

# Lexington-Fayette Urban County Government

Lexington, Kentucky  
Horse Capital of the World

Division of Central Purchasing

Date of Issue: March 27, 2017

## INVITATION TO BID #51-2017 City Street Striping & Marking

**Bid Opening Date:** April 17, 2017

**Bid Opening Time:** 2:00 PM

**Address:** 200 East Main Street, 3<sup>rd</sup> Floor, Room 338, Lexington, Kentucky 40507

**Type of Bid:** Price Contract

**Pre Bid Meeting:** N/A

**Pre Bid Time:** N/A

**Address:** N/A

Sealed bids will be received in the office of the Division of Central Purchasing, 200 East Main Street, Lexington, Kentucky, until **2:00 PM**, prevailing local time on **04/17/2017**. Bids must be received by the above-mentioned date and time. Mailed bids should be sent to:

**Division of Central Purchasing  
200 East Main Street, Room 338  
Lexington, KY 40507, (859) 258-3320**

The Lexington-Fayette Urban County Government assumes no responsibility for bids that are not addressed and delivered as indicated above. **Bids that are not delivered to the Division of Central Purchasing by the stated time and date will be rejected.** All bids must be signed and have the company name and address, bid invitation number, and the name of the bid on the outside of the envelope.

Bids are to include all shipping costs to the point of delivery located at: VARIOUS LOCATIONS, Lexington, KY

**Bid Security Required:** \_\_\_ Yes  No *Cashier Check, Certified Check, Bid Bond (Personal checks and company checks will not be acceptable).*

**Performance Bond Required:** \_\_\_ Yes  No

<input checked="" type="checkbox"/> Bid Specifications Met <input type="checkbox"/> Exceptions to Bid Specifications. <i>Exceptions shall be itemized and attached to bid proposal submitted.</i>	<b>Proposed Delivery:</b> <input checked="" type="checkbox"/> days after acceptance of bid.
<b>Procurement Card Usage</b> —The Lexington-Fayette Urban County Government may be using Procurement Cards to purchase goods and services and also to make payments. Will you accept Procurement Cards? <input type="checkbox"/> Yes <input type="checkbox"/> No	

Submitted by: Central Seal Company

*Firm Name*

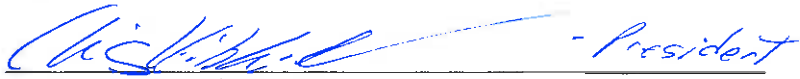
P O Box 490 / 521 Ensslin Drive

*Address*

Danville, KY 40422

*City, State & Zip*

**Bid must be signed:**  
(original signature)

 - President  
**Signature of Authorized Company Representative – Title**

Chris Hibberd - President

*Representative's Name (Typed or printed)*

859-236-2367

859-236-2373

*Area Code - Phone – Extension*

*Fax #*

chris@centralseal.com

*E-Mail Address*

**I. GREEN PROCUREMENT**

**A. ENERGY**

The Lexington-Fayette Urban County Government is committed to protecting our environment and being fiscally responsible to our citizens.

The Lexington-Fayette Urban County Government mandates the use of Energy Star compliant products if they are available in the marketplace (go to [www.Energystar.gov](http://www.Energystar.gov)). If these products are available, but not submitted in your pricing, your bid will be rejected as non-compliant.

ENERGY STAR is a government program that offers businesses and consumers energy-efficient solutions, making it easy to save money while protecting the environment for future generations.

Key Benefits

- These products use 25 to 50% less energy
- Reduced energy costs without compromising quality or performance
- Reduced air pollution because fewer fossil fuels are burned
- Significant return on investment
- Extended product life and decreased maintenance

**B. GREEN SEAL CERTIFIED PRODUCTS**

The Lexington-Fayette Urban County Government is also committed to using other environmentally friendly products that do not negatively impact our environment. Green Seal is a non-profit organization devoted to environmental standard setting, product certification, and public education.

Go to [www.Greenseal.org](http://www.Greenseal.org) to find available certified products. These products will have a reduced impact on the environment and on human health. The products to be used must be pre-approved by the LFUCG prior to commencement of any work in any LFUCG facility. If a Green Seal product is not available, the LFUCG must provide a signed waiver to use an alternate product. Please provide information on the Green Seal products being used with your bid response.

