding this contract had one or more public transactions (Federal, state, or local) terminated for cause of default.

The contractor certifies that if it becomes aware of any later information that contradicts the statements of paragraphs (1) through (4) above, it will promptly inform FTA. Should the contractor be unable to certify to the statements of paragraphs (1) through (4) above, it shall acknowledge on its signature page and provide a written explanation to FTA.

Signature of Authorized Individual	
Title	

The certification must be attached and returned with any bid exceeding \$25,000.00.

SIGNATURE (Vendor Representative)

### CERTIFICATION OF COMPLIANCE WITH FEDERAL CONTRACT CLAUSES

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As required by Federal Transit Administration Circular FTA C 4220.1F Third Party Contracting Guidance, Rev. 4, March 18, 2013, and all subsequent editions, as available on FTA's website, <a href="www.tta.dot.gov">www.tta.dot.gov</a> and <a href="http://www.kmetro.org/about-metro/purchasing-info">http://www.kmetro.org/about-metro/purchasing-info</a>

acknowledges receipt of the Contract Clauses available

(Vendor Name)

at <a href="http://www.kmetro.org/about-metro/purchasing-info">http://www.kmetro.org/about-metro/purchasing-info</a> and certifies compliance with all federal requirements for items and services being purchased by the CCTA.

Date

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### **BIDDERS QUESTIONNAIRE**

Ple	ase answer the following questions comple	pletely on this form.	
1.	Firm name:		
2.	Address and telephone number:		
3.	Established: Year	State	
4.			
4.	a. Individual: c. Corporation:	b. Partnership: d. Other:	
5.	Warranty Service will be provided by: Name and Contact: Address: Phone:		
6.			
	Agency Name:		_
			_
			_
			_
	Phone Number:		
	Type of Service Provided:		_
	7. State any deviations from the specific	ications:	
			_
I he	ereby certify that all of the information pro	rovided is true and answered to the best of my ability.	
Sig	ned:	Name:	
515		Type or Print	
Titl	le:	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 CCTA.

# **CCTA - REQUEST FOR QUOTATIONS Electrical Lighting Upgrades for 459 N Rose Street**

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 CCTA that would tend to destroy or hinder free competition.

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The firm's identification information provided v contractual purposes. If the contractual relation a complete explanation on your letterhead and a	ship is with, or the pa	yment made to,	another firm please provide	de
Tax Identification Number (Federal ID):	•	-	1,7,1,1	
Remittance Address:				
I hereby state that I have read, understand and ag	gree to be bound by al	l terms and cond	ditions of this bid documer	ıt.
SIGNED:	NAME: _	(Type or Print)		
TITLE:	DATE: _			
FIRM NAME:(if any)				
ADDRESS:(Street address)	(CCTA)	(State)	(Zip)	
PHONE:	FAX:			
EMAIL ADDRESS:				

FOR CCTA USE ONLY - DO NOT WRITE BELOW

### SPECIFICATIONS AND REQUIREMENTS

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### 1. SCOPE AND INTENT

### **Central County Transportation Authority Project Scope:**

### Overview

- The work in this request for quotes includes conduit installation, new lighting, and all electrical work as noted on the plans. Project technical specifications are included on the plans.
- The tree and fence removals have been completed, the pad on the west end of the parking lot has been poured, and the storage shed has been relocated. Fencing will be installed on the north and east sides of the lot under another contract. The owner will restrict parking in the lot and fence installation as needed to facilitate the work.
- See ATTACHMENT A Specification Sheet for placement and description.

### \*\*PLEASE SEE ATTACHMENT A – PROJECT SPECIFICATIONS

### 2. AWARD

Award will be made on an aggregate basis, not split, and is subject to the availability of funds.

### 3. **INVOICING FOR CCTA -**

Upon delivery the vendor shall leave an itemized copy of the packing slip with the using agency and obtain signature of proof of delivery. The vendor shall submit an invoice in duplicate listing detail of items and cost.

All original invoice(s) will be sent to CCTA, 530 North Rose Street, Kalamazoo, MI 49007 or via email at <a href="mailto:finance@kmetro.com">finance@kmetro.com</a>. Faxed copy of invoice(s) will not be accepted, unless it is to replace an original invoice that was lost in the mail. The CCTA processes payments after receipt of an original invoice from the Contractor and approval by the department.

The CCTA 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 paper work 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 CCTA with goods or services. All original, and copies of original invoice(s), will clearly state which purchase order they are being billed against.

The CCTA is a government municipality and therefore is tax exempt from all sales tax. Our tax-exempt number is 47-5061737.

The vendor is responsible for supplying the CCTA with a copy of their W-9 if they are awarded.

### 4. **PRODUCT NUMBERS, MAKE OR NAME**

References to the fence by make, name or product number shall be interpreted as establishing a standard of quality and shall not be construed as limiting competition.

### 5. DUTIES AND RESPONSIBILITIES OF THE CONTRACTOR

Contractor shall perform all work in a professional manner and in accordance with industry standards for work of this nature. Contractor shall be held responsible for the satisfactory and complete execution of the work in accordance with the true intent of the specifications. Contractor shall be responsible for any and all items not specified in detail or inadvertently Omitted by the CCTA of which is normally considered to be part of this type of work. Contractor shall provide, without extra charge, all incidentals required as part of their work even though not particularly specified or indicated.

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### 6. **GUARANTEE**

The Contractor shall guarantee that fence provided meets or exceeds the manufacturer's warranty requirements.

### 7. **QUESTIONS**

Questions regarding the specifications may be addressed to Rob Branch, Deputy Director of Fleet and Facilities at (269) 337-8235 at (269) 337-8761. Questions relating to the general bid requirements may be addressed to Kyle Dunn, Buyer, at (269) 337-8720. This does not relieve the requirements of Page 2, Item 3.

### TERMS AND CONDITIONS

### 1. **AWARD**

This purchase will be awarded to the responsible bidder whose quote will be most advantageous to the CCTA, price and other factors considered. The CCTA reserves the right to accept or reject any or all quotes and waive informalities and minor irregularities for quotes received. Notification of award will be in writing by the CCTA and purchase orders.

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### 2. **COMPLETE CONTRACT**

This request for quote document together with its addenda, amendments, attachments and modifications, when referenced by an executed purchase order, 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. TAXES

The CCTA is exempt from all federal excise tax and state sales and use taxes. However, depending upon the situation, the vendor may not be exempt from said taxes and the CCTA is making no representation as to any such exemption.

### 4. **PAYMENTS**

Unless otherwise specified by the CCTA, the Contractor will be paid in not more than thirty (30) days after receipt of a properly executed invoice, the sum stipulated herein for supplies delivered and accepted, or service rendered and accepted. The Budget and Accounting Division processes payments after receipt of an original invoice from the Contractor and approval by the department. Submit invoice to Budget and Accounting, 241 W. South Street, Kalamazoo, MI 49007.

### 5. LAWS, ORDINANCES AND REGULATIONS

The Contractor shall keep him/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.

### 6. CCTA AUTHORITY ASSIGNMENT CLAUSE

The CCTA reserves the right to assign this contract to a transit authority legally incorporated and assuming the transit functions of the CCTA.

### 7. **TERMINATION**

This Agreement may be terminated by either the CCTA or the Firm by giving written notice at least thirty (30) days prior to the date of termination.

- A. In the event of such termination by the Firm, the CCTA, together with any other remedies which are legally available, may withhold any subsequent payment due under this agreement until such time as the services required to be performed under this Agreement have been completed by the CCTA or another firm. In the event that the CCTA incurs additional expenses caused directly or indirectly by the termination of this Agreement, together with such other remedies as are legally available, the CCTA shall be entitled to deduct such expenses from any unpaid amount due to the Firm under this agreement.
- B. In the event of such termination by the CCTA, the CCTA shall pay the Firm for services and reimbursable expenses performed or incurred prior to the termination date plus all costs and expenses directly attributable to such termination for which the Firm is not otherwise compensated.

### 8. **HOLD HARMLESS**

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

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### 9. CHANGES AND/OR CONTRACT MODIFICATIONS

The CCTA reserves the right to increase or decrease services 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 Firm and the CCTA. The modifications cannot constitute cardinal changes.

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 Manager. CCTA Commission approval may also be required. SUCH CHANGES, IF PERFORMED IN ADVANCE OF PURCHASING MANAGER APPROVAL, MAY BE SUBJECT TO DENIAL AND NON-PAYMENT.

### 10. **DEFAULT**

The CCTA 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 make delivery of the supplies, or to perform the services within the time specified herein, or any extension thereof.
- B. The unauthorized substitution of articles for those bid as specified.
- C. Failure to make progress if such failure endangers performance of the contract in accordance with its terms.
- D. Failure to perform in compliance with any provision of the contract.
- E. Standard of Performance Vendor 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.

Upon notice by the CCTA of Vendor'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 CCTA. 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 CCTA.

In the event of any breach of this contract by Contractor, Contractor shall pay any cost to the CCTA caused by said breach including but not limited to the replacement cost of such goods or services with another Contractor.

The CCTA reserves the right to withhold any or all payments until any defects in performance have been satisfactorily corrected.

In the event the Contractor is in breach of this contract in any manner, and such breach has not been satisfactorily corrected, the CCTA may bar the Contractor from being awarded any future CCTA contracts.

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

# APPENDIX A NON-DISCRIMINATION CLAUSE FOR ALL CCTA 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, CCTA 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 individuals ability to perform the duties of the particular job or position.
- 3. If requested by the CCTA, 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 CCTA 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 CCTA 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.

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



# ATTACHMENT A – SPECIFICATIONS

Electrical Lighting Upgrades for 459 N Rose Street Bid Reference #: 98854-006.0

# CENTRAL COUNTY TRANSPORTATION AUTHORITY

# ELECTRICAL AND LANDSCAPING UPGRADES FOR SHORT TERM PARKING LOT AT 459 NORTH ROSE STREET FOR CCTA

# **OWNER CONTACT**

ROBERT BRANCH
DEPUTY DIRECTOR OF FLEET AND FACILITIES
(269) 337-8235
BranchR@kmetro.com

# **ADDITIONAL CONTACTS**

CIVIL ENGINEER

WIGHTMAN 433 E RANSOM STREET KALAMAZOO, MI 49007 (W) 269.487.9659 (M) 269.217.4673 FRANK RENALDI, PE

FRENALDI@GOWIGHTMAN.COM

ELECTRICAL ENGINEER

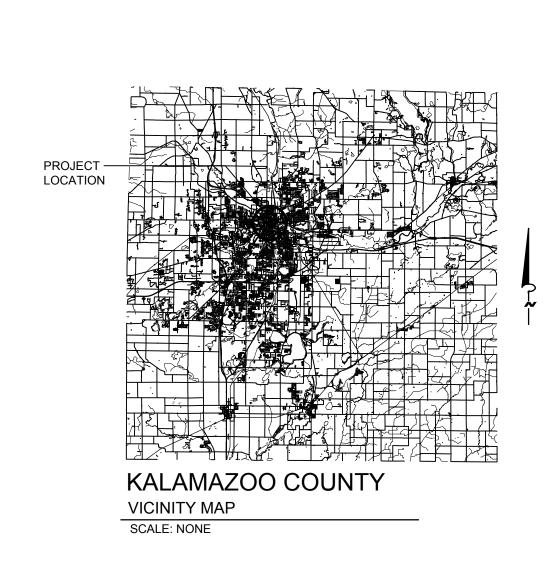
THE STEELHEAD ENGINEERING COMPANY 259 E MICHIGAN AVE, SUITE 407 KALAMAZOO, MI 49007 BRANDEN COX, PE ENGINEERING TECHNICAL MANAGER 269.459.5207 BCOX@BODWEGROUP.COM

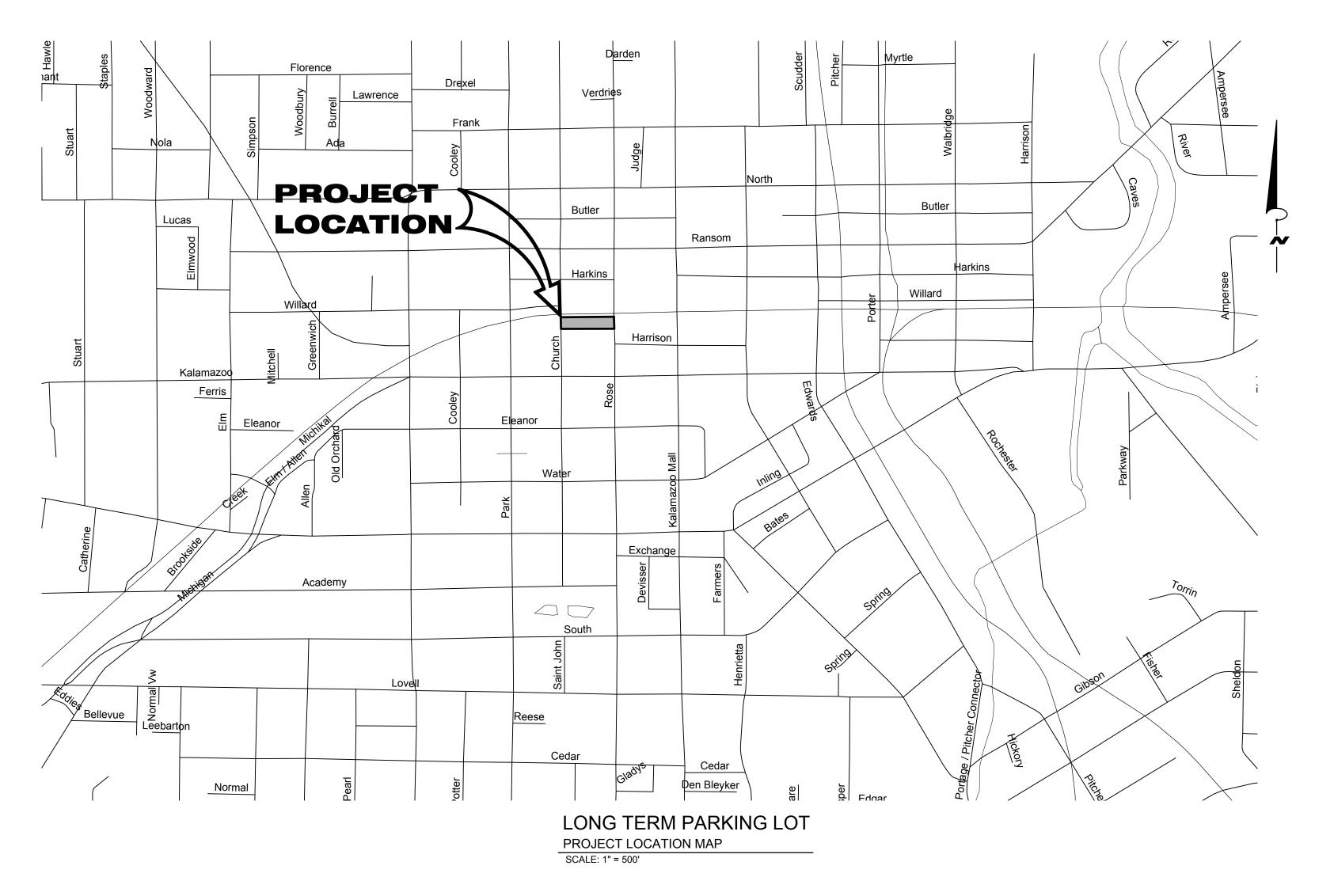
# **NOTES**

EXCEPT WHERE OTHERWISE INDICATED ON THESE PLANS OR IN THE PROPOSAL AND SUPPLEMENTAL SPECIFICATIONS CONTAINED THEREIN, ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE 2020 MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION.

THE PLACING OF PAVEMENT MARKINGS AND TRAFFIC CONTROL SIGNS SHALL BE DONE IN ACCORDANCE WITH THE 2011 MICHIGAN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AS AMENDED.

IN CONFORMANCE WITH PUBLIC ACT 174 OF 2013, ALL CONTRACTORS SHALL CALL MISS DIG @ 811 OR 800-482-7171 FOR PROTECTION OF UNDERGROUND UTILITIES A MINIMUM OF THREE FULL WORKING DAYS (EXCLUDING SATURDAYS, SUNDAYS AND HOLIDAYS) PRIOR TO BEGINNING EACH EXCAVATION IN ANY AREA. 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





# **INDEX OF PLANS**

G100 COVER SHEET
C100 SITE LAYOUT
E002 ELECTRICAL SITE PLAN
E500 ELECTRICAL SPECS
E520 ELECTRICAL SPECS
E600 ELECTRICAL SPECS

# **UTILITIES**

ELECTRIC CONSUMERS ENERGY CO. 2500 E. CORK STREET KALAMAZOO, MI 49001 269.337.2246 MIKE SOKOLOV GAS CONSUMERS ENERGY CO. 2500 E. CORK STREET KALAMAZOO, MI 49001 269.337.2366 KYLE OAK CABLE **CHARTER COMMUNICATIONS** 4176 COMMERCIAL AVE. PORTAGE, MI 49002 269.217.8152 MARK BURKE TELEPHONE AT&T 2919 MILLCORK ST. KALAMAZOO, MI 49001 269.384.4436 **TODD SHIBAYAMA** SEWER/WATER CITY OF KALAMAZOO DEPARTMENT OF PUBLIC SERVICES 415 E. STOCKBRIDGE AVE KALAMAZOO, MI 49001 ANNA CRANDELL / RYAN STOUGHTON "MISS DIG" 811

# LEGEND

ELECTRIC LINE ——— OHE ———— ELECTRIC LINE (OVERHEAD) FO FIBER OPTIC LINE GAS LINE TELEPHONE LINE — FORCEMAIN GUARDRAIL SANITARY SEWER STORM SEWER CENTER LINE EXISTING TREE LINE —— -- EXISTING DITCH LINE ——— — EASEMENT LINE/GRADING PERMIT ---- GRADING LIMITS/LIMITS OF DISTURBANCE ——— — PROPERTY LINE RIGHT-OF-WAY LINE — SECTION LINE —++-+++---- TO BE ABANDONED \$ = ANTENNA • = PAVEMENT/SOIL BORING □ = CATCH BASIN = PROPOSED HYDRANT

= CABLE RISER BOX = PROPOSED GATE VALVE & BOX ◆<sup>CO</sup> = CLEAN OUT = PROPOSED GATE VALVE & VAULT = CURB INLET = PROPOSED REDUCER = ELECTRIC MANHOLE = PROPOSED SANITARY MANHOLE T = FIRE HYDRANT = PROPOSED STORM MANHOLE (i) = STORM MANHOLE = FOUND IRON PIPE ☼ = GAS VALVE □ = TELEPHONE RISER BOX ·) = GUY ANCHOR ☐ = LIGHT POLE = TURNING POINT/TRAVERSE = MAILBOX  $\emptyset$  = UTILITY POLE ● MW = MONITORING WELL VLT = VAULT ■ = WATER ELEVATION = POST ຈ = SATELLITE DISH (W) = WATER MANHOLE S = SANITARY MANHOLE WM = WATER METER ◆ = SECTION CORNER ■ = WATER VALVE