**C. GREEN COMMUNITY**

**The Lexington-Fayette Urban County Government (LFUCG) serves as a principal, along with the University of Kentucky and Fayette County Public Schools, in the Bluegrass Partnership for a Green Community. The Purchasing Team component of the Partnership collaborates on economy of scale purchasing that promotes and enhances environmental initiatives. Specifically, when applicable, each principal is interested in obtaining best value products and/or services which promote environment initiatives via solicitations and awards from the other principals.**

**If your company is the successful bidder on this Invitation For Bid, do you agree to extend the same product/service pricing to the other principals of the Bluegrass Partnership for a Green Community (i.e. University of Kentucky and Fayette County Schools) if requested?**

Yes  No

- P. All material furnished hereunder must be in full compliance with OSHA regulations.
- Q. If more than one bid is offered by one party, or by any person or persons representing a party, all such bids shall be rejected.
- R. Signature on the face of this bid by the Bidder or his authorized representative shall be construed as acceptance of and compliance with all terms and conditions contained herein.
- S. The Entity (regardless of whether construction contractor, non-construction contractor or supplier) agrees to provide equal opportunity in employment for all qualified persons, to prohibit discrimination in employment because of race, color, creed, national origin, sex or age, and to promote equal employment through a positive, continuing program from itself and each of its sub-contracting agents. This program of equal employment opportunity shall apply to every aspect of its employment policies and practices.
- T. The Kentucky Equal Employment Opportunity Act of 1978 (KRS 45.560-45.640) requires that any county, city, town, school district, water district, hospital district, or other political subdivision of the state shall include in directly or indirectly publicly funded contracts for supplies, materials, services, or equipment hereinafter entered into the following provisions:

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

- (1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, age or national origin;*
- (2) The contractor will state in all solicitations or advertisements for employees placed by or on behalf of the contractors that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, age or national origin;*
- (3) The contractor will post notices in conspicuous places, available to employees and applicants for employment, setting forth the provisions of the non-discrimination clauses required by this section; and*
- (4) The contractor will send a notice to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding advising the labor union or workers' representative of the contractor's commitments under the nondiscrimination clauses.*

The Act further provides:

KRS 45.610. Hiring minorities - Information required

- (1) For the length of the contract, each contractor shall hire minorities from other sources within the drawing area, should the union with which he has collective bargaining agreements be unwilling to supply sufficient minorities to satisfy the agreed upon goals and timetable.*
- (2) Each contractor shall, for the length of the contract, furnish such information as required by KRS 45.560 to KRS 45.640 and by such rules, regulations and orders issued pursuant thereto and will permit access to all books and records pertaining to his employment practices and work sites by the contracting agency and the department for purposes of investigation to ascertain compliance with KRS 45.560 to 45.640 and such rules, regulations and orders issued pursuant thereto.*

KRS 45.620. Action against contractor - Hiring of minority contractor or subcontractor

- (1) If any contractor is found by the department to have engaged in an unlawful practice under this chapter during the course of performing under a contract or subcontract covered under KRS 45.560 to 45.640, the department shall so certify to the contracting agency and such certification shall be binding upon the contracting agency unless it is reversed in the course of judicial review.*
- (2) If the contractor is found to have committed an unlawful practice under KRS 45.560 to 45.640, the contracting agency may cancel or terminate the contract, conditioned upon a program for future compliance approved by the contracting agency and the department. The contracting agency may declare such a contractor ineligible to bid on further contracts with that agency until such time as the contractor complies in full with the requirements of KRS 45.560 to 45.640.*

Notice of appeal of a bid recommendation must be filed within 3 business days of the bid recommendation by (1) sending a written notice, including sufficient documentation to support appeal, to the Director, Division of Central Purchasing or (2) submitting a written request for a meeting with the Director of Central Purchasing to explain his appeal. After reviewing the documentation and/or hearing the vendor and consulting with the Commissioner of Finance and the Chief Administrative Officer, the Director of Central Purchasing shall in writing, affirm or withdraw the recommendation.