# TREE DESIGNATORS

o<sup>W</sup> = WELL

⇒ = WATER SPIGOT



\_\_\_ = SIGN

W+ WIGHTMAN

> 433 E. RANSOM ST. KALAMAZOO, MI. 49007

> > 269.327.3532

www.gowightman.com



FRANK RENALDI

PROJECT NAME:

ELECTRICAL AND
LANDSCAPING
UPGRADES FOR
SHORT TERM
PARKING LOT AT
459 NORTH ROSE
STREET FOR CCTA
459 NORTH ROSE STREET,
KALAMAZOO, MI 49007
CENTRAL COUNTY
TRANSPORTATION
AUTHORITY
530 NORTH ROSE STREET,
KALAMAZOO, MI 49007

01 01/27/2023 SUBMITTED FOR ADMISTRATIVE REVIEW

REVISIONS

P:Kalamazoo!224206 KMetro Parking Lot Renovation 459 N RoselB)
DrawingsiB50 AutoCADi224206-G100.dwg G100 1/27/2023 1:1:0:00 PM

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DATE: JANUARY, 2023

SCALE: AS NOTED

COVER SHEET

JOB No. 224206 **G100** 

30 FT - FENCE REMOVAL COMPLETED

BY OTHERS

22 FT- PROPOSED UAF-200 FLAT TOP FENCING ——

Description	Quantity	Uni
Fence Removal	260	LF
Remove Gate and Appurtenances	1	LSU
Rem Ex Conc Pad, Decorative Fence and Bollards	1	LSU
Remove Trees, Stumps and shrubs, grind stumps to 1' below grade	1	LSU
Sawcut Curb Back and Place Conc Ramp and Pad for Ex. Storage Bldg Relocation	າ 1	LSU
New Fencing	247.5	LF
Electrical Conduit, Wiring, and Fixtures	1	LSU
Landscape Stone	330	SY
Topsoil Seeding and Mulching	55	cv

CUT FENCE POSTS OFF AT GRADE
TO REMOVE EXISTING FENCE COMPLETED

WIGHTMAN 1670 LINCOLN RD. ALLEGAN, MI. 49010

www.gowightman.com

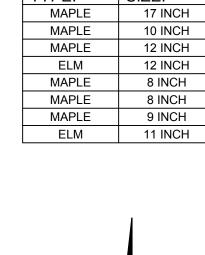
269.673.8465

FRANK RENALDI

PROJECT NAME:

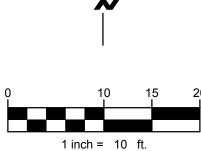
KALAMAZOO, MI 49007

ELECTRICAL AND LANDSCAPING **UPGRADES FOR** SHORT TERM PARKING LOT AT 459 NORTH ROSE STREET FOR CCTA 459 NORTH ROSE STREET, KALAMAZOO, MI 49007 CENTRAL COUNTY TRANSPORTATION AUTHORITY 530 NORTH ROSE STREET,



BY OTHERS

TREE REMOVALS



# LEGEND

INSTALL WASHED NATIVE STONE PER DETAIL



INV. 775.93 - 12" E

INV. 775.93 - 4" W

RIM 777.85 INV. 775.80 - 12" W

INV. 775.80 - 8" SE

RIM 777.70 INV. 775.42 - 8" NW

INV. 775.42 - 12" SE

RIM 775.85 INV. 774.68 - 12" NW

INV. 774.70 - 12" E

INV. 775.22 - 15" S

INV. 775.00 - 15" N

STANDARD

0.0 FT SUMP

ST103

EX 24 INCH DIA STRUCTURE

EX 24 INCH DIA STRUCTURE

EX 48 INCH DIA STRUCTURE

EX 48 INCH DIA STRUCTURE RIM 776.44

TOPSOIL, SEEDING, AND MULCHING

INSTALL CONCRETE PAD

# SAN. STRUCTURES

101	RIM 0.36 INV. 772.48 - 8" \$
	RIM 772.61

INV. 771.92 - 8" N INV. 771.84 - 8" S INV. 772.12 - 6" E

02 03/03/2023

01 01/27/2023

REVISIONS

SCALE: 1" = 10'

UPDATED PER CITY PLANNING COMMENTS

ADMISTRATIVE REVIEW

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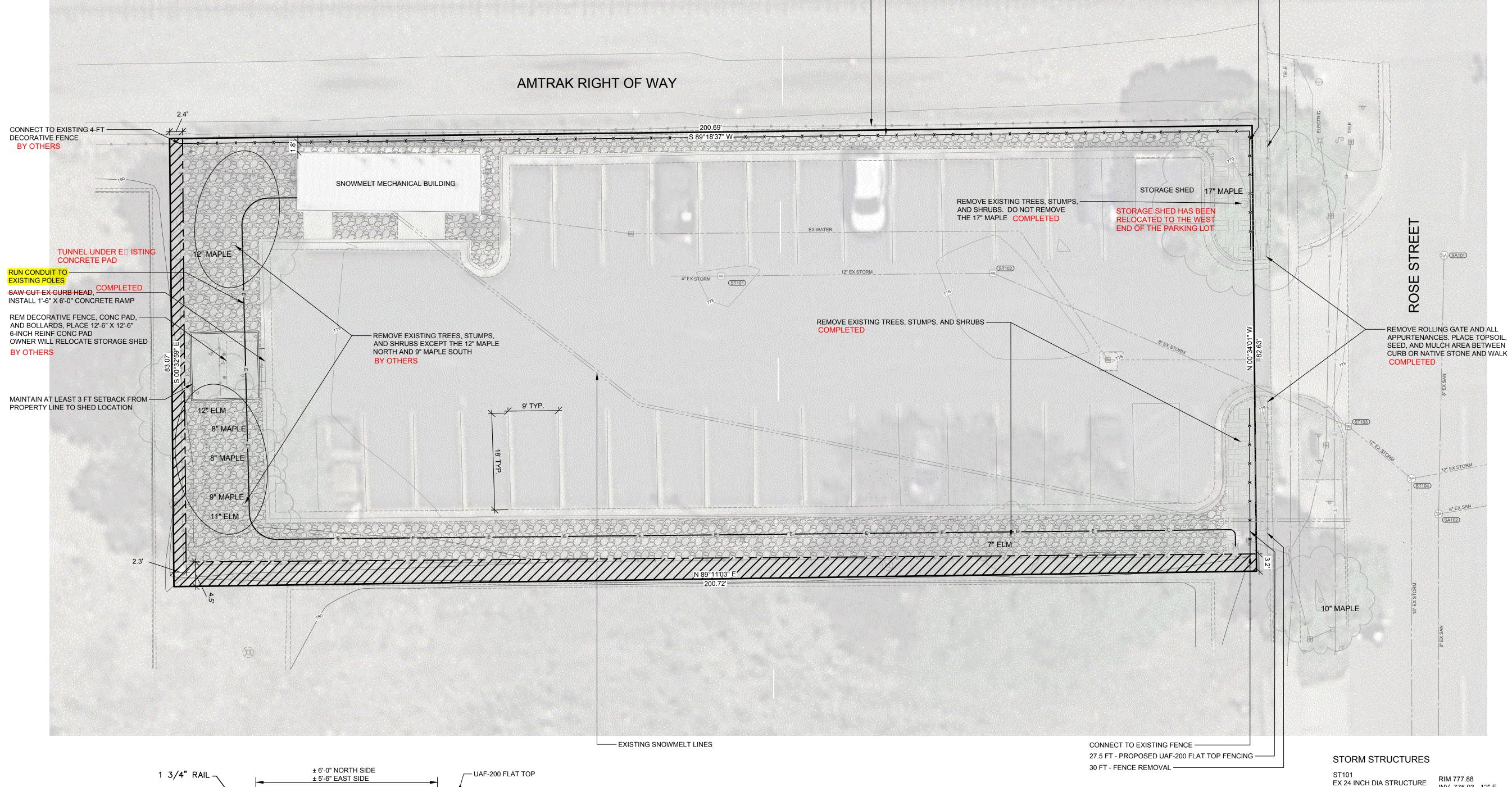
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DATE: JANUARY, 2023

SUBMITTED FOR

SITE LAYOUT

JOB No. 224206 C100



— VARIES —

2% MIN.

LANDSCAPE STONE DETAIL

SCALE: NONE

NATIVE WASHED STONE 2-4" DIA. 4" DEPTH,

MDOT CLASS II SUBBASE TO PROVIDE SLOPE TO MATCH EXISTING DRAINAGE

— GEOTEXTILE FILTER FABRIC

**PATTERNS** 

SET STONE FLUSH WITH ADJACENT CURBS/WALKS

1" PICKET -

3" POST →

-GROUND LEVEL

' (TYP.)

4" (TYP.)

PER MANUFACTURES

RECOMMENDATIONS

SCALE: NONE

FOOTING DIAMETER INSTALLED -

ORNAMENTAL FENCE DETAIL

BY OTHERS

198 FT - PROPOSED UAF-200 FLAT TOP FENCING ——

200 FT - FENCE REMOVAL —

COMPLETED

LIGHT FIXTURE SCHEDULE																	
	CONSTRUCTION PRODUCT			CONSTRUCTION LIGHT SOURCE				ELECTRICAL									
MARK	DESCRIPTION	MANUFACTURER	MODEL NO.	LENS/LOUVER	MOUNTING	LAMP	LUMENS DOWN	LUMENS UP	ССТ	CRI	BALLAST/ DRIVER	VOLTAGE	PHASE	WATTS	W./FT.	EMERGENCY COMPONENT	NOTES
F4	ROUND LENS LED STRIP	LITHONIA	FEM-L48-4000LM-IMAFD-M D-MVOLT-GZ10-35K/80CRI	frosted smooth acrylic	SURFACE/SUS PENDED	LED	4000 lm	0 lm	3500 K	80	LED NON-DIMMING DRIVER	120 V	1	24 W			
PHS2	OSQ LED AREA/FLOOD LUMINAIRE	CREE	OSQM-9L-30K7-3M-UL-NM- BK		OSQ-ML-B-D A	LED	8875 lm	0 lm	3000 K	70	LED DRIVER	120 V	1	166 W			1
UW7	EXTERIOR WALL PACK	LITHONIA	DSXW1 LED 10C 1000 30K T2M MVOLT HS		WALL	LED	3215 lm	0 lm	3000 K	70	LED DRIVER	120 V	1	39 W			2

CHEDULE NOTES:
. MOUNTING AND OPTIONS AS REQUIRED.

2. FIXTURE MOUNTED AT 8'-0" ABOVE THE FINISH GRADE. COORDINATE MOUNTING HEIGHT WITH THE EXISTING BUILDING COMPONENTS AND THE OWNER.

# KEYNOTES

- PROVIDE DEDICATED BREAKER 15-AMP BREAKER FROM PANEI ON WEST SIDE OF SNOWMELT BUILDING FOR NEW LIGHTS ON SNOWMELT BUILDING, 2 #12 COPPER CONDUCTORS AND 1 #12 COPPER GROUND IN 3/4" CONDUIT THROUGH LIGHTING CONTACTOR, FIELD VERIFY AVAILABLE PANEL SPACE.
- 2 PROVIDE ONE 20-AMP 1-POLE BREAKER FOR NEW LIGHTS ON RELOCATED SHED AND NEW POLE MOUNTED LIGHTS ROUTE 2 #10 COPPER CONDUCTORS AND 1 #10 GROUND, ROUTE THROUGH LIGHTING CONTACTOR AND MANUAL OVERRIDE SWITCH. PROVIDE ONE 20-AMP 1-POLE BREAKER FOR NEW GFI RECEPTACLE IN SHED AND SHED LIGHT, ROUTE 2-#12 COPPER CONDUCTORS AND 1-#12 COPPER GROUND IN 3/4" CONDUIT. FIELD VERIFY AVAILABLE PANEL SPACE.
- 3 APPROXIMATE ROUTE FOR NEW BELOW GRADE LIGHT FIXTURE FEEDER.
- 4 QUAZITE BOX LOCATED NEAR BASE OF EXISTING POLE FOR CONNECTION OF NEW LIGHTING CONDUIT TO EXISTING CONDUIT TO THE LIGHT POLE.
- 5 NEW FIXTURE MOUNTED TO THE FACE OF THE EXISTING BUILDING.
- EXISTING WALL PACK ON SNOWMELT BUILDING DEMOLISHED ALONG WITH EXISTING LIGHTING CONTROLS.

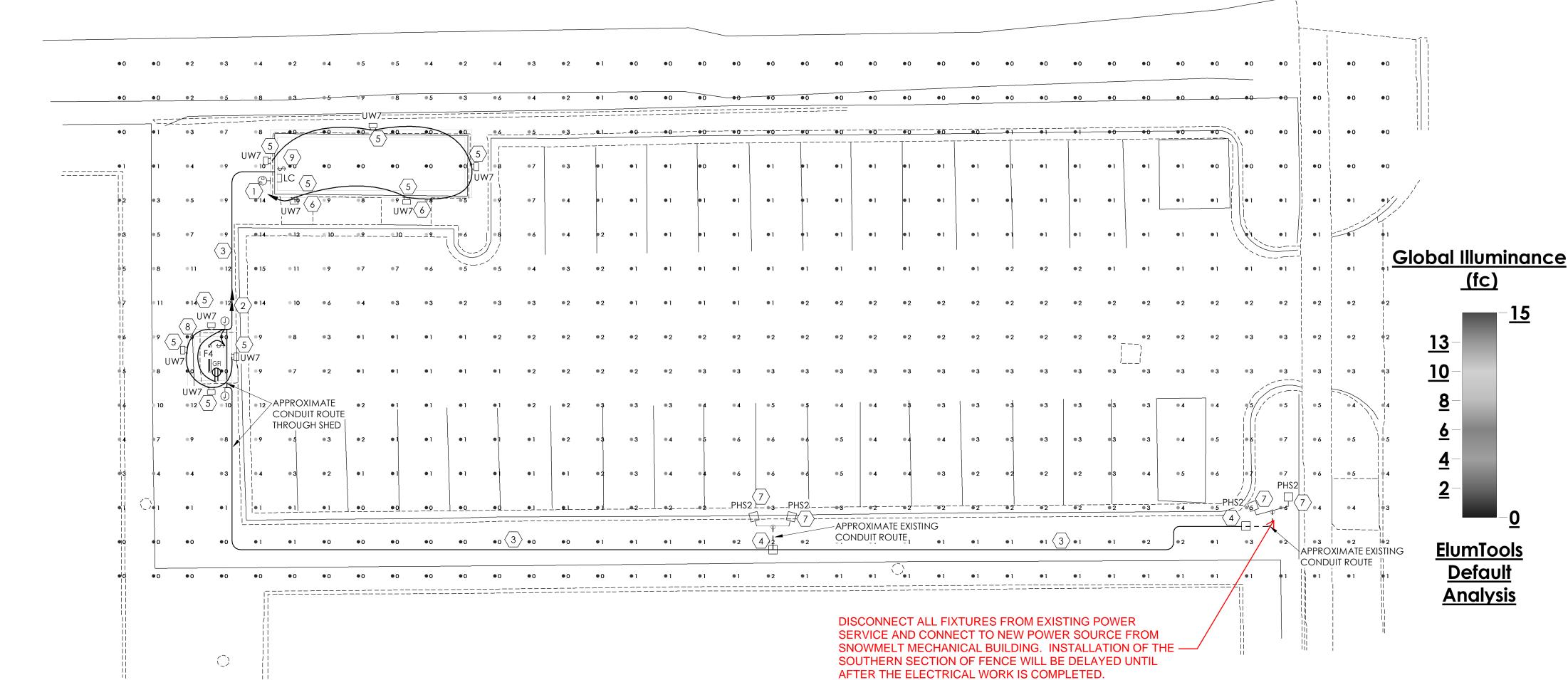
  NEW FIXTURE MOUNTED TO EXISTING LIGHT POLE, EXISTING
- CIRCUITRY AND CONDUIT FROM LIGHT POLE TO BE CONNECTED TO NEW CIRCUITRY AND CONDUIT IN QUIZITE BOX, FIELD VERIFY THE CONNECTION REQUIREMENTS.

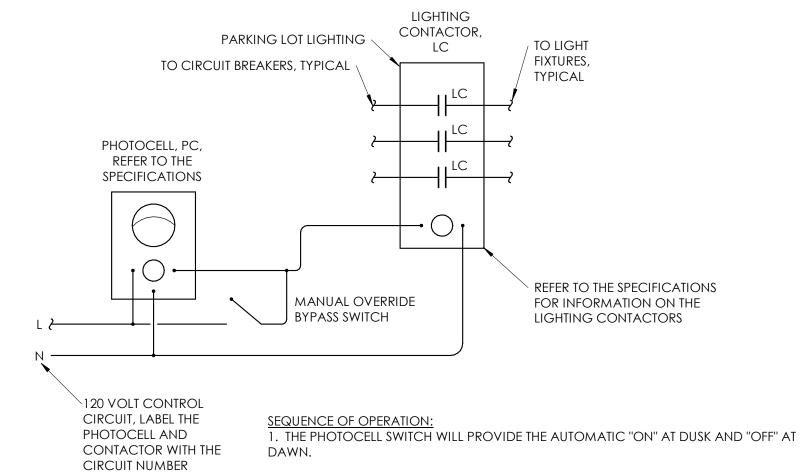
  8 CONDUIT FOR EXTERNAL SHED LIGHTS TO BE ROUTED INSIDE
- OF SHED FOR CONNECTION TO LIGHT FIXTURES.

  9 MANUAL OVERRIDE BYPASS SWITCH FOR CONTROL/TESTING
  OF EXTERIOR LIGHTS, LABEL SWITCH 'EXTERIOR LIGHT TEST'.

# GENERAL SITE PLAN NOTES

- ALL LIGHTING AND POWER CONDUCTORS SHALL BE INSTALLED BETWEEN 24" (MINIMUM) AND 36" (MAXIMUM) BELOW FINISHED GRADE.
- 2 ALL CONDUCTORS FOR EXTERIOR LIGHTING AND POWER CIRCUITS SHALL BE #10 AWG MINIMUM.





2 EXTERIOR LIGHTING CONTROL DETAIL

CONTROL IS DERIVED

FROM

SCALE: 1" = 10'-0"

WIGHTMAN

WIGHTMAI
BENTON HARBOR

2303 Pipestone Road Benton Harbor, MI 49022 Phone: 269.927.0100

**KALAMAZOO**433 East Ransom Street Kalamazoo, MI 49007

Phone: 269.327.3532

ALLEGAN 1670 Lincoln Road Allegan, MI 49010 Phone: 269.673.8465

www.gowightman.com

PROJECT NAME:
KMETRO
PARKING LOT
LIGHTING

459 NORTH ROSE ST. KALAMAZOO, MI 49007

WIGHTMAN

REVISIONS

Autodesk Docs://0000/2 Steelhead Working Folder 2023/222737 Kmetro Parking Lot Lighting, MEP P.23.nd

10/2/2023 11:45:51 AM

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DATE: 1/24/2023

SCALE: As indicated

ELECTRICAL SITE

PLAN

JOB NO: 224206 **E002** 

### **DIVISION 26 - ELECTRICAL**

### **SECTION 260519** LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES

### **PART 1 GENERAL**

### 1.01 SECTION INCLUDES

- A. Single conductor building wire.
- B. Wiring connectors.
- C. Electrical tape.
- D. Heat shrink tubing.
- E. Oxide inhibiting compound.
- F. Wire pulling lubricant. G. Cable ties.

### 1.02 RELATED REQUIREMENTS

A. Section 260526 - Grounding and Bonding for Electrical Systems: Additional requirements for grounding conductors and grounding connectors.

### B. Section 260553 - Identification for Electrical Systems: Identification products and requirements.

- 1.03 REFERENCE STANDARDS A. ASTM B3 - Standard Specification for Soft or Annealed Copper Wire 2013 (Reapproved 2018).
- B. ASTM B8 Standard Specification for Concentric-Lay-Stranded Copper Conductors, Hard, Medium-Hard, or Soft 2011 (Reapproved 2017).
- C. ASTM B33 Standard Specification for Tin-Coated Soft or Annealed Copper Wire for Electrical Purposes 2010, with Editorial Revision (2020).
- D. ASTM B787/B787M Standard Specification for 19 Wire Combination Unilay-Stranded Copper Conductors for Subsequent Insulation 2004 (Reapproved 2020).
- E. ASTM D3005 Standard Specification for Low-Temperature Resistant Vinyl Chloride Plastic Pressure-Sensitive Electrical Insulating Tape 2017.
- F. ASTM D4388 Standard Specification for Nonmetallic Semi-Conducting and Electrically Insulating Rubber Tapes 2020.
- G. NECA 1 Standard for Good Workmanship in Electrical Construction 2015.
- H. NEMA WC 70 Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy 2021.
- NFPA 70 National Electrical Code Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
- J. UL 44 Thermoset-Insulated Wires and Cables Current Edition, Including All Revisions.
- K. UL 83 Thermoplastic-Insulated Wires and Cables Current Edition, Including All Revisions.
- L. UL 267 Outline of Investigation for Wire-Pulling Compounds Most Recent Edition, Including All Revisions.
- M. UL 486A-486B Wire Connectors Current Edition, Including All Revisions.
- N. UL 486C Splicing Wire Connectors Current Edition, Including All Revisions.
- UL 486D Sealed Wire Connector Systems Current Edition, Including All Revisions.
- P. UL 510 Polyvinyl Chloride, Polyethylene, and Rubber Insulating Tape Current Edition, Including All Revisions.

### 1.04 ADMINISTRATIVE REQUIREMENTS

- A. Coordination: 1. Coordinate sizes of raceways, boxes, and equipment enclosures installed under other sections with the actual conductors to be installed, including adjustments for
- conductor sizes increased for voltage drop. Coordinate with electrical equipment installed under other sections to provide terminations suitable for use with the conductors to be installed.

- Notify Architect of any conflicts with or deviations from Contract Documents. Obtain direction before proceeding with work.

- Product Data: Provide manufacturer's standard catalog pages and data sheets for conductors and cables, including detailed information on materials, construction, ratings, listings, and available sizes, configurations, and stranding.
- B. Wire Pulling Lubricant: Certification of compatibility with conductors/cables where used with the following insulation/jacket types:
- C. Field Quality Control Test Reports.
- Manufacturer's Installation Instructions: Indicate application conditions and limitations of use stipulated by product testing agency. Include instructions for storage,
- handling, protection, examination, preparation, and installation of product. Project Record Documents: Record actual installed circuiting arrangements. Record actual routing for underground circuits.
- F. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.

### 1.06 QUALITY ASSURANCE

- Comply with requirements of NFPA 70.
- Maintain at the project site a copy of each referenced document that prescribes execution requirements.
- C. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience.
- D. Product Listing Organization Qualifications: An organization recognized by OSHA as a Nationally Recognized Testing Laboratory (NRTL) and acceptable to authorities having jurisdiction.

# 1.07 DELIVERY, STORAGE, AND HANDLING

A. Receive, inspect, handle, and store conductors and cables in accordance with manufacturer's instructions.

A. Do not install or otherwise handle thermoplastic-insulated conductors at temperatures lower than 14 degrees F, unless otherwise permitted by manufacturer's instructions. When installation below this temperature is unavoidable, notify Architect and obtain direction before proceeding with work.

# PART 2 PRODUCTS

- 2.01 CONDUCTOR AND CABLE APPLICATIONS A. Do not use conductors and cables for applications other than as permitted by NFPA 70 and product listing.
- B. Provide single conductor building wire installed in suitable raceway unless otherwise indicated, permitted, or required.
- C. Nonmetallic-sheathed cable is not permitted.
- Underground feeder and branch-circuit cable is not permitted.
- E. Service entrance cable is not permitted.
- F. Armored cable is not permitted. G. Metal-clad cable is not permitted.
- Manufactured wiring systems are not permitted.

# 2.02 CONDUCTOR AND CABLE GENERAL REQUIREMENTS

- A. Provide products that comply with requirements of NFPA 70.
- Provide products listed, classified, and labeled as suitable for the purpose intended.
- C. Unless specifically indicated to be excluded, provide all required conduit, boxes, wiring, connectors, etc. as required for a complete operating system.
- D. Comply with NEMA WC 70. E. Thermoplastic-Insulated Conductors and Cables: Listed and labeled as complying with UL 83.
- F. Thermoset-Insulated Conductors and Cables: Listed and labeled as complying with UL 44.
- G. Conductors for Grounding and Bonding: Also comply with Section 260526.
- H. Conductor Material:
- Provide copper conductors only. Aluminum conductors are not acceptable for this project. Conductor sizes indicated are based on copper. Copper Conductors: Soft drawn annealed, 98 percent conductivity, uncoated copper conductors complying with ASTM B3, ASTM B8, or ASTM B787/B787M
- unless otherwise indicated.
- 3. Tinned Copper Conductors: Comply with ASTM B33.
- Minimum Conductor Size:
- Branch Circuits: 12 AWG.
- J. Where conductor size is not indicated, size to comply with NFPA 70 but not less than applicable minimum size requirements specified.
- Color code conductors as indicated unless otherwise required by the authority having jurisdiction. Maintain consistent color coding throughout project. Color Coding Method: Integrally colored insulation.
  - a. Conductors size 4 AWG and larger may have black insulation color coded using vinyl color coding electrical tape.
- Color Code: 480/277 V, 3 Phase, 3 Wire System:
- 1) Phase 1: Brown
- Phase 2: Orange
- Phase 3: Yellow Neutral/Grounded: Grey
- b. Equipment Ground, All Systems: Green.

### 2.03 SINGLE CONDUCTOR BUILDING WIRE A. Manufacturers:

- Copper Building Wire:
  - a. Cerro Wire LLC: www.cerrowire.com/#sle. Encore Wire Corporation: www.encorewire.com/#sle.
- General Cable Technologies Corporation: www.generalcable.com/#sle.
- d. Service Wire Co: www.servicewire.com/#sle. e. Southwire Company: www.southwire.com/#sle.
- Substitutions: See Section 016000 Product Requirements.
- B. Description: Single conductor insulated wire. C. Conductor Stranding:
  - Feeders and Branch Circuits: Size 10 AWG and Smaller: Solid.
  - b. Size 8 AWG and Larger: Stranded.
- D. Insulation Voltage Rating: 600 V.

- E. Insulation:
  - 1. Copper Building Wire: Type THHN/THWN or THHN/THWN-2, except as indicated below.
  - Size 4 AWG and Larger: Type XHHW-2. Installed Underground: Type XHHW-2.

### 2.04 WIRING CONNECTORS

- A. Description: Wiring connectors appropriate for the application, suitable for use with the conductors to be connected, and listed as complying with UL 486A-486B or UL
- B. Connectors for Grounding and Bonding: Comply with Section 260526. C. Wiring Connectors for Splices and Taps:
  - Copper Conductors Size 8 AWG and Smaller: Use twist-on insulated spring connectors.
- 2. Copper Conductors Size 6 AWG and Larger: Use mechanical connectors or compression connectors.
- D. Wiring Connectors for Terminations:
  - Provide terminal lugs for connecting conductors to equipment furnished with terminations designed for terminal lugs. Provide compression adapters for connecting conductors to equipment furnished with mechanical lugs when only compression connectors are specified.
  - Where over-sized conductors are larger than the equipment terminations can accommodate, provide connectors suitable for reducing to appropriate size, but not less than required for the rating of the overcurrent protective device.
  - Copper Conductors Size 8 AWG and Larger: Use mechanical connectors or compression connectors where connectors are required.
- 5. Stranded Conductors Size 10 AWG and Smaller: Use crimped terminals for connections to terminal screws. Do not use insulation-piercing or insulation-displacement connectors designed for use with conductors without stripping insulation.
- F. Do not use push-in wire connectors as a substitute for twist-on insulated spring connectors.
- G. Twist-on Insulated Spring Connectors: Rated 600 V, 221 degrees F for standard applications and 302 degrees F for high temperature applications; pre-filled with sealant and listed as complying with UL 486D for damp and wet locations.
- Manufacturers: a. 3M: www.3m.com/#sle.
- b. Ideal Industries, Inc: www.idealindustries.com/#sle NSI Industries LLC: www.nsiindustries.com/#sle.
- d. Substitutions will be allowed.: H. Mechanical Connectors: Provide bolted type or set-screw type.
- Manufacturers: a. Burndy LLC: www.burndy.com/#sle.
- Ilsco: www.ilsco.com/#sle. Thomas & Betts Corporation: www.tnb.com/#sle.
- d. Substitutions will be allowed.:
- Compression Connectors: Provide circumferential type or hex type crimp configuration.
- Manufacturers: a. Burndy LLC: www.burndy.com/#sle.
- b. Ilsco: www.ilsco.com/#sle Thomas & Betts Corporation: www.tnb.com/#sle.
- d. Substitutions will be allowed.:
- Crimped Terminals: Nylon-insulated, with insulation grip and terminal configuration suitable for connection to be made. Manufacturers:
- a. Burndy LLC: www.burndy.com/#sle. b. Ilsco: www.ilsco.com/#sle.
- Thomas & Betts Corporation: www.tnb.com/#sle. d. Substitutions will be allowed .:
- 2.05 ACCESSORIES A. Electrical Tape:
  - Manufacturers:
  - a. 3M: www.3m.com/#sle. b. Plymouth Rubber Europa: www.plymouthrubber.com/#sle.
  - Substitutions will be allowed .: Vinyl Color Coding Electrical Tape: Integrally colored to match color code indicated; listed as complying with UL 510; minimum thickness of 7 mil; resistant to
  - abrasion, corrosion, and sunlight; suitable for continuous temperature environment up to 221 degrees F. Vinyl Insulating Electrical Tape: Complying with ASTM D3005 and listed as complying with UL 510; minimum thickness of 7 mil; resistant to abrasion, corrosion,
  - and sunlight; conformable for application down to 0 degrees F and suitable for continuous temperature environment up to 221 degrees F.
  - 4. Rubber Splicing Electrical Tape: Ethylene Propylene Rubber (EPR) tape, complying with ASTM D4388; minimum thickness of 30 mil; suitable for continuous temperature environment up to 194 degrees F and short-term 266 degrees F overload service. Electrical Filler Tape: Rubber-based insulating moldable putty, minimum thickness of 125 mil; suitable for continuous temperature environment up to 176 degrees
  - Varnished Cambric Electrical Tape: Cotton cambric fabric tape, with or without adhesive, oil-primed and coated with high-grade insulating varnish; minimum thickness of 7 mil; suitable for continuous temperature environment up to 221 degrees F.
- Moisture Sealing Electrical Tape: Insulating mastic compound laminated to flexible, all-weather vinyl backing; minimum thickness of 90 mil. B. Heat Shrink Tubing: Heavy-wall, split-resistant, with factory-applied adhesive; rated 600 V; suitable for direct burial applications; listed as complying with UL 486D.
- Manufacturers: a. 3M: www.3m.com/#sle.
- Burndy LLC: www.burndy.com/#sle. Thomas & Betts Corporation: www.tnb.com/#sle.
- d. Substitutions will be allowed.: C. Oxide Inhibiting Compound: Listed; suitable for use with the conductors or cables to be installed.
- Manufacturers: a. Burndy LLC: www.burndy.com/#sle.
- b. Ideal Industries, Inc: www.idealindustries.com/#sle. c. Ilsco: www.ilsco.com/#sle.
- d. Substitutions will be allowed.:
- D. Wire Pulling Lubricant: Manufacturers:
  - a. 3M: www.3m.com/#sle.
  - b. American Polywater Corporation: www.polywater.com/#sle. c. Ideal Industries, Inc: www.idealindustries.com/#sle.
- d. Substitutions will be allowed.: Listed and labeled as complying with UL 267.
- Suitable for use with conductors/cables and associated insulation/jackets to be installed. 4. Suitable for use at installation temperature.
- E. Cable Ties: Material and tensile strength rating suitable for application.

# PART 3 EXECUTION

- 3.01 EXAMINATION
- Verify that work likely to damage wire and cable has been completed. B. Verify that raceways, boxes, and equipment enclosures are installed and are properly sized to accommodate conductors and cables in accordance with NFPA 70.
- Verify that field measurements are as indicated.
- D. Verify that conditions are satisfactory for installation prior to starting work.

# 3.02 PREPARATION

- A. Clean raceways thoroughly to remove foreign materials before installing conductors and cables. 3.03 INSTALLATION
- A. Circuiting Requirements:
- Install products in accordance with manufacturer's instructions.
- Perform work in accordance with NECA 1 (general workmanship). D. Secure and support conductors and cables in accordance with NFPA 70 using suitable supports and methods approved by the authority having jurisdiction. Provide independent support from building structure. Do not provide support from raceways, piping, ductwork, or other systems
- F. Neatly train and bundle conductors inside boxes, wireways, panelboards and other equipment enclosures.

E. Install conductors with a minimum of 12 inches of slack at each outlet.

- G. Group or otherwise identify neutral/grounded conductors with associated ungrounded conductors inside enclosures in accordance with NFPA 70. H. Make wiring connections using specified wiring connectors.
- Make splices and taps only in accessible boxes. Do not pull splices into raceways or make splices in conduit bodies or wiring gutters.
- Remove appropriate amount of conductor insulation for making connections without cutting, nicking or damaging conductors. 3. Do not remove conductor strands to facilitate insertion into connector. 4. Clean contact surfaces on conductors and connectors to suitable remove corrosion, oxides, and other contaminates. Do not use wire brush on plated connector
- Mechanical Connectors: Secure connections according to manufacturer's recommended torque settings.
- Compression Connectors: Secure connections using manufacturer's recommended tools and dies.
- I. Insulate splices and taps that are made with uninsulated connectors using methods suitable for the application, with insulation and mechanical strength at least
- equivalent to unspliced conductors. Insulate ends of spare conductors using vinyl insulating electrical tape.
- K. Field-Applied Color Coding: Where vinyl color coding electrical tape is used in lieu of integrally colored insulation as permitted in Part 2 under "Color Coding", apply half overlapping turns of tape at each termination and at each location conductors are accessible. Install firestopping to preserve fire resistance rating of partitions and other elements, using materials and methods specified in Section 078400.

END OF SECTION

**SECTION 260526** 

### M. Unless specifically indicated to be excluded, provide final connections to all equipment and devices, including those furnished by others, as required for a complete operating system.

GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS PART 1 GENERAL

### 1.01 SECTION INCLUDES

- A. Grounding and bonding requirements.
- B. Conductors for grounding and bonding.
- C. Connectors for grounding and bonding.

### 1.02 RELATED REQUIREMENTS

- A. Section 260519 Low-Voltage Electrical Power Conductors and Cables: Additional requirements for conductors for grounding and bonding, including conductor color
- B. Section 260553 Identification for Electrical Systems: Identification products and requirements.

### 1.03 REFERENCE STANDARDS

- A. IEEE 81 IEEE Guide for Measuring Earth Resistivity, Ground Impedance, and Earth Surface Potentials of a Grounding System 2012.
- B. NECA 1 Standard for Good Workmanship in Electrical Construction 2015.
- C. NETA ATS Standard For Acceptance Testing Specifications For Electrical Power Equipment And Systems 2021
- NFPA 70 National Electrical Code Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements. E. UL 467 - Grounding and Bonding Equipment Current Edition, Including All Revisions.

# 1.04 ADMINISTRATIVE REQUIREMENTS

- A. Coordination: Verify exact locations of underground metal water service pipe entrances to building.
- Notify Architect of any conflicts with or deviations from Contract Documents. Obtain direction before proceeding with work. 1.05 SUBMITTALS

Coordinate the work with other trades to provide steel reinforcement complying with specified requirements for concrete-encased electrode.

- B. Manufacturer's Instructions: Indicate application conditions and limitations of use stipulated by product testing agency. Include instructions for storage, handling,
- protection, examination, preparation, and installation of product. C. Field quality control test reports.

A. Product Data: Provide manufacturer's standard catalog pages and data sheets for grounding and bonding system components.

### Project Record Documents: Record actual locations of grounding electrode system components and connections. 1.06 QUALITY ASSURANCE

- Comply with requirements of NFPA 70.
- Maintain at the project site a copy of each referenced document that prescribes execution requirements.
- C. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience.
- D. Installer Qualifications for Signal Reference Grids: Company with minimum five years documented experience with high frequency grounding systems. E. Product Listing Organization Qualifications: An organization recognized by OSHA as a Nationally Recognized Testing Laboratory (NRTL) and acceptable to authorities

### having jurisdiction. 1.07 DELIVERY, STORAGE, AND HANDLING

Receive, inspect, handle, and store products in accordance with manufacturer's instructions.

### PART 2 PRODUCTS

D. Grounding System Resistance:

- 2.01 GROUNDING AND BONDING REQUIREMENTS A. Do not use products for applications other than as permitted by NFPA 70 and product listing.
- B. Unless specifically indicated to be excluded, provide all required components, conductors, connectors, conduit, boxes, fittings, supports, accessories, etc. as necessary for a complete grounding and bonding system.
- C. Where conductor size is not indicated, size to comply with NFPA 70 but not less than applicable minimum size requirements specified.

Grounding Electrode System: Not greater than 5 ohms to ground, when tested according to IEEE 81 using "fall-of-potential" method.

- Achieve specified grounding system resistance under normally dry conditions unless otherwise approved by Architect. Precipitation within the previous 48 hours does not constitute normally dry conditions.
- tested using "point-to-point" methods. E. Bonding and Equipment Grounding:
- Provide bonding for equipment grounding conductors, equipment ground busses, metallic equipment enclosures, metallic raceways and boxes, device grounding terminals, and other normally non-current-carrying conductive materials enclosing electrical conductors/equipment or likely to become energized as indicated and in

3. Between Grounding Electrode System and Major Electrical Equipment Frames, System Neutral, and Derived Neutral Points: Not greater than 0.5 ohms, when

Where circuit conductor sizes are increased for voltage drop, increase size of equipment grounding conductor proportionally in accordance with NFPA 70.

- Provide insulated equipment grounding conductor in each feeder and branch circuit raceway. Do not use raceways as sole equipment grounding conductor.
- Unless otherwise indicated, connect wiring device grounding terminal to branch circuit equipment grounding conductor and to outlet box with bonding jumper. Terminate branch circuit equipment grounding conductors on solidly bonded equipment ground bus only. Do not terminate on neutral (grounded) or

### isolated/insulated ground bus. 6. Provide bonding jumper across expansion or expansion/deflection fittings provided to accommodate conduit movement.

- 2.02 GROUNDING AND BONDING COMPONENTS A. General Requirements:
- Provide products listed and labeled as complying with UL 467 where applicable. B. Conductors for Grounding and Bonding, in Addition to Requirements of Section 260526: Use insulated copper conductors unless otherwise indicated.
- a. Exceptions: Use bare copper conductors where installed underground in direct contact with earth.
- Use bare copper conductors where directly encased in concrete (not in raceway). C. Connectors for Grounding and Bonding:

Provide products listed, classified, and labeled as suitable for the purpose intended

- Description: Connectors appropriate for the application and suitable for the conductors and items to be connected; listed and labeled as complying with UL 467. Unless otherwise indicated, use exothermic welded connections for underground, concealed and other inaccessible connections.
- Unless otherwise indicated, use mechanical connectors or compression connectors for accessible connections. Manufacturers - Mechanical and Compression Connectors:
- a. allG Fabrication: www.allgfab.com/#sle. Burndy LLC: www.burndy.com/#sle. Harger Lightning & Grounding: www.harger.com/#sle.
- d. nVent ERICO: www.nvent.com/#sle. e. Thomas & Betts Corporation: www.tnb.com/#sle.

a. Burndy LLC: www.burndy.com/#sle.

- Substitutions: See Section 016000 Product Requirements. Manufacturers - Exothermic Welded Connections:
- b. nVent ERICO; Cadweld: www.nvent.com/#sle thermOweld, subsidiary of Continental Industries; division of Burndy LLC: www.thermoweld.com/#sle. Substitutions will be allowed.
- PART 3 EXECUTION 3.01 EXAMINATION
- Verify that work likely to damage grounding and bonding system components has been completed Verify that field measurements are as indicated.
- 3.02 INSTALLATION A. Install products in accordance with manufacturer's instructions.

C. Verify that conditions are satisfactory for installation prior to starting work.

 B. Perform work in accordance with NECA 1 (general workmanship). Make grounding and bonding connections using specified connectors.

C. Perform ground electrode resistance tests under normally dry conditions. Precipitation within the previous 48 hours does not constitute normally dry conditions.

END OF SECTION

SECTION 260533.13

CONDUIT FOR ELECTRICAL SYSTEMS

Remove appropriate amount of conductor insulation for making connections without cutting, nicking or damaging conductors. Do not remove conductor strands to

facilitate insertion into connector. Remove nonconductive paint, enamel, or similar coating at threads, contact points, and contact surfaces.

Investigate and correct deficiencies where measured ground resistances do not comply with specified requirements.

Exothermic Welds: Make connections using molds and weld material suitable for the items to be connected in accordance with manufacturer's recommendations. Mechanical Connectors: Secure connections according to manufacturer's recommended torque settings.

### Compression Connectors: Secure connections using manufacturer's recommended tools and dies. D. Identify grounding and bonding system components in accordance with Section 260553.

3.03 FIELD QUALITY CONTROL A. Inspect and test in accordance with NETA ATS except Section 4.

B. Perform inspections and tests listed in NETA ATS, Section 7.13.

- 1.01 SECTION INCLUDES A. Rigid polyvinyl chloride (PVC) conduit.

PART 1 GENERAL

1.02 RELATED REQUIREMENTS

 A. Section 033000 - Cast-in-Place Concrete: Concrete encasement of conduits. B. Section 260526 - Grounding and Bonding for Electrical Systems.

Includes additional requirements for fittings for grounding and bonding.

- C. Section 260529 Hangers and Supports for Electrical Systems. D. Section 260533.16 - Boxes for Electrical Systems.

# WIGHTMAN

**BENTON HARBOR** 2303 Pipestone Road Benton Harbor, MI 49022

Phone: 269.927.0100

# **KALAMAZOO**

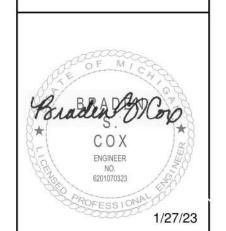
ALLEGAN

433 East Ransom Street Kalamazoo, MI 49007 Phone: 269.327.3532

Allegan, MI 49010 Phone: 269.673.8465

www.gowightman.com

1670 Lincoln Road



PARKING LOT LIGHTING 459 NORTH ROSE ST.

KALAMAZOO, MI 49007

PROJECT NAME:

KMETRO

WIGHTMAN

REVISIONS

DATE: 1/27/2023

SCALE:

**ELECTRICAL SPECS** 

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### 1.03 REFERENCE STANDARDS

- A. NECA 1 Standard for Good Workmanship in Electrical Construction 2015.
- B. NECA 111 Standard for Installing Nonmetallic Raceways (RNC, ENT, LFNC) 2017
- C. NEMA TC 2 Electrical Polyvinyl Chloride (PVC) Conduit 2020.
- D. NEMA TC 3 Polyvinyl Chloride (PVC) Fittings for Use with Rigid PVC Conduit and Tubing 2021.
- E. NFPA 70 National Electrical Code Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
- F. UL 651 Schedule 40, 80, Type EB and A Rigid PVC Conduit and Fittings Current Edition, Including All Revisions.
- G. UL 2419 Outline of Investigation for Electrically Conductive Corrosion Resistant Compounds Current Edition, Including All Revisions.

### 1.04 ADMINISTRATIVE REQUIREMENTS

- A. Coordination:
  - Coordinate minimum sizes of conduits with actual type and quantity of conductors to be installed, including adjustments for conductor sizes increased for voltage
  - Coordinate arrangement of conduits with structural members, ductwork, piping, equipment, and other potential conflicts.
  - Verify exact conduit termination locations required for boxes, enclosures, and equipment.
  - Coordinate work to provide roof penetrations that preserve integrity of roofing system and do not void roof warranty. Notify Architect of conflicts with or deviations from Contract Documents. Obtain direction before proceeding with work.
- 1. Do not begin installation of conductors and cables until installation of conduit between termination points is complete.

- A. See Section 013000 Administrative Requirements for submittals procedures.
- B. Product Data: Provide manufacturer's standard catalog pages and data sheets for conduits and fittings.
- C. Project Record Documents: Record actual routing for conduits installed underground, conduits embedded within concrete slabs, and conduits 2-inch (53 mm) trade size

### and larger. 1.06 QUALITY ASSURANCE

- Documents at Project Site: Maintain at project site one copy of manufacturer's instructions and shop drawings.
- B. Product Listing Organization Qualifications: Organization recognized by OSHA as Nationally Recognized Testing Laboratory (NRTL) and acceptable to authorities having jurisdiction.

### 1.07 DELIVERY, STORAGE, AND HANDLING

- A. See Section 017419 Construction Waste Management and Disposal for packaging waste requirements.
- B. Receive, inspect, handle, and store conduit and fittings in accordance with manufacturer's instructions.

PART 2 PRODUCTS

### 2.01 CONDUIT APPLICATIONS

- A. Do not use conduit and associated fittings for applications other than as permitted by NFPA 70, manufacturer's instructions, and product listing.
- Unless otherwise indicated and where not otherwise restricted, use conduit types indicated for specified applications. Where more than one listed application applies, comply with most restrictive requirements. Where conduit type for particular application is not specified, use galvanized steel rigid metal conduit.
- C. Underground: Under Slab on Grade: Use rigid PVC conduit.
- Exterior, Direct-Buried: Use PVC-coated galvanized steel rigid metal conduit.
- D. Embedded Within Concrete:
- Within Slab on Grade: Use rigid PVC conduit. Embed within structural slabs only where approved by Structural Engineer.
- Within Slab Above Ground: Use rigid PVC conduit, Embed within structural slabs only where approved by Structural Engineer.
- Within Concrete Walls Above Ground: Use rigid PVC conduit.
- 4. Where rigid polyvinyl (PVC) conduit is provided, transition to galvanized steel rigid metal conduit (RMC) where emerging from concrete.
- E. Exposed, Interior, Subject to Physical Damage: Use galvanized steel intermediate metal conduit (IMC).
- Locations subject to physical damage include, but are not limited to:
- a. Where exposed below 8 feet, except within electrical and communication rooms or closets.

### 2.02 CONDUIT - GENERAL REQUIREMENTS

- A. Comply with NFPA 70.
- B. Fittings for Grounding and Bonding: See Section 260526 for additional requirements.
- Provide conduit, fittings, supports, and accessories required for complete raceway system.
- Provide products listed, classified, and labeled as suitable for purpose intended.
- E. Minimum Conduit Size, Unless Otherwise Indicated: Branch Circuits: 3/4-inch trade size.
- Branch Circuit Homeruns: 3/4-inch trade size.
- Control Circuits: 1/2-inch trade size. Flexible Connections to Luminaires: 3/8-inch trade size.
- Underground, Interior: 3/4-inch trade size.
- Underground, Exterior: 1-inch trade size.
- F. Where conduit size is not indicated, size to comply with NFPA 70 but not less than applicable minimum size requirements specified. 2.03 RIGID POLYVINYL CHLORIDE (PVC) CONDUIT

# A. Manufacturers:

- ABB; Carlon: www.carlon.com/#sle.
- Allied Tube & Conduit, a division of Atkore International: www.alliedeg.com/#sle. Cantex Inc: www.cantexinc.com/#sle
- Heritage Plastics, a division of Atkore International: www.heritageplastics.com/#sle. JM Eagle: www.jmeagle.com/#sle.
- 6. Substitutions will be allowed.: See Section 016000 Product Requirements B. Description: NFPA 70, Type PVC rigid polyvinyl chloride conduit complying with NEMA TC 2 and listed and labeled as complying with UL 651; Schedule 40 unless
- otherwise indicated, Schedule 80 where subject to physical damage; rated for use with conductors rated 90 degrees C.
- C. Fittings:
- Manufacturer: Same as manufacturer of conduit to be connected.
- Description: Fittings complying with NEMA TC 3 and listed and labeled as complying with UL 651; material to match conduit.

# 2.04 ACCESSORIES

- A. Corrosion Protection Tape: PVC-based, minimum thickness of 20 mil, 0.020 inch. B. Conduit Joint Compound: Corrosion-resistant, electrically conductive compound listed as complying with UL 2419; suitable for use with conduit to be installed.
- C. Solvent Cement for PVC Conduit and Fittings: As recommended by manufacturer of conduit and fittings to be installed. D. Pull Strings: Use nylon or polyester tape with average breaking strength of not less than 1,250 lbf.
- PART 3 EXECUTION

# 3.01 EXAMINATION

- Verify that field measurements are as indicated.
- Verify that mounting surfaces are ready to receive conduits.
- Verify that conditions are satisfactory for installation prior to starting work.

# 3.02 INSTALLATION

- A. Install products in accordance with manufacturer's instructions.
- B. Install conduit in accordance with NECA 1.
- Install rigid polyvinyl chloride (PVC) conduit in accordance with NECA 111.
- D. Conduit Routing:
- Unless dimensioned, conduit routing indicated is diagrammatic.
- When conduit destination is indicated without specific routing, determine exact routing required. Conceal conduits unless specifically indicated to be exposed.
- Conduits in the following areas may be exposed, unless otherwise indicated: Electrical rooms.
- Mechanical equipment rooms.
- Within joists in areas with no ceiling.
- 5. Unless otherwise approved, do not route exposed conduits: a. Across floors.
- Across roofs.
- Across top of parapet walls. Across building exterior surfaces.
- Conduits installed underground or embedded in concrete may be routed in shortest possible manner unless otherwise indicated. Route other conduits parallel or perpendicular to building structure and surfaces, following surface contours where practical.
- Arrange conduit to maintain adequate headroom, clearances, and access.
- Arrange conduit to provide no more than equivalent of four 90-degree bends between pull points.
- Arrange conduit to provide no more than 150 feet between pull points.
- Route conduits above water and drain piping where possible. 11. Arrange conduit to prevent moisture traps. Provide drain fittings at low points and at sealing fittings where moisture may collect.
- Maintain minimum clearance of 6 inches between conduits and piping for other systems.
- Maintain minimum clearance of 12 inches between conduits and hot surfaces. This includes, but is not limited to: a. Heaters. b. Hot water piping.
- 14. Group parallel conduits in same area on common rack.

Flues.

- Secure and support conduits in accordance with NFPA 70 using suitable supports and methods approved by authorities having jurisdiction; see Section 260529. Provide independent support from building structure. Do not provide support from piping, ductwork, or other systems.
- Installation Above Suspended Ceilings: Do not provide support from ceiling support system. Do not provide support from ceiling grid or allow conduits to lay on

- Use conduit strap to support single surface-mounted conduit.
- Use clamp back spacer with conduit strap for damp and wet locations to provide space between conduit and mounting surface.
- Use metal channel/strut with accessory conduit clamps to support multiple parallel surface-mounted conduits.
- Use conduit clamp to support single conduit from beam clamp or threaded rod.
- Use trapeze hangers assembled from threaded rods and metal channel/strut with accessory conduit clamps to support multiple parallel suspended conduits. Use of spring steel conduit clips for support of conduits is not permitted.
- Use of wire for support of conduits is not permitted. 10. Where conduit support intervals specified in NFPA 70 and NECA standards differ, comply with most stringent requirements.
- F. Connections and Terminations: Use suitable adapters where required to transition from one type of conduit to another.
  - Provide insulating bushings, insulated throats, or listed metal fittings with smooth, rounded edges at conduit terminations to protect conductors. Secure joints and connections to provide mechanical strength and electrical continuity.
- Do not penetrate or otherwise notch or cut structural members, including footings and grade beams, without approval of Structural Engineer. Make penetrations perpendicular to surfaces unless otherwise indicated.
- Provide sleeves for penetrations as indicated or as required to facilitate installation. Set sleeves flush with exposed surfaces unless otherwise indicated or required. Conceal bends for conduit risers emerging above ground.
- Where conduits penetrate waterproof membrane, seal as required to maintain integrity of membrane. Make penetrations for roof-mounted equipment within associated equipment openings and curbs where possible to minimize roofing system penetrations. Where
- penetrations are necessary, seal as indicated or as required to preserve integrity of roofing system and maintain roof warranty. Install firestopping to preserve fire resistance rating of partitions and other elements; see Section 078400.
- H. Underground Installation:
  - Minimum Cover, Unless Otherwise Indicated or Required: Underground, Exterior: 18 inches.
  - Under Slab on Grade: 12 inches to bottom of slab.
  - Provide underground warning tape along entire conduit length for service entrance where not concrete-encased;
- Embedment Within Structural Concrete Slabs (only where approved by Structural Engineer): Maximum Conduit Size: 1-inch trade size unless otherwise approved.
- Install conduits within middle one third of slab thickness
- Secure conduits to prevent floating or movement during pouring of concrete. J. Concrete Encasement: Where conduits not otherwise embedded within concrete are indicated to be concrete-encased, provide minimum concrete cover of 3 inches on
- all sides unless otherwise indicated; see Section 033000. K. Conduit Movement Provisions: Where conduits are subject to movement, provide expansion and expansion/deflection fittings to prevent damage to enclosed conductors
- or connected equipment. This includes, but is not limited to: Where conduits cross structural joints intended for expansion, contraction, or deflection.
- Where calculated in accordance with NFPA 70 for rigid polyvinyl chloride (PVC) conduit installed above ground to compensate for thermal expansion and
- Where conduits are subject to earth movement by settlement or frost.
- L. Conduit Sealing:
  - Use foam conduit sealant to prevent entry of moisture and gases. This includes, but is not limited to: a. Where conduits enter building from outside.
- Where service conduits enter building from underground distribution system. Where conduits enter building from underground.
- Where conduits may transport moisture to contact live parts. Where conduits cross barriers between areas of potential substantial temperature differential, use foam conduit sealant at accessible point near penetration to
- prevent condensation. This includes, but is not limited to: Where conduits pass from outdoors into conditioned interior spaces.
- Where conduits pass from unconditioned interior spaces into conditioned interior spaces.
- M. Provide pull string in each empty conduit and in conduits where conductors and cables are to be installed by others. Leave minimum slack of 12 inches at each end. N. Provide grounding and bonding; see Section 260526.
- Identify conduits;

for installation of conductors.

3.03 FIELD QUALITY CONTROL Correct deficiencies and replace damaged or defective conduits.

Clean interior of conduits to remove moisture and foreign matter.

- 3.04 CLEANING
- 3.05 PROTECTION A. Immediately after installation of conduit, use suitable manufactured plugs to provide protection from entry of moisture and foreign material and do not remove until ready

# END OF SECTION

### SECTION 260533.16 BOXES FOR ELECTRICAL SYSTEMS

# PART 2 PRODUCTS

- 1.01 BOXES
- A. General Requirements:
  - Do not use boxes and associated accessories for applications other than as permitted by NFPA 70 and product listing. Provide all boxes, fittings, supports, and accessories required for a complete raceway system and to accommodate devices and equipment to be installed.
- Provide products listed, classified, and labeled as suitable for the purpose intended. Where box size is not indicated, size to comply with NFPA 70 but not less than applicable minimum size requirements specified.
- Provide grounding terminals within boxes where equipment grounding conductors terminate. B. Outlet and Device Boxes Up to 100 cubic inches, Including Those Used as Junction and Pull Boxes:
- Use sheet-steel boxes for dry locations unless otherwise indicated or required. Use cast iron boxes or cast aluminum boxes for damp or wet locations unless otherwise indicated or required; furnish with compatible weatherproof gasketed
- Use cast iron boxes or cast aluminum boxes where exposed galvanized steel rigid metal conduit or exposed intermediate metal conduit (IMC) is used.
- Use nonmetallic boxes where exposed rigid PVC conduit is used.
- Use raised covers suitable for the type of wall construction and device configuration where required.
- Sheet-Steel Boxes: Comply with NEMA OS 1, and list and label as complying with UL 514A. Cast Metal Boxes: Comply with NEMA FB 1, and list and label as complying with UL 514A; furnish with threaded hubs.
- Nonmetallic Boxes: Comply with NEMA OS 2, and list and label as complying with UL 514C. Boxes for Ganged Devices: Use multigang boxes of single-piece construction. Do not use field-connected gangable boxes unless specifically indicated or
- Minimum Box Size, Unless Otherwise Indicated:
- a. Wiring Devices (Other Than Communications Systems Outlets): 4 inch square by 1-1/2 inch deep (100 by 38 mm) trade size. Communications Systems Outlets: 4 inch square by 2-1/8 inch (100 by 54 mm) trade size.
- Ceiling Outlets: 4 inch octagonal or square by 1-1/2 inch deep (100 by 38 mm) trade size. Manufacturers:
- a. Cooper Crouse-Hinds, a division of Eaton Corporation: www.cooperindustries.com/#sle.
- b. Hubbell Incorporated; Bell Products: www.hubbell-rtb.com/#sle. Hubbell Incorporated; RACO Products: www.hubbell-rtb.com/#sle.
- . Thomas & Betts Corporation: www.tnb.com/#sle. Substitutions will be allowed.
- C. Cabinets and Enclosures, Including Junction and Pull Boxes Larger Than 100 cubic inches: Comply with NEMA 250, and list and label as complying with UL 50 and UL 50E, or UL 508A.
- NEMA 250 Environment Type, Unless Otherwise Indicated:
- a. Indoor Clean, Dry Locations: Type 1, painted steel. Outdoor Locations: Type 3R, painted steel.
- 3. Junction and Pull Boxes Larger Than 100 cubic inches Provide screw-cover or hinged-cover enclosures unless otherwise indicated.

Hubbell Incorporated; Wiegmann Products: www.hubbell-wiegmann.com/#sle.

- Finish for Painted Steel Enclosures: Manufacturer's standard grey unless otherwise indicated. Manufacturers:
- a. Cooper B-Line, a division of Eaton Corporation: www.cooperindustries.com/#sle. Hoffman, a brand of Pentair Technical Products: www.hoffmanonline.com/#sle.
- d. Substitutions will be allowed 1.02 ACCESSORIES
- A. Flashing Panels for Exterior Wall Penetrations: Premanufactured components and accessories as required to preserve integrity of building envelope; suitable for boxes and facade materials to be installed.

B. Install boxes in accordance with NECA 1 (general workmanship) and, where applicable, NECA 130, including mounting heights specified in those standards where

# PART 3 EXECUTION

- 2.01 EXAMINATION Verify that field measurements are as indicated.
- Verify that mounting surfaces are ready to receive boxes.
- Verify that conditions are satisfactory for installation prior to starting work. 2.02 INSTALLATION
- A. Install products in accordance with manufacturer's instructions.
- C. Arrange equipment to provide minimum clearances in accordance with manufacturer's instructions and NFPA 70. Unless otherwise indicated, provide separate boxes for line voltage and low voltage systems. Flush-mount boxes in finished areas unless specifically indicated to be surface-mounted.
- Unless otherwise indicated, boxes may be surface-mounted where exposed conduits are indicated or permitted. G. Box Locations:

mounting heights are not indicated.

- Unless dimensioned, box locations indicated are approximate.
- Locate junction and pull boxes as indicated, as required to facilitate installation of conductors, and to limit conduit length and/or number of bends between pulling points in accordance with Section 260533.13.

### H. Box Supports:

- Secure and support boxes in accordance with NFPA 70 and Section 260529 using suitable supports and methods approved by the authority having jurisdiction.
- Provide independent support from building structure except for cast metal boxes (other than boxes used for fixture support) supported by threaded conduit connections in accordance with NFPA 70. Do not provide support from piping, ductwork, or other systems.
- Installation Above Suspended Ceilings: Do not provide support from ceiling grid or ceiling support system. 4. Use far-side support to secure flush-mounted boxes supported from single stud in hollow stud walls. Repair or replace supports for boxes that permit excessive
- movement

### Install boxes plumb and level.

- J. Flush-Mounted Boxes: Install boxes in noncombustible materials such as concrete, tile, gypsum, plaster, etc. so that front edge of box or associated raised cover is not set back from finished surface more than 1/4 inch or does not project beyond finished surface.
- Install boxes in combustible materials such as wood so that front edge of box or associated raised cover is flush with finished surface.
- K. Install boxes as required to preserve insulation integrity.
- Install firestopping to preserve fire resistance rating of partitions and other elements, using materials and methods specified in Section 078400. M. Close unused box openings.
- Provide grounding and bonding in accordance with Section 260526.

# Clean interior of boxes to remove dirt, debris, plaster and other foreign material.

2.04 PROTECTION

### END OF SECTION **SECTION 260553**

1.01 RELATED REQUIREMENTS

# PART 2 PRODUCTS

- A. Identification for Equipment:
  - a. Time Switches:
  - Enclosed Contactors:
  - Identify ampere rating.
  - Identify voltage and phase. Identify load(s) and associated circuits controlled. Include location.
- Color Coding for Power Conductors 600 V and Less: Comply with Section 260519.
- feeder or branch-circuit distribution equipment when premises has feeders or branch circuits served by more than one nominal voltage system.
- C. Identification for Boxes:
- 2.02 IDENTIFICATION NAMEPLATES AND LABELS
  - Manufacturers:
  - c. Panduit Corp: www.panduit.com/#sle.
  - Materials: Use self-adhesive laminated plastic labels; UV, chemical, water, heat, and abrasion resistant. 3. Text: Use factory pre-printed or machine-printed text. Do not use handwritten text unless otherwise indicated.
  - Minimum Size: 1 inch by 2.5 inches. Legend:
- Text: All capitalized unless otherwise indicated.
- a. System Designation: 1 inch. Equipment Designation: 1/2 inch.
- Color:
- C. Format for Receptacle Identification: Minimum Size: 3/8 inch by 1.5 inches. Legend: Power source and circuit number or other designation indicated.
- Color: Black text on clear background. 2.03 WIRE AND CABLE MARKERS
- A. Manufacturers:
- Panduit Corp: www.panduit.com/#sle.

END OF SECTION

**SECTION 265600** 

EXTERIOR LIGHTING

- B. Markers for Conductors and Cables: Use wrap-around self-adhesive vinyl cloth, wrap-around self-adhesive vinyl self-laminating, heat-shrink sleeve, plastic sleeve, plastic clip-on, or vinyl split sleeve type markers suitable for the conductor or cable to be identified.
- Text: Use factory pre-printed or machine-printed text, all capitalized unless otherwise indicated.
- F. Minimum Text Height: 1/8 inch.
- A. Manufacturers: Brady Corporation: www.bradyid.com/#sle.

2.05 UNDERGROUND WARNING TAPE

A. Manufacturers:

- Substitutions will be allowed: See Section 016000 Product Requirements.
- Markers for Pull Boxes: 1 1/8 by 4 1/2 inches.
- Markers for Voltage Identification: Highest voltage present. E. Color: Black text on orange background unless otherwise indicated.
- Brimar Industries, Inc: www.brimar.com/#sle. Seton Identification Products: www.seton.com/#sle.

Substitutions will be allowed: See Section 016000 - Product Requirements.

C. Non-detectable Type Tape: 6 inches wide, with minimum thickness of 4 mil. D. Foil-backed Detectable Type Tape: 3 inches wide, with minimum thickness of 5 mil, unless otherwise required for proper detection.

E. Legend: Type of service, continuously repeated over full length of tape.

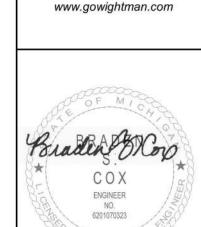
- Repair rough openings around boxes in noncombustible materials such as concrete, tile, gypsum, plaster, etc. so that there are no gaps or open spaces greater
- than 1/8 inch at the edge of the box.
- N. Install blank wall plates on junction boxes and on outlet boxes with no devices or equipment installed or designated for future use.
- Immediately after installation, protect boxes from entry of moisture and foreign material until ready for installation of conductors.
- IDENTIFICATION FOR ELECTRICAL SYSTEMS PART 1 GENERAL
- A. Section 260519 Low-Voltage Electrical Power Conductors and Cables: Color coding for power conductors and cables 600 V and less; vinyl color coding electrical tape. 1.02 SUBMITTALS
- 2.01 IDENTIFICATION REQUIREMENTS
  - Use identification nameplate to identify each piece of electrical distribution and control equipment and associated sections, compartments, and components.
    - Identify load(s) served and associated circuits controlled. Include location.
- B. Identification for Conductors and Cables:
- Use identification nameplate or identification label to identify color code for ungrounded and grounded power conductors inside door or enclosure at each piece of
- Use voltage markers to identify highest voltage present. Use identification labels or handwritten text using indelible marker to identify circuits enclosed.
- A. Identification Labels:
  - a. Brady Corporation: www.bradyid.com/#sle. Brother International Corporation: www.brother-usa.com/#sle.
- Substitutions will be allowed: See Section 016000 Product Requirements.
- B. Format for Equipment Identification:
- System designation where applicable Equipment designation or other approved description.
- Minimum Text Height:
- Normal Power System: White text on black background.
- Text: All capitalized unless otherwise indicated. Minimum Text Height: 3/16 inch.
- Brady Corporation: www.bradyid.com/#sle. HellermannTyton: www.hellermanntyton.com/#sle.
- Substitutions will be allowed: See Section 016000 Product Requirements.
- C. Markers for Conductor and Cable Bundles: Use plastic marker tags secured by nylon cable ties. D. Legend: Power source and circuit number or other designation indicated.
- G. Color: Black text on white background unless otherwise indicated. 2.04 VOLTAGE MARKERS
  - Brimar Industries, Inc: www.brimar.com/#sle. Seton Identification Products: www.seton.com/#sle.
- B. Markers for Boxes and Equipment Enclosures: Use factory pre-printed self-adhesive vinyl or self-adhesive vinyl cloth type markers. C. Minimum Size:
- Markers for Junction Boxes: 1/2 by 2 1/4 inches. D. Legend:
  - Brady Corporation: www.bradyid.com/#sle.

B. Materials: Use non-detectable type polyethylene tape suitable for direct burial, unless otherwise indicated.

- PART 1 GENERAL
- A. Exterior luminaires

1.01 SECTION INCLUDES

- **WIGHTMAN**
- **BENTON HARBOR**
- 2303 Pipestone Road Phone: 269.927.0100
- Benton Harbor, MI 49022
- **KALAMAZOO** 433 East Ransom Street
- Kalamazoo, MI 49007 Phone: 269.327.3532
- **ALLEGAN** 1670 Lincoln Road Allegan, MI 49010 Phone: 269.673.8465



PROJECT NAME: KMETRO PARKING LOT LIGHTING

459 NORTH ROSE ST.

KALAMAZOO, MI 49007

1/27/23

WIGHTMAN

REVISIONS

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**ELECTRICAL SPECS** 

E520

JOB NO: 224206

- B. Ballasts and Drivers.
- C. Luminaire accessories.

### 1.02 RELATED REQUIREMENTS

A. Section 260529 - Hangers and Supports for Electrical Systems.

### 1.03 REFERENCE STANDARDS

- A. IES LM-79 Approved Method: Optical and Electrical Measurements of Solid-State Lighting Products 2019.
- B. IES LM-80 Approved Method: Measuring Maintenance of Light Output Characteristics of Solid-State Light Sources 2021.
- C. NECA 1 Standard for Good Workmanship in Electrical Construction 2015.
- D. NECA/IESNA 501 Standard for Installing Exterior Lighting Systems 2000 (Reaffirmed 2006).
- E. NEMA 410 Performance Testing for Lighting Controls and Switching Devices with Electronic Drivers and Disharge Ballasts 2020.
- F. NEMA LE 4 Recessed Luminaires, Ceiling Compatibility 2012 (Reaffirmed 2018).
- G. NFPA 70 National Electrical Code Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
- H. UL 1598 Luminaires Current Edition, Including All Revisions.
- UL 8750 Light Emitting Diode (LED) Equipment for Use in Lighting Products Current Edition, Including All Revisions.

### 1.04 ADMINISTRATIVE REQUIREMENTS

### 1.05 SUBMITTALS

- Product Data: Provide manufacturer's standard catalog pages and data sheets including detailed information on luminaire construction, dimensions, ratings, finishes, mounting requirements, listings, service conditions, photometric performance, weight, effective projected area (EPA), and installed accessories; include model number nomenclature clearly marked with all proposed features. LED Luminaires:
  - Include estimated useful life, calculated based on IES LM-80 test data.
- Lamps: Include rated life and initial and mean lumen output.
- Poles: Include information on maximum supported effective projected area (EPA) and weight for the design wind speed.
- B. Certificates for Poles and Accessories: Manufacturer's documentation that products are suitable for the luminaires to be installed and comply with designated structural design criteria.
- C. Field Quality Control Reports.
- Include test report indicating measured illumination levels.
- D. Manufacturer's Installation Instructions: Indicate application conditions and limitations of use stipulated by product testing agency. Include instructions for storage, handling, protection, examination, preparation, installation, and starting of product.
- E. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.
- F. Project Record Documents: Record actual connections and locations of pole foundations, luminaires, and any pull or junction boxes.

### 1.06 QUALITY ASSURANCE

- A. Comply with requirements of NFPA 70.
- Maintain at the project site a copy of each referenced document that prescribes execution requirements.
- C. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience.
- D. Product Listing Organization Qualifications: An organization recognized by OSHA as a Nationally Recognized Testing Laboratory (NRTL) and acceptable to authorities having jurisdiction.

### 1.07 DELIVERY, STORAGE, AND HANDLING

- Receive, handle, and store products according to NECA/IESNA 501 and manufacturer's written instructions.
- Keep products in original manufacturer's packaging and protect from damage until ready for installation.

### 1.08 WARRANTY

### Provide 2-year manufacturer warranty for all LED luminaires, including drivers.

PART 2 PRODUCTS

### 2.01 LUMINAIRE TYPES Furnish products as indicated in luminaire schedule included on the drawings.

### B. Substitutions will be allowed.:

- 2.02 LUMINAIRES
- A. Manufacturers: Acuity Brands, Inc: www.acuitybrands.com/#sle.
- Alloy LED: www.alloyled.com/#sle.
- Cooper Lighting, a division of Cooper Industries: www.cooperindustries.com/#sle.
- Hubbell Lighting, Inc: www.hubbelllighting.com/#sle.
- Philips Lighting North America Corporation: www.lightingproducts.philips.com/#sle. RAB Lighting, Inc: www.rablighting.com/#sle.
- H.E. Williams, Inc..
- Substitutions will be allowed.:
- B. Provide products that comply with requirements of NFPA 70.
- C. Provide products that are listed and labeled as complying with UL 1598, where applicable.
- D. Provide products listed, classified, and labeled as suitable for the purpose intended.
- E. Unless otherwise indicated, provide complete luminaires including lamp(s) and all sockets, ballasts, reflectors, lenses, housings and other components required to
- position, energize and protect the lamp and distribute the light. F. Unless specifically indicated to be excluded, provide all required conduit, boxes, wiring, connectors, hardware, poles, foundations, supports, trims, accessories, etc. as
- necessary for a complete operating system. G. Provide products suitable to withstand normal handling, installation, and service without any damage, distortion, corrosion, fading, discoloring, etc.
- H. Provide luminaires listed and labeled as suitable for wet locations unless otherwise indicated.
- Recessed Luminaires:
- Ceiling Compatibility: Comply with NEMA LE 4.
- 2. Luminaires Recessed in Insulated Ceilings: Listed and labeled as IC-rated, suitable for direct contact with insulation and combustible materials.
- J. Luminaires Mounted in Continuous Rows: Provide quantity of units required for length indicated, with all accessories required for joining and aligning.
- K. LED Luminaires:
- Components: UL 8750 recognized or listed as applicable. Tested in accordance with IES LM-79 and IES LM-80.
- 3. LED Estimated Useful Life: Minimum of 50,000 hours at 70 percent lumen maintenance, calculated based on IES LM-80 test data.

# 2.03 BALLASTS AND DRIVERS

- A. Manufacturers:
- California Accent Lighting, Inc; www.calilighting.com/#sle.
- General Electric Company/GE Lighting: www.gelighting.com/#sle. OSRAM Sylvania, Inc: www.osram.us/ds/#sle.
- Philips Lighting North America Corporation; www.usa.lighting.philips.com/#sle. Substitutions will be allowed.:
- 6. Manufacturer Limitations: Where possible, for each type of luminaire provide ballasts produced by a single manufacturer.
- B. Ballasts/Drivers General Requirements:
- Electronic Ballasts/Drivers: Inrush currents not exceeding peak currents specified in NEMA 410. C. Dimmable LED Drivers:
- Dimming Range: Continuous dimming from 100 percent to five percent relative light output unless dimming capability to lower level is indicated, without flicker. Control Compatibility: Fully compatible with the dimming controls to be installed.
- 2.04 ACCESSORIES
- A. Stems for Suspended Luminaires: Steel tubing, minimum 1/2" size, factory finished to match luminaire or field-painted as directed.
- B. Threaded Rods for Suspended Luminaires: Zinc-plated steel, minimum 1/4" size, field-painted as directed. Provide accessory plaster frames for luminaires recessed in plaster ceilings.

# PART 3 EXECUTION

# 3.01 EXAMINATION

- Verify that field measurements are as indicated.
- B. Verify that outlet boxes are installed in proper locations and at proper mounting heights and are properly sized to accommodate conductors in accordance with NFPA 70.
- Verify that suitable support frames are installed where required.
- Verify that branch circuit wiring installation is completed, tested, and ready for connection to luminaires. E. Verify that conditions are satisfactory for installation prior to starting work.
- 3.02 PREPARATION

- A. Provide extension rings to bring outlet boxes flush with finished surface.
- Clean dirt, debris, plaster, and other foreign materials from outlet boxes.
- 3.03 INSTALLATION
- A. Coordinate locations of outlet boxes provided under Section 260533.16 as required for installation of luminaires provided under this section.
- B. Perform work in accordance with NECA 1 (general workmanship).
- C. Install products in accordance with manufacturer's instructions.
- D. Install luminaires in accordance with NECA/IESNA 501.
- E. Provide required support and attachment in accordance with Section 260529. F. Install luminaires plumb and square and aligned with building lines and with adjacent luminaires.
- G. Wall-Mounted Luminaires: Unless otherwise indicated, specified mounting heights are to center of luminaire.
- H. Install accessories furnished with each luminaire.
- Bond products and metal accessories to branch circuit equipment grounding conductor.

- Install lamps in each luminaire.
- 3.04 FIELD QUALITY CONTROL
- A. Inspect each product for damage and defects.
- Operate each luminaire after installation and connection to verify proper operation.
- C. Correct wiring deficiencies and repair or replace damaged or defective products. Repair or replace excessively noisy ballasts as determined by Architect.

# 3.05 ADJUSTING

- A. Aim and position adjustable luminaires to achieve desired illumination as indicated or as directed by Architect. Secure locking fittings in place.
- A. Clean surfaces according to NECA/IESNA 501 and manufacturer's instructions to remove dirt, fingerprints, paint, or other foreign material and restore finishes to match original factory finish.

3.06 CLEANING

- 3.07 PROTECTION
- A. Protect installed luminaires from subsequent construction operations. END OF SECTION



# WIGHTMAN

**BENTON HARBOR** 2303 Pipestone Road Benton Harbor, MI 49022 Phone: 269.927.0100

# **KALAMAZOO**

433 East Ransom Street Kalamazoo, MI 49007 Phone: 269.327.3532

# ALLEGAN

1670 Lincoln Road Allegan, MI 49010 Phone: 269.673.8465

www.gowightman.com



# PROJECT NAME: KMETRO PARKING LOT LIGHTING

459 NORTH ROSE ST. KALAMAZOO, MI 49007

# WIGHTMAN

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ELECTRICAL SPECS

JOB NO: 224206 E600



# FTA REQUIREMENTS

# Electrical Lighting Upgrades for 459 N Rose Street Bid Reference #: 98854-006.0

October 2023

### APPENDIX A-1 NONDISCRIMINATION

During the performance of this contract, the contractor agrees as follows:

- (1) Nondiscrimination in accordance with Title VI of the Civil Rights Act, as amended, 42 USC subsection 2000d, section 303 of the Age Discrimination Act of 1975, as amended, 42 USC subsection 6102, section 202 of the Americans with Disabilities Act of 1990, 42 USC subsection 12132, and Federal transit law at 49 USC subsection 5332, the Contractor agrees that it will not discriminate against any employee or applicant for employment because of race, color, creed, national origin, sex, age or disability. In addition, the Contractor agrees to comply with applicable Federal implementing regulations and other implementing requirements FTA may issue.
- (2) Equal Employment Opportunity The following equal employment opportunity requirements apply to the underlying contract:
  - Race, Color, Creed, National Origin, Sec In accordance with Title VII of the Civil Rights a. Act, as amended, 42 USC subsection 2000e and Federal transit laws at 49 USC subsection 5332, the Contractor agrees to comply with all applicable equal employment opportunity requirements of the Department of Labor (USDOL) regulations. "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor." 41 CFR Parts 60 et seq., (which implement Executive Order No. 11246, "Equal Employment Opportunity," as amended by Executive Order No. 11375," Amending Executive Order 11246 Relating to Equal Employment Opportunity," 42 USC subsection 2000e note), and with any applicable Federal statutes, executive orders, regulations, and Federal policies that may in the future affect construction activities undertaken in the course of the Project. The Contractor agrees to take affirmative action to ensure that applicants are employed, and that employees are tested during employment, without regard to their race, color, creed, national origin, sex or age. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination; rates of pay or other forms of compensation; and selection of training, including apprenticeship. In addition, the Contractor agrees to comply with any implementing requirements FTA may issue.
  - b. Age In accordance with section 4 of the Age Discrimination in Employment Act of 1967, as amended, 29 USC subsections 623 and Federal transit law at 49 USC subsection 5332, the Contractor agrees to refrain from discrimination against present and prospective employees for reason of age. In addition, the Contractor agrees to comply with any implementing requirements FTA may issue.
  - c. Disabilities In accordance with section 102 of the Americans with Disabilities Act, as amended, 42 USC subsection 12112, the Contractor agrees that it will comply with the requirements of the US Equal Employment Opportunity Commission, "Regulations to Implement the Equal Employment Provisions of the Americans with Disabilities Act," 29 CFR Part 1630, pertaining to employment of persons with disabilities. In addition, the Contractor agrees to comply with any implementing requirements the FTA may issue.
  - (3) The Contractor also agrees to include these requirements in each subcontract financed in whole or in part with Federal assistance provided by FTA, modified only if necessary to identify the affected parties.

# APPENDIX B-1 APPLICATION OF FEDERAL TRANSIT ADMINISTRATION REGULATIONS AND REQUIREMENTS

To achieve compliance with changing Federal requirements, the City of Kalamazoo hereby includes notice that Federal requirements may change and the changed requirements will apply to this contract, as applicable, unless the Federal government determines otherwise.

The contractor also recognizes that the United States Environmental Protection Agency, Federal Highway Administration, and other agencies in the Federal Government have issued and are expected to issue regulations, guidelines, orders, or other requirements that may affect this contract. The Contractor acknowledges that other obligations relative to this contract involving Federal law may exist.

The City of Kalamazoo has agreed to include provision adequate to ensure compliance of participation entities with Federal requirements. The contractor agrees to include in its subcontracts for service under this contract provisions adequate to impose Federal requirements including those below:

### **For all Contracts:**

**NOTICE OF FEDERAL REQUIREMENTS**: The contractor shall comply with the rules of 49 CFR Part 18, relative to third party contracts with the City of Kalamazoo, Uniform Administrative Requirements for Grants and Cooperative Agreements.

**INTEREST OF MEMBERS OR DELEGATES TO CONGRESS**: No member or delegate to the Congress of the United States shall be admitted to any share or part of this project or any benefit therefrom.

**ENERGY CONSERVATION REQUIREMENTS**: The contractor agrees to comply with mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act.

ACCESS TO RECORDS (sole source or offer): The contractor agrees to provide the Metro Transit system, the FTA Administrator, the Comptroller General of the United States or any of their authorized representatives access to any books, documents, papers, and records of the Contractor which are directly pertinent to this contract for the purposes of making audits, examinations, excerpts, and transcriptions. Contractor also agrees, pursuant to 49 C.F.R. 633.17 to provide the FTA Administrator or his authorized representatives including any PMO Contractor access to Contractor's records and construction sites pertaining to a major capital project, defined at 49 U.S.C. 5302(a)1, which is receiving federal financial assistance through the programs described at 49 U.S.C. 5307, 5309, or 5311. The contractor agrees to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed. The Contractor agrees to maintain all books, records, accounts, and reports required under this contract for a period of not less than three years, after the date of termination or expiration of this contract, except in the event of litigation or settlement of claims arising from the performance of this contract, in which case contractor agrees to maintain same until the Metro Transit System, the FTA Administrator, the Comptroller General, or any of their duly authorized representatives, have disposed of all such litigation, appeals, claims, or exceptions related thereto. Reference 49 CFR 18.39(I)(11).

CONTRACTS INVOLVING FEDERAL PRIVACY ACT REQUIREMENTS (applies to the contractor and its employees that administer any system of records on behalf of the Federal Government under any contract. Specific attention is drawn to contractors administering drug and alcohol enforcement activities for FTA): (1) The contractor agrees to comply with, and assures the compliance of its employees with, the information restrictions and other applicable requirements of the Privacy Act of 1974, 5 U.S.C. subsection 552a. Among other things, the contractor agrees to obtain the express consent of the Federal Government before the contractor or its employees operate a system of records on behalf of the Federal Government. The contractor understands that the requirements of the Privacy Act, including the civil and criminal penalties for violation of that Act, apply to those individuals involved, and that failure to comply with the terms of the Privacy Act may result in termination of the underlying contract. (2) The contractor also agrees to include these requirements in each subcontract to administer any system of records on behalf of the Federal Government financed in whole or in part with Federal assistance provided by FTA.

**FEDERAL CHANGES**: Contractor shall at all times comply with all applicable FTA regulations, policies, procedures and directives, including without limitation those listed directly or by reference in the Agreement (Form FTA MA (2) dated October, 1999) between the Metro Transit System, and the FTA, as they may be amended or promulgated from time to time during the term of this contract. Contractor's failure to so comply shall constitute a material breach of this contract.

**RECOVERED MATERIALS**: The contractor agrees to comply with all the requirements of Section 6002 of the Resource Conservation and Recovery Act (RCRA), as amended (42 U.S.C. 6962), including but not limited to the regulatory provisions of 40 CFR Part 247, and Executive Order 12873, as they apply to the procurement of the items designed in Subpart B of 40 CFR Part 247.

NO OBLIGATIONS BY THE FEDERAL GOVERNMENT: (1) The Metro Transit System and Contractor acknowledge and agree that, notwithstanding any concurrence by the Federal Government or in approval of the solicitation or award of the underlying contract, absent the express written consent by the Federal Government, the Federal Government is not a party to this contract and shall not be subject to any obligations or liabilities to the Purchaser, Contractor, or any other party (whether or not a party to that contract) pertaining to any matter resulting from the underlying contract. (2) The contractor agrees to include the above clause in each subcontract financed in whole or in part with Federal assistance provided by FTA. It is further agreed that the clause shall not be modified, except to identify the subcontractor who will be subject to its provisions.

**INCORPORATION OF FEDERAL TRANSIT ADMINISTRATION (FTA) TERMS**: These provisions include, in part, certain Standard Terms and Conditions required by DOT, whether or not expressly set forth in the preceding contract provisions. All contractual provisions required by DOT, as set forth in FTA Circular 4220.1D, dated April 15, 1996, are hereby incorporated by reference. Anything to the contrary herein notwithstanding, all FTA mandated terms shall be deemed to control in the event of a conflict with other provisions contained in this Agreement. The Contractor shall not perform any act, fail to perform any act, or refuse to comply with any Kalamazoo Metro Transit requests which would cause Kalamazoo Metro Transit to be in violation of the FTA terms and conditions.

PROGRAM FRAUD AND FALSE OR FRAUDULENT STATEMENTS OR RELATED ACTS: (1) The contractor acknowledges that the provisions of the Program Fraud Civil Remedies Act of 1986, as amended, 31 U.S.C. subsection 3801 et seq. And U.S. DOT regulations, Program Fraud Civil Remedies, 49 CFR Part 31, apply to its actions pertaining to this Project. Upon execution of the underlying contract the Contractor certifies or affirms the truthfulness and accuracy of any statement it has made, it makes, it may make, or causes to be made, pertaining to the underlying contract or the FTA assistance project for which this contract work is being performed. In addition to other penalties that may be applicable, the Contractor further acknowledges that if it makes, or causes to be made a false, fictitious, or fraudulent claim, statement, submission, or certification, the

Federal Government reserves the right to impose the penalties of the Program Fraud Civil Remedies Act of 1986 on the Contractor to the extent the Federal Government deems appropriate. (2) The contractor also acknowledges that if it makes or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification to the Federal Government under a contract connected with a project that is financed in whole or in part with Federal assistance originally awarded by FTA under the authority of 49 U.S.C. subsection 5307, the Government reserves the right to impose the penalties of 18 U.S.C. subsection 1001 and 49 U.S.C. subsection 5307(n)(1) on the contractor, to the extent the Federal Government deems appropriate. (3) The contractor agrees to include the above two clauses in each subcontract financed in whole or in part with Federal assistance provided by the FTA. It is further agreed that the clauses shall not be modified, except to identify the contractor who will be subject to the provisions.

**DISADVANTAGED BUSINESS ENTERPRISE PROVISION**: The Federal Fiscal Year goal has been set by Kalamazoo Metro Transit in an attempt to match projected procurements with available qualified disadvantaged businesses. Kalamazoo Metro Transit goals for budgeted service contracts, bus parts, and other material and supplies for Disadvantaged Business Enterprises have been established by Kalamazoo Metro Transit as set forth by the Department of Transportation Regulations 49 C.F.R. Part 23, March 31, 1980, and amended by Section 106(c) of the Surface Transportation Assistance Act of 1987, and is considered pertinent to any contract resulting from this solicitation.

(1) Policy. It is the policy of the Department of Transportation and Kalamazoo Metro Transit that Disadvantaged Business Enterprises, as defined in 49 CFR Part 23, and as amended in Section 106(c) of the Surface Transportation and Uniform Relocation Assistance Act of 1987, shall have the maximum opportunity to participate in the performance of contracts financed in whole or in part with federal funds under this Agreement. Consequently, the DBE requirements of 49 CFR Part 23 and Section 106(c) of the STURRA of 1987, apply to this contract.

The Contractor agrees to ensure that DBEs as defined in 49 CFR Part 23 and Section 106(c) of the STURAA of 1987 have the maximum opportunity to participate in the whole or in part with federal funds provided under this Agreement. In this regard, the Contractor shall take all necessary and reasonable steps in accordance with the regulations to ensure that DBEs have the maximum opportunity to compete for and perform subcontracts. The contractor shall not discriminate on the basis of race, color, national origin, religion, sex, age, or physical handicap in the award and performance of subcontracts. It is further the policy of Kalamazoo metro Transit to promote the development and increase the participation of businesses owned and controlled by disadvantaged individuals. DBE involvement in all phases of Kalamazoo Metro Transit procurement activities are encouraged.

- (2) <u>DBE obligation</u>. The contractor and its subcontractors agree to ensure that disadvantaged businesses have the maximum opportunity to participate in the performance of contracts and subcontracts financed in whole or in part with federal funds provided under this Agreement. In that regard, all Contractors and subcontractors shall take all necessary and reasonable steps in accordance with 49 CFR Part 23 as amended, to ensure that minority business enterprises have the maximum opportunity to compete for and perform contracts.
- (3) Where the contractor is found to have failed to exert sufficient reasonable and good faith efforts to involved DBEs in the work provided, Kalamazoo Metro Transit may declare the contractor noncompliant and in breach of contract.

- (4) The contractor will keep records and documents for a reasonable time following performance of this contract to indicate compliance with Kalamazoo Metro Transit's DBE program. These records and documents will be made available at reasonable times and placed for inspection by an authorized representative of Kalamazoo Metro Transit and will be submitted to Kalamazoo Metro Transit upon request.
- (5) Kalamazoo Metro Transit will provide affirmative assistance as may be reasonable and necessary to assist the prime contractor in implementing their programs for DBE participation. The assistance may include the following upon request: identification of a qualified DBE; available listing of minority assistance agencies; holding bid conferences to emphasize requirements.

### (6) Definitions:

- Disadvantaged business: A small business concern which is at leave 51 percent owned by one or more socially and economically disadvantaged individuals, or in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more socially and economically disadvantaged individuals; and whose management and daily business operations are controlled by one or more of the socially and economically disadvantaged individuals who own it OR Which is at least 51 percent owned by one or more women, or in the case of public owned business, at least 51 percent of the stock of which is owned by one or more women; and, whose management and daily business operations are controlled by one or more women who own it.
- X Small Business Concern: A small business, as defined by Section 3 of the Small Business Act and Appendix B (Section 106(c)) Determinations of Business Size.
- X Socially and economically disadvantaged individuals: Those individuals who are citizens of the United States or lawfully admitted permanent residents and who are black Americans, Hispanic Americans, native Americans, Asian-Pacific Americans, Asian-Indian Americans, or women, or any other minorities or individuals found to be disadvantaged by the Small Business Administration pursuance to section 8(a) of the Small Business Act. Black Americans includes persons having origins in any of the Black racial groups of Africa; Hispanic Americans includes persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish or Portuguese culture or origin, regardless of race; Native Americans includes persons who are American Indians, Eskimos, Aleuts, or Native Hawaiians; Asian-Pacific Americans includes persons whose origins are from Japan, China, Taiwan, Korea, Vietnam, Laos, Cambodia, the Philippines, Samoa, Guam, the U.S. Trust Territories of the Pacific, and the Northern Marianas; AAsian-Indian Americans includes persons whose origins are from India, Pakistan, and Bangladesh.

TRANSIT EMPLOYEE PROTECTIVE PROVISIONS: (1) The contractor agrees to comply with applicable transit employee protective requirements, as follows: (a) General Transit Employee Protective Requirements. To the extent that FTA determines that transit operations are involved, the contractor agrees to carry out the transit operations work on the underlying contract in compliance with terms and conditions determined by the U.S. Secretary of Labor to be fair and equitable to protect the interests of employees employed under this contract and to meet the employee protective requirements of 49 U.S.C. subsection 5333(b), and U.S. DOL guidelines at 29 CFR Part 215, and any amendments thereto. These terms and conditions are identifies in the letter of certification from the US DOL to FTA applicable to the FTA Recipient's project from which Federal assistance is provided to support work on the underlying contract. The Contractor agrees to carry out that work in compliance with the conditions stated in that US DOL letter. The requirements of this subsection (1), however, do not apply to any contract financed with Federal assistance provided by FTA either for projects for elderly

individuals and individuals with disabilities authorized by 49 U.S.C. subsection 5310(a)(2), or for projects for nonurbanized areas authorized by 49 U.S.C. subsection 5311. Alternate provisions for those projects are set forth in subsections (b) and (c) of this clause. (b) Transit Employee Protective Requirements for Projects Authorized by 49 U.S.C. subsection 5310(a)(2) for Elderly Individuals and Individuals with Disabilities. If the contract involves transit operations financed in whole or in part with Federal assistance authorized by 49 U.S.C. subsection 5310(a)(2), and if the US Secretary of Transportation has determined or determines in the future that the employee protective requirements of 49 U.S.C. subsection 5333(b) are necessary or appropriate for the state and the public body subrecipient for which work is performed on the underlying contract, the contractor agrees to carry out the Project in compliance with the terms and conditions determined by the U.S. Secretary of Labor to meet the requirements of 49 U.S.C. subsection 5333(b), US DOL guidelines at 29 CFR Part 215, and any amendments thereto. These terms and conditions are identified in the US DOL's letter of certification to FTA. the date of which is set forth Grant Agreement or Cooperative Agreement with the state. The contractor agrees to perform transit operations in connection with the underlying contract in compliance with the conditions stated in that US DOL letter. (c) <u>Transit Employee Protective Requirements for Projects Authorized by 49 U.S.C.</u> subsection 5311 in Nonurbanized areas. If the contract involves transit operations financed in whole or in part with Federal assistance authorized by 49 U.S.C. subsection 5311, the contractor agrees to comply with the terms and conditions of the Special Warranty for the Nonurbanized Area Program agreed to by the US Secretaries of Transportation and Labor, dated May 31, 1979, and the procedures implements by US DOL or any revision thereto. (2) The contractor also agrees to include any applicable requirements in each subcontract involving transit operations financed in whole or in part with Federal assistance provided by the FTA.

**ACCESS REQUIREMENTS FOR PERSONS WITH DISABILITIES**: The contractor agrees to comply with all applicable requirements of the Americans with Disabilities Act of 1990 (ADA) as amended, 42 USC subsection 12101, et seq; Section 504 of the Rehabilitation Act of 1973, as amended, 29 USC, subsection 794, 49 USC subsection 5301(d), and the following Federal regulations, as they relate to this contract:

- (1) United States Department of Transportation regulations, Transportation Services for Individuals with Disabilities (ADA), 49 CFR Part 37.
- (2) United States Department of Transportation regulations, Nondiscrimination on the Basis of Handicap in Programs and Activities Receiving or Benefitting from Federal Financial Assistance, 49 CFR Part 27.
- (3) United States Department of Transportation regulations, Americans with Disabilities Act (ADA) Accessibility Specifications for Transportation Vehicles, 49 CFR Part 38.
- (4) United States Department of Justice regulations, Nondiscrimination on the Basis of Disability in State and Local Government Services, 28 CFR Part 35.
- (5) United States Department of Justice regulations, Nondiscrimination on the Basis of Disability by Public Accommodations and in Commercial Facilities, 28 CFR Part 36.
- (6) United States General Services Administration regulations Accommodations for the Physically Handicapped, 41 CFR Subparts 101-19.
- (7) United States Equal Employment Opportunity Commission, Regulations to Implement the Equal Employment Provisions of the ADA, 29 CFR Part 1630.

- (8) United States Federal Communications Commission regulations, Telecommunications Relay Services and Related Customer Premises Equipment for the Hearing and Speech Disabled, 47 CFR Part 64, Subpart F.
- (9) Federal Transit Administration regulations, Transportation for Elderly and Handicapped Persons, 49 CFR Part 609.
- (10) Any implementing requirements FTA may issue.

**TERMINATION PROVISIONS** – If there is a conflict between the termination provisions of the terms and conditions and these FTA provisions, the FTA provisions prevail.

- a. Termination for Convenience The City of Kalamazoo may terminate this contract, in whole or in part, at any time by written notice to the Contractor when it is in the Government's best interest. The Contractor shall be paid its costs, including contract close-outs, and profit on work performed up to the time of termination. The Contractor shall promptly submit its termination claim to the City of Kalamazoo to be paid the Contractor. If the Contractor has any property in its possession belonging to the City of Kalamazoo, the Contractor will account for the same, and dispose of it in the manner the City of Kalamazoo directs.
- b. Termination for Default (Breach or Cause) If the Contractor does not deliver supplies in accordance with the contract delivery schedule, or if the contract is for services, the Contractor fails to perform in the manner called for in the contract, or if the Contractor fails to comply with any other provisions of the contract, the City of Kalamazoo may terminate this contract for default. Termination shall be effective by serving a notice of termination on the contractor setting forth the manner in which the Contractor is in default. The contractor will only be paid the contract price for supplies delivered and accepted, or services performed in accordance with the manner of performance set forth in the contract.
  - If it is later determined by the City of Kalamazoo that the Contractor had an excusable reason for not performing, such as strike, flood, events which are not the fault of or are beyond the control of the Contractor, the City of Kalamazoo, after setting up a new delivery of performance schedule, may allow the Contractor to continue work or treat the termination as a termination for convenience.
- c. Opportunity to Cure The City of Kalamazoo in its sole discretion may, in the case of a termination for breach or default, allow the Contractor an appropriately short period of time in which to cure the defect. In such case, the notice of termination will state the time period in which cure is permitted and other appropriate conditions.

  If Contractor fails to remedy to the City of Kalamazoo's satisfaction the breach or default of any of
  - If Contractor fails to remedy to the City of Kalamazoo's satisfaction the breach or default of any of the terms, covenants, or conditions of this Contract within the established timeframe, the City of Kalamazoo shall have the right to terminate the Contract without any further obligation to the Contractor. Such termination for default shall not in any way operate to preclude the City of Kalamazoo from also pursuing all available remedies against the Contractor and its sureties for said breach or default.
- d. Waiver of Remedies for Any Breach In the event that the City of Kalamazoo elects to waive its remedies for any breach by the Contractor of any covenant, term or condition of the Contract, such waiver by the City of Kalamazoo shall not limit the City of Kalamazoo's remedies for any succeeding breach of that or of any other term, covenant or condition of this Contract.

FLY AMERICA REQUIREMENTS – The Contractor agrees to comply with 49 USC 40118 (the "Fly America" Act) in accordance with the General Services Administration's regulations at 41 CFR Part 301-10, which provide the recipients and subrecipients of Federal funds and their contractors are required to use U.S. Flag air carriers for U.S. Government-financed international air travel and transportation of their personal effects or property, to the extent such service is available, unless travel by foreign air carrier is a matter of necessity, as defined by the Fly America Act. The Contractor shall submit, if a foreign air carried was used, an appropriate certification or memorandum adequately explaining why service by a U.S. Flag air carrier was not available or why it was necessary to use a foreign air carrier and shall, in any event, provide a certificate of compliance with the Fly America requirements. The Contractor agrees to include the requirements of this section in all subcontracts that may involve international air transportation.

CARGO PREFERENCE REQUIREMENTS - Use of United States Flag Vessels: (applies to anything transported by ocean vessels) The contractor agrees to a) use privately owned United States-Flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to the underlying contract to the extent such vessels are available at fair and reasonable rates for United States-Flag commercial vessels; b) furnish within 20 working days following the date of loading for shipments originating within the United States, or within 30 working days following the date of leading for shipments originating outside the United States, a legible copy of a rates, on-board commercial ocean bill-of-lading in English for each shipment of cargo described in the preceding paragraph to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590 and to the Metro Transit System; c) to include these requirements in all subcontracts issued pursuant to this contract when the subcontract may involve the transport of equipment, material, or commodities by ocean vessel.

For Operational Contracts (excluding transportation services) in excess of \$2,500; rolling stock contracts; and, construction contracts over \$2,000 (in conjunction with the Davis-Bacon Act clauses set forth below).

### **CONTRACT WORK HOURS AND SAFETY STANDARDS ACT**: Pursuant to Section 102 (Overtime):

- (1) **Overtime Requirements**. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
- Violation; liability for unpaid wages; liquidated damage. In the event of any violation of the clause set forth in paragraph (1) of this section the contractor and any subcontractor responsible therefore shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1) of this section.
- (3) Withholding for unpaid wages and liquidated damages. The Kalamazoo Metro Transit System shall upon its own action or upon written request for an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2) of this section.
- (4) **Subcontracts**. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in this section.
- (5) Special Provision of Section 102 Nonconstruction Contracts: Payroll and basic records. (i) Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work (or under the United States Housing Act of 1937, or under the Housing Act of 1949, in the construction or development of the project). Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing

apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

- (6) Section 107 (OSHA): (This section is applicable to construction contracts only) Contract Work Hours and Safety Standards Act -
  - (i) The Contractor agrees to comply with section 107 of the Contract Work Hours and Safety Standards Act, 40 USC section 333 and applicable DOL regulations. "Safety and Health Regulations for Construction" 29 CFR Part 1926. Among other things, the Contractor agrees that it will not require any laborer or mechanic to work in unsanitary, hazardous, or dangerous surroundings or working conditions.
  - (ii) Subcontracts The Contractor also agrees to include the requirements of this section in each subcontract. The term "subcontract" under this section is considered to refer to a person who agrees to perform any part of the labor or material requirements of a contract for construction, alteration or repair. A person who undertakes to perform a portion of a contract involving the furnishing of supplies or materials will be considered a "subcontractor" under this section if the work in question involves the performance of construction work and is to be performed: (1) directly on or near the construction site, or (2) by the employer for a specific project on a customized basis. Thus, a supplier of materials which will become an integral part of the construction is a "subcontractor" if the supplier fabricates or assembles the goods or materials in question specifically for the construction project and the work involved may be said to be construction activity. If the goods or materials in question are ordinarily sold to other customers from regular inventory, the supplier is not a "subcontractor." The requirements of this section do not apply to contracts or subcontracts for the purchase of supplies or materials or articles normally available on the open market.

### **For Research Contracts:**

**PATENT AND RIGHTS IN DATA**: The following requirements apply to each contract involving experimental, developmental or research work:

- (1) The term "subject data" used in this clause means recorded information, whether or not copyrighted, that is delivered or specified to be delivered under the contract. The term includes graphic or pictorial delineation in media such as drawings or photographs; text in specifications or related performance or design-type documents; machine forms such as punched cards, magnetic tape, or computer memory printouts; and information retained in computer memory. Examples include, but are not limited to: computer software, engineering drawings and associated lists, specifications, standards, process sheets, manuals, technical reports, catalog item identifications, and related information. The term subject data does not include financial reports, cost analyses, and similar information incidental to contract administration.
- (2) The following restrictions apply to all subject data first produced in the performance of the contract to which this attachment has been added:
  - (a) Except for its own internal use, Kalamazoo Metro Transit or the contractor may not publish or reproduce subject data in whole or in part, or in any manner or form, nor may Kalamazoo Metro Transit or contractor authorize others to do so, without the written consent of the Federal Government, until such time as the Federal Government may have either released or approved the release of such data to the public; this restriction on publication, however, does not apply to any contract with an academic institution.
  - (b) In accordance with 49 CFR subsection 18.34 and 49 CFR subsection 19.36, the Federal Government reserves a royalty-free, non-exclusive and irrevocable license to reproduce, publish, or otherwise use, and to authorize others to use, for Federal Government purposes, any subject data or copyright described in subsections (2)(b)1 and (2)(b)2 of this clause below. As used in the previous sentence, for Federal Government purposes, means use only for the direct purposes of the Federal Government. Without the copyright owner's consent, the Federal Government may not extend its Federal license to any other party.
    - 1. Any subject data developed under that contract, whether or not a copyright has been obtained; and
    - 2. Any rights of copyright purchase by Kalamazoo Metro Transit or contractor using Federal assistance in whole or in part provided by FTA.
  - When FTA awards Federal assistance for experimental, developmental, or research work, it is (c) FTA's general intention to increase transportation knowledge available to the public, rather than to restrict the benefits resulting from the work to participants in that work. Therefore, unless FTA determines otherwise, Kalamazoo Metro Transit and the contractor performing experimental, developmental, or research work required by the underlying contract to which this Attachment is added agrees to permit FTA to make available to the public, either FTA's license in the copyright to any subject data developed in the course of that contract, or a copy of the subject data first produced under the contract for which a copyright has not been obtained. If the experimental, developmental, or research work, which is the subject of the underlying contract, is not completed for any reason whatsoever, all data developed under that contract shall become subject data as defined in subsection (a) of this clause and shall be delivered as the Federal Government may direct. This subsection (c), however, does not apply to adaptation of automatic data processing equipment or programs for which Kalamazoo Metro Transit or the contractor's use whose costs are financed in whole or in part with Federal assistance provided by FTA for transportation capital projects.

- (d) Unless prohibited by state law, upon request by the Federal Government, Kalamazoo Metro Transit and the contractor agree to indemnify, save, and hold harmless the Federal Government, its officers, agents, and employees acting within the scope of their official duties against any liability, including costs and expenses, resulting from any willful or intentional violation by Kalamazoo Metro Transit or the contractor of proprietary rights, copyrights, or right of privacy, arising out of the publication, translation, reproduction, delivery, use, or disposition of any data furnished under that contract. Neither Kalamazoo metro Transit nor the contractor shall be required to indemnify the Federal Government of any such liability arising out of the wrongful act of any employee, official, or agents of the Federal Government.
- (e) Nothing contained in this clause on rights in data shall imply a license to the Federal Government under any patent or be construed as affecting the scope of any license or other right otherwise granted to the Federal Government under any patent.
- (f) Data developed by Kalamazoo Metro Transit or the contractor and financed entirely without using Federal assistance provided by the Federal Government that has been incorporated into work required by the underlying contract to which this Attachment has been added is exempt from the requirements of subsections (b), (c), and (d) of this clause, provided that Kalamazoo Metro Transit or the contractor identifies that data in writing at the time of delivery of the contract work.
- (g) Unless FTA determines otherwise, the Contractor agrees to include these requirements in each subcontract for experimental, developmental, or research work financed in whole or in part with Federal assistance provided by FTA.
- (3) Unless the Federal Government later makes a contrary determination in writing, irrespective of the Contractor's status (i.e., a large business, small business, state government or state instrumentality, local government, nonprofit organization, institution of higher education, individual, etc.), Kalamazoo metro Transit and the contractor agree to take the necessary actions to provide through FTA, those rights in that invention due the Federal Government as described in U.S. Department of Commerce regulations, Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements, 37 CFR Part 401.
- (4) The contractor also agrees to include these requirements in each subcontract for experimental, developmental, or research work financed in whole or in part with Federal assistance provided by FTA.

PATENT RIGHTS: (1) General. If any invention, improvement, or discovery is conceived or first actually reduced to practice in the course of or under the contract to which this Attachment has been added, and that invention, improvement, or discovery is patentable under the laws of the United States of America or any foreign country, Kalamazoo Metro Transit and the contractor agree to take actions necessary to provide immediate notice and a detailed report to the party at a higher tier until FTA is ultimately notified. (2) Unless the Federal Government later makes a contrary determination in writing, irrespective of the Contractor's status (a large business, small business, state government, or state instrumentality, local government, nonprofit organization, institution of higher education, individual), Kalamazoo Metro Transit and the contractor agree to take the necessary actions to provide through FTA, those rights in that invention due the Federal Government as described in U.S. Department of Commerce regulations, Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts, and Cooperative Agreements, 37 CFR Part 401. (3) The contractor also agrees to include the requirements of this clause in each subcontract for experimental, developmental, or research work financed in whole or in part with Federal assistance provided by FTA.

# **For Operational Service Contracts:**

DRUG AND ALCOHOL TESTING: (Maintenance contractors and subcontractors -- these rules do not apply): The contractor agrees to establish and implement a drug and alcohol testing program that complies with 49 CFR Parts 653 and 654, and permit any authorized representative of the United States Department of Transportation or its operating administrations, the Michigan Department of Transportation, or the Kalamazoo Metro Transit System to inspect the facilities and records associated with the implementation of the drug and alcohol testing program as required under 49 CFR Parts 653 and 654 and review the testing process. The contractor agrees further to certify annually its compliance with Parts 653 and 654 and to submit the Management Information System (MIS) reports before February 15th to the Metro Transit System Operations Supervisor. To certify compliance the contractor shall use the Substance Abuse Certifications in the Annual List of Certifications and Assurances for Federal Transit Administration Grants and Cooperative Agreements, which is published annually in the Federal Register.

CHARTER BUS REQUIREMENTS: The contractor agrees to comply with 49 U.S.C. 5323(d) and 49 CFR Part 604, which provides that recipients are subrecipients of FTA assistance are prohibited from providing charter service using federally funded equipment or facilities if there is as least one private charter operator willing and able to provide the service, except under one of the exceptions at 49 CFR 604.9. Any charter service provided under one of the exceptions must be incidental (i.e., must not interfere with or detract from the provision of mass transportation).

**SCHOOL BUS REQUIREMENTS**: Pursuant to 69 U.S.C. 5323(f) and 49 CFR Part 605, recipients and subrecipients of FTA assistance my not engage in school bus operations exclusively for the transportation of students and school personnel in competition with private school bus operators unless qualified under specified exemptions. When operating exclusive school bus service under an allowable exemption, recipients and subrecipients may not use federally funded equipment, vehicles, or facilities.

# **Special Requirements for Construction Contracts**

**Prime Contractor Participation.** The prime contractor shall perform on the site with his own staff, work equivalent to at least ten percent of the total amount of construction work at the site. Only pay items of the construction contract will be used in computing the total amount of construction work at the site. The City may increase this minimum amount of prime contractor participation depending upon the degree of specialization or time to perform the work.

Certified Payrolls Construction Project. The City shall obtain from each contractor and subcontractor, a certified copy of each weekly payroll within seven days after the regular payroll date. Following a review by the City of compliance with State and Federal labor laws, the payroll copy shall be retained by the City for later review by FTA. A contractor may use the Department of Labor form WH-347, optional payroll form, which provides for all of the necessary payroll information and certifications. This Department of Labor form may be purchased at nominal cost from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. However, the contractor may use his own payroll form provided it includes the same information and certifications as the Department of Labor form WH-348 Statement of Compliance.

**Site Inspections**. The City shall have access to the site of construction and shall have the right to inspect all work.

**Project Signs**. The contractor shall erect at the site of construction, and maintain during construction, signs satisfactory to the Department of Transportation identifying the project and indicating that the Government is participating in the development of the project.

**Warranty of Construction**. For a period of one year from the date of completion as evidenced by the date of final acceptance of the work, the contractor warrants the work performed under this contract conforms to the contract requirements and is free of any defect of equipment, materials, or workmanship performed by the contractor or any other subcontractors or suppliers.

Under this warranty, the contractor shall remedy at his own expense any such failure to conform or any such defect. Nothing in the above intends or implies that this warranty shall apply to work which has been abused or neglected by the owner.

**Accessibility Requirements**. Construction projects shall comply with 41 CFR, Section 101-19.6, General Services Administration specifications on construction design for the physically disabled, and other mandates for accessibility as contained elsewhere in this specification or as may be implemented by the Federal Government.

#### For Construction Contracts in Excess of \$2,000

#### **DAVIS-BACON ACT**

# (1) **Minimum wages**.

(i) All laborers and mechanics employed or working upon the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the age determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers and mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill except as provided in 29 CFR part 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

- (ii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.
- (iii) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program; provided, that the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.
- (iv) (A) The contracting officer shall require that any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

- (1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
- (2) The classification is utilized in the area by the construction industry; and
- (3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
- (B) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- (C) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- (D) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (1)(iv) (B) or (C) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.
- (2) Withholding. The City of Kalamazoo shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), all or part of the wages required by the contract, the City of Kalamazoo may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violation shave ceased.

- (3) Payrolls and basic records.
  - (i) Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work (or under the United States Housing Act of 1937, or under the Housing Act of 1949, in the construction or development of the project). Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated of the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.
  - (ii) (A) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the City of Kalamazoo for transmission to the Federal Transit Administration. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR part 5. This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal Stock Number 029-005-00014-1), U.S. Government Printing Office, Washington, DC 20402. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors.
    - (B) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of The persons employed under the contract and shall certify the following:
      - (1) That the payroll for the payroll period contains the information required to be maintained under 29 CFR part 5 and that such information is correct and complete;
      - (2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3.

- (3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.
- (C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the Statement of Compliance required by paragraph (3)(ii)(B) of this section.
- (D) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal persecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.
- (iii) The contractor or subcontractor shall make the records required under paragraph (3)(i) of this section available for inspection, copying, or transcription by authorized representatives of the Federal Transit Administration or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the Federal agency may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

# (4) **Apprentices and trainees**

(i) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship Agency recognized by the Bureau, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe

benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator of the Wage and Hour Division of the U.S. Department of Labor determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. in the event the Bureau of Apprenticeship and Training, or a State Apprenticeship Agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

- (ii) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval. evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the age determination unless the Administrator of the Wage and hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered an participating in a training plan approved by the Employment and training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.
- (iii) Equal Employment Opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.
- (5) **Compliance with Copeland Act requirements**. The contractor shall comply with the requirements of 29 CFR Part 3, which are incorporated by reference in this contract.
- (6) **Subcontracts**. The contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (10) and such other clauses as the Federal Transit Administration may be appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

- (7) **Contract termination**: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.
- (8) **Compliance with Davis-Bacon and Related Act requirements**. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.
- (9) **Disputes concerning labor standards**. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees of their representatives.
- (10) **Certification of eligibility**. (i) By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
  - (ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1). (iii) The penalty for making false statement is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

# For Contracts in Excess of \$100,000 BREACHES AND DISPUTE RESOLUTION:

**DISPUTES:** Disputes arising in the performance of this contract which are not resolved by agreement of the parties shall be decided in writing by the authorized representative of the City of Kalamazoo. This decision shall be final and conclusive unless within ten (10) days from the date of receipt of its copy, the Contractor mails or otherwise furnishes a written appeal to the City Manager. In connection with any such appeal, the Contractor shall be afforded an opportunity to be heard and to offer evidence in support of its position. The decision of the City Manager shall be binding upon the Contractor and the Contractor shall abide by the decision.

**PERFORMANCE DURING DISPUTE:** Unless otherwise directed by the City of Kalamazoo, the Contractor shall continue performance under this Contract while matters in dispute are being resolved.

**CLAIMS FOR DAMAGES:** Should either party to the Contract suffer injury or damage to person or property because of any act or omission of the party or of any of his/her employees, agent or others for who acts he/she is legally liable, a claim for damages therefore shall be made in writing to such other party within a reasonable time after the first observance of such injury or damage.

**REMEDIES:** Unless this contract provides otherwise, all claims, counterclaims, disputes and other matters in question between the City of Kalamazoo and the Contractor arising out of or relating to this agreement or its breach will be decided by arbitration if the parties mutually agree, or in a court of competent jurisdiction within the State in which the City of Kalamazoo is located.

**RIGHTS AND REMEDIES:** The duties and obligations imposed by the contract documents and the rights and remedies available thereunder shall be in addition to and not a limitation of any duties, obligations, rights and remedies otherwise imposed or available by law. No action or failure to act by the City of Kalamazoo, Architect or Engineer, or Contractor shall constitute a waiver of any right or duty afforded any of them under the Contract, nor shall any such action or failure constitute an approval of or acquiescence in any breach thereunder, except as may be specifically agreed in writing.

**USE OF FACILITIES**: In contracts exceeding \$100,000, the use of facilities included on the EPA list of violating facilities is expressly prohibited, per the requirements contained at 49 CFR Part 15.

**CLEAN WATER REQUIREMENTS**: (1) The contractor agrees to comply with all applicable standards, orders, or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et <u>seq.</u> The contractor agrees to report each violation to the Purchaser and understands and agrees that the Purchaser will in turn report each violation as required to assure notification to FTA and the appropriate EPA Regional office. (2) The contractor also agrees to include these requirements in each subcontract exceeding \$100,000 financed in whole or in part with Federal assistance provided by the FTA.

**LOBBYING:** (Construction/A&E/Rolling Stock/Professional Service/Operational Service) Contractors who apply or bid for an award of \$100,000 or more shall file the certification required by 49 CFR part 20, "New Restrictions on Lobbying." Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier shall also disclose the name of any registrant under the Lobbying Disclosure Act of 1995 who has made lobbying contacts on its behalf with non-Federal funds with respect to that Federal contract, grant or award covered by 31 U.S.C. 1352. Such disclosures are forwarded from tier to tier up to the Metro Transit System.

**BUY AMERICA**: (Applicable to construction contracts; acquisition of goods or rolling stock (over \$100,000)): The contractor agrees to comply with 49 U.S.C. 5323(j) and 49 CFR Part 661, which provide that Federal funds may not be obligated unless steel, iron, and manufactured products used in FTA-funded projects are produced in the United States, unless a waiver has been granted by FTA or the product is subject to a general waiver. General waivers are listed in 49 CFR Part 661.7, and include final assembly in the United States for 15 passenger vans and 15 passenger wagons produced by Chrysler Corporation, microcomputer equipment, software, and small purchased (currently less than \$100,000) made with capital, operating, or planning funds. Separate requirements for rolling stock are set out at 5323(j)(2)(C) and 49 CFR 661.11. Rolling stock not subject to a general waiver must be manufactured in the United States and have a 60 percent domestic content.

A bidder or offeror must submit to the Metro Transit System the appropriate Buy America certificate with all bids on FTA-funded contracts, except those subject to a general waiver. Bids or offers that are not accompanied by a completed Buy America Certification must be rejected as non-responsive. The requirement does not apply to lower tier subcontractors.

**SEISMIC SAFETY** (applies to buildings - new construction or additions): The contractor agrees that any new building or addition to an existing building will be designed and constructed in accordance with the standards for Seismic Safety required in the Department of Transportation Seismic Safety Regulations 49 CFR Part 41 and will certify to compliance to the extent required by the regulation. The contractor also agrees to ensure that all work performed under this contract including work performed by a subcontractor is in compliance with the standards required by the Seismic Safety Regulations and the certification of compliance issued on the project.

**CLEAN AIR**: (1) The contractor agrees to comply with all applicable standards, orders, or regulations issued pursuant to the Clean Air Act, as amended, 41 U.S.C. subsections 7401 *et seq*. The contractor agrees to report each violation to the Purchaser and understands and agrees that the Purchase will in turn report each violation as required to assure notification to FTA and the appropriate EPA Regional Office. (2) The contractor also agrees to include these requirements in each subcontract exceeding \$100,000 financed in whole or in part with Federal assistance provided by FTA.

# For Contracts in Excess of \$25,000 CERTIFICATION REGARDING DEBARMENT, SUSPENSION AND OTHER RESPONSIBILITY MATTERS

- 1. By signing and submitting this bid or proposal, the prospective lower tier participant is providing the signed certification set out below.
- 2. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the Metro Transit System may pursue available remedies, including suspension and/or debarment.
- 3. The prospective lower tier participant shall provide immediate written notice to Kalamazoo Metro Transit if at any time the prospective lower tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- 4. The terms covered transaction, debarred, suspended, ineligible, lower tier covered transaction, participant, persons, lower tier covered transaction, principal, proposal, and voluntarily excluded, as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549 [49 CFR Part 29]. You may contact Kalamazoo Metro Transit for assistance in obtaining a copy of those regulations.
- 5. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction unless authorized in writing by Kalamazoo Metro Transit.
- 6. The prospective lower tier participant further agrees by submitting this proposal that is will include the clause entitled Certification Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion Lower Tier Covered Transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
- 7. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determined the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List issued by U.S. General Service Administration.
- 8. Nothing contained in the foregoing shall be construed to require establishment of system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- 9. Except for transactions authorized under Paragraph 5 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to all remedies available to the Federal Government, Kalamazoo Metro Transit may pursue available remedies including suspension and/or debarment.

# Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Transactions

- (1) The prospective lower tier participant certifies, by submission of this bid or proposal, that neither it nor its principals [as defined at 49 CFR subsection 29.105(p)] is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
- When the prospective lower tier participant is unable to certify to the statements in this certification, such prospective participant shall attach an explanation to this proposal.

# **For Rolling Stock Procurement**

**BUS TESTING**: The contractor agrees to comply with 49 U.S.C., subsection 5323(c) and FTA's implementing regulation at 49 CFR Part 665 and shall perform the following: 1) a manufacturer of a new bus model or a bus produced with a major change in components or configuration shall provide a copy of the final test report to the recipient at a point in the procurement process specified by the recipient which will be prior to the recipient's final acceptance of the first vehicle. 2) A manufacturer who releases a report under paragraph 1 above shall provide notice to the operator of the testing facility that the report is available to the public. 3) If the manufacturer represents that the vehicle was previously tested, the vehicle being sold should have the identical configuration and major components as the vehicle in the test report, which must be provided to the recipient prior to recipient's final acceptance of the first vehicle. If the configuration or components are not identical, the manufacturer shall provide a description of the change and the manufacturer's basis for concluding that it is not a major change requiring additional testing. 4) If the manufacturer represents that the vehicle is grand fathered (has been used in mass transit service in the United States before October 1, 1988, and is currently being produced without a major change in configuration or components), the manufacturer shall provide the name and address of the recipient of such a vehicle and the details of that vehicle's configuration and major components.

PRE-AWARD AND POST-DELIVERY AUDIT REQUIREMENTS: The contractor agrees to comply with 49 U.S.C. subsection 5323(1) and FTA's implementing regulation at 49 CFR Part 663 and to submit the following certifications: 1) Buy America Requirements: The contractor shall complete and submit a declaration certifying either compliance or noncompliance with Buy America. If the Bidder/Offeror certifies compliance with Buy America, it shall submit documentation which lists 1) component and subcomponent parts of the rolling stock to be purchased identified by manufacturer of the parts, their country of origin and costs; and 2) the location of the final assembly point for the rolling stock, including a description of activities that will take place at the final assembly point for the rolling stock, including a description of the activities that will take place at the final assembly point and the cost of final assembly. (2) Solicitation Specification Requirements: The contractor shall submit evidence that it will be capable of meeting the bid specifications. (3) Federal Motor Vehicle Safety Standards (FMVSS): The contractor shall submit 1) manufacturer's FMVSS self-certification sticker information that the vehicle complies with relevant FMVSS or 2) manufacturer's certified statement that the contracted buses will not be subject to FMVSS regulations.

## **Special Requirements for Vehicle Acquisition**

**Buy America**. In accordance with 49 CFR Part 661.13, the attached certification shall be completed and submitted with the bid in accordance with this part.

**Motor Vehicle Pollution**. 40 CFR Parts 84 and 85, Motor Vehicle Pollution Requirements, establish emission standards for vehicles, and are applicable to Federal contracts for vehicle acquisition.

**Safe Vehicles**. Contracts for vehicles must comply with 49 CFR Part 500, Motor Vehicle Safety Standards, which set forth requirements for delivery of safe vehicles.

Accessible Vehicles. Contractors must comply with 49 CFR Part 27, Elderly and Handicapped. This regulation implements Section 504 of the Rehabilitation Act of 1973, and outlines accessibility requirements. In the provision of accessible vehicles, the contractor shall also comply with the U.S. Department of Transportation regulations Americans with Disabilities (ADA) Accessibility Specifications for Transportation Vehicles, 49 CFR Part 38.

Title

# **BUY AMERICA CERTIFICATE (A)**

# Certification requirement for procurement of steel, iron, or manufactured projects:

Certificate of Compliance with 49 CFR U.S.C. 5323(j)(1)

The bidder or offeror hereby certifies that it will meet the requirements of 49 U.S.C. 5323(j)(1) and the applicable regulations in 49 CFR Part 661.

Date		-
Signature		-
Company		-
Title		-
The bidder or o	Non-Compliance with 49 U.S.C. 5323(j)(1) offeror hereby certifies that it cannot comply with the rear an exception pursuant to 49 U.S.C. 5323(j)(2)(B) or (	
Date		-
Signature		-
Company		

*Certificate of Compliance with 49 U.S.C. 5323(j)(2)(C)* 

## **BUY AMERICA CERTIFICATE (B)**

Certification requirement for procurement of buses, other rolling stock and assorted equipment.

The bidder or offeror hereby certifies that it will comply with the requirements of 49 CFR U.S.C. 5323(j)(2)(C) and the regulations at 49 CFR Part 661.

Date

Signature

Company

Title

Certificate of Non-Compliance with 49 U.S.C. 5323(j)(2)(C)

The bidder or offeror hereby certifies that it cannot comply with the requirements of 49 CFR U.S.C. 5323(j)(2)(C), but may qualify for an exception pursuant to 49 U.S.C. 5323(j)(2)(B) or (j)(2)(D) and the regulations at 49 CFR Part 661.7.

Date	 	
Signature		
Company		
Title		

Title

# CERTIFICATION OF COMPLIANCE WITH FTA'S BUS TESTING REQUIREMENTS

The undersigned certifies that the vehicle offered in this procurement complies with 49 U.S.C. subsection 5323(c) and FTA's implementing regulation at 49 CFR Part 665.

The undersigned understand that misrepresenting the testing status of a vehicle acquired with Federal financial assistance may subject the undersigned to civil penalties as outlined in the Department of Transportation's regulation on Program Fraud Civil Remedies, 49 CFR Part 31. In addition, the undersigned understands that FTA may suspend or debar a manufacturer under the procedures in 49 CFR Part 29.

Certification requirement for procurement of buses, other rolling stock and assorted equipment.

The bidder or o	Compliance with 49 U.S.C. $5323(j)(2)(C)$ offeror hereby certifies that it will comply with the requirements of 49 CFR U.S.C. $5323(j)(2)(C)$ ions at 49 CFR Part 661.
Date	
Signature	
Company	

#### 49 CFR PART 20--CERTIFICATION REGARDING LOBBYING

Certification for Contracts, Grants, Loans, and Cooperative Agreements (*To be submitted with each bid or offer exceeding \$100,000*)

The undersigned certifies to the best of his/her knowledge and belief, that: (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, or an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement. (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for making lobbying contacts to an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, Disclosure Form to Report Lobbying, in accordance with its instructions [as amended by Government wide Guidance for New Restrictions on Lobbying, 61 Fed. Reg. 1413 (1/19/96). Note: Language in paragraph (2) herein has been modified in accordance with Section 10 of the Lobbying Disclosure Act of 1995 (P.L. 104-65, to be codified as 2 U.S.C. 1601 et seq.)] (3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31, U.S.C., subsection 1352 (as amended by the Lobbying Disclosure Act of 1995). Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure. [Note: Pursuant to 31 U.S.C. subsection 1352(c)(1)-(2)(A), any person who makes a prohibited expenditure or fails to file or amend a required certification or disclosure form shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such expenditure or failure.]

The contractor certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the contractor understands and agrees that the provisions of 31 U.S.C., subsection 3801, *et seq.*, apply to this certification and disclosure, if any.

Date	
Signature	
Company	
Title	 _

#### DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS

As required by U.S. Department of Transportation regulations on Government and Suspension at 49 CFR 29.510, the Contractor certifies to the best of its knowledge and belief, that it and its principals:

- (1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency.
- (2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, state, or local) transaction or contract under a public transaction; violation of Federal or state anti-trust statutes; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property.
- (3) Are not presently indicted or otherwise criminally or civilly charged by a government entity (Federal, state, or local) with the commission of any of the offenses listed in paragraph (2) of this certification.
- (4) Have not within a three-year period preceding this contract had one or more public transactions (Federal, state, or local) terminated for cause of default.

The contractor certifies that if it becomes aware of any later information that contradicts the statements of paragraphs (1) through (4) above, it will promptly inform FTA. Should the contractor be unable to certify to the statements of paragraphs (1) through (4) above, it shall acknowledge on its signature page and provide a written explanation to FTA.

This certification must be attached and returned with any bid/proposal/offer exceeding \$100,000.

## APPEALS AND REMEDIES - FTA GRANT REQUIREMENTS

## (A) PROTESTS

# (1) Right to Protest

Any actual or prospective bidder, offeror, or contractor who is aggrieved in connection with the solicitation or award of a contract may file a written protest with the Purchasing Director. A protest with respect to an Invitation for Bids or Request for Proposal shall be submitted in writing prior to the opening of bids or the closing date of proposals, unless the aggrieved person did not know and would not have known of the facts giving rise to such protest prior to bid opening or the closing date for proposals. In all cases, the protest shall be submitted within ten (10) calendar days after receiving knowledge of the action about which the protest is being made.

# (2) Stay of Procurement During Protests

In the event of a timely protest, the Purchasing Director shall not proceed further with the solicitation or award of the contract until all administrative remedies have been exhausted or until the City Manager makes a determination on the record that the award of a contract without delay is necessary to protect substantial interests of the City.

# (3) Notification of Granter Agency - Grant Funding

If a procurement action which spends grant funding is subject to a protest, the grantor agency shall be notified in writing of such protest and any subsequent response made by the City or the challenging vendor.

## (4) Decision of Purchasing Director

The Purchasing Director shall issue a decision in writing within fourteen (14) calendar days after receipt of such protest or notice of other controversy. A copy of that decision shall be mailed, or otherwise furnished, to the aggrieved party and shall state the reasons for the action taken.

#### (5) Appeal

The decision of the Purchasing Director shall be final and conclusive unless the aggrieved party files a written appeal with the Purchasing Director, addressed to the City Manager, within ten (10) calendar days after receipt of the Purchasing Director's decision.

## (6) Decision of City Manager

The City Manager shall issue a decision, in writing, within fourteen (14) calendar days after receipt of appeal unless the parties agree to a longer period. The decision of the City Manager shall be final and conclusive, and a copy of that decision shall be mailed, or otherwise furnished, to the aggrieved party and shall state the reasons for the action taken. In the absence of a decision by the City Manager within the time specified, the decision of the Purchasing Director shall stand.

## (B) CONTRACT CLAIMS

# (1) Decision of the Purchasing Director

All claims by the contract against the City relating to a contractor, except bid protests, shall be submitted in writing to the Purchasing Director for a decision. The contractor may request a conference with the Purchasing Director on the claim. Claims include, without limitation, disputes arising under a contract and those based upon breach of contract, mistake, misrepresentation, or other cause for contract modification or recision.

## (2) Notice to the Contractor of the Purchasing Director's Decision

The decision of the Purchasing Director shall be issued in writing within fourteen (14) calendar days after receipt of such protest, and shall be immediately mailed or otherwise furnished to the contractor. The decision shall state the reasons for the decision reached, and shall inform the contractor of its appeal rights.

# (3) Finality of Purchasing Director's Decision: Contractor's Right to Appeal

The Purchasing Director's decision shall be final and conclusive unless, within ten (10) calendar days from the date of receipt of the decision, the contractor mails or otherwise delivers a written appeal to the City Manager or commences an action in a court of competent jurisdiction.

## (4) Decision of City Manager

The City Manager shall issue a decision, in writing, within fourteen (14) calendar days after receipt of an appeal unless the parties agree to a longer period. The decision of the City Manager shall be final and conclusive and a copy of that decision shall be mailed, or otherwise furnished, to the aggrieved party, and shall state the reasons for the action taken. In the absence of a decision by the City Manager within the time specified, the decision of the Purchasing Director shall stand.