### III. **Procurement Contract Bid Conditions**

- A. The terms of this agreement shall be for 2 year(s) from the date of acceptance of this contract by the Lexington-Fayette Urban County Government. This agreement may be automatically extended for an additional 2-1 year(s) renewal. This contract may be canceled by either party thirty (30) days after delivery by canceling party of written notice of intent to cancel to the other contracting party.
- B. Price Changes (**Space Checked Applies**)
  - (XX) 1. Prices quoted in response to the Invitation shall be firm prices for the first 365 days of the Procurement Contract. After 365 days, prices may be subject to revision and such changes shall be based on general industry changes. Revision may be either increases or decreases and may be requested by either party. There will be no more than one (1) price adjustment per contract year. Requests for price changes shall be received in writing at least twenty (20) days prior to the effective date and are subject to written acceptance before becoming effective. Proof of the validity of a request for revision shall be responsibility of the requesting party. The Lexington-Fayette Urban County Government shall receive the benefit of any decline that the seller shall offer his other accounts.
  - () 2. No provision for price change is made herein. Prices are to be firm for the term of this contract.
  - () 3. Procurement Level Contract
- C. If any contract item is not available from the vendor, the Lexington-Fayette Urban County Government, at its option, may permit the item to be back-ordered or may procure the item on the open market.
- D. All invoices must bear reference to the Lexington-Fayette Urban County Government Purchasing document numbers which are being billed.
- E. This contract may be canceled by the Lexington-Fayette Urban County Government if it is determined that the Bidder has failed to perform under the terms of this agreement, such cancellation to be effective upon receipt of written notice of cancellation by the Bidder.
- F. No substitutions for articles specified herein may be made without prior approval of the Division of Central Purchasing.

## GENERAL PROVISIONS OF BID CONTRACT


By signing the below, bidder acknowledges that it understands and agrees with the following provisions related to its bid response and the provision of any goods or services to LFUCG upon selection by LFUCG pursuant to the bid request:

1. Bidder shall comply with all Federal, State & Local regulations concerning this type of service or good.
2. Failure to submit ALL forms and information required by LFUCG may be grounds for disqualification.
3. Addenda: All addenda, if any, must be considered by the bidder in making its response, and such addenda shall be made a part of the requirements of the bid contract. Before submitting a bid response, it is incumbent upon bidder to be informed as to whether any addenda have been issued, and the failure of the bidder to cover any such addenda may result in disqualification of that response.
4. Bid Reservations: LFUCG reserves the right to reject any or all bid responses, to award in whole or part, and to waive minor immaterial defects in proposals. LFUCG may consider any alternative proposal that meets its basic needs.
5. Liability: LFUCG is not responsible for any cost incurred by bidder in the preparation of its response.
6. Changes/Alterations: Bidder may change or withdraw a proposal at any time prior to the opening; however, no oral modifications will be allowed. Only letters, or other formal written requests for modifications or corrections of a previously submitted proposal which is addressed in the same manner as the bid response, and received by LFUCG prior to the scheduled closing time for receipt of bids, will be accepted. The bid response when opened, will then be corrected in accordance with such written request(s), provided that the written request is contained in a sealed envelope which is plainly marked "modifications of bid response".
7. Clarification of Submittal: LFUCG reserves the right to obtain clarification of any point in a bid or to obtain additional information from any bidder.
8. Bribery Clause: By his/her signature on its response, bidder certifies that no employee of his/hers, any affiliate or subcontractor, has bribed or attempted to bribe an officer or employee of the LFUCG.
9. Additional Information: While not necessary, the bidder may include any product brochures, software documentation, sample reports, or other documentation that may assist LFUCG in better understanding and evaluating the bid response. Additional documentation shall not serve as a substitute for other documentation which is required by the LFUCG to be submitted with the bid response.
10. Ambiguity, Conflict or other Errors: If a bidder discovers any ambiguity, conflict, discrepancy, omission or other error in the bid request of LFUCG, it shall immediately notify LFUCG of such error in writing and request modification or clarification of the document if allowable by the LFUCG.
11. Agreement to Bid Terms: In submitting its bid response, the bidder agrees that it has carefully examined the specifications and all provisions relating to LFUCG's bid request, including but not limited to the bid contract. By submission of its bid response, bidder states that it understands the meaning, intent and requirements of LFUCG's bid request and agrees to the same. The successful bidder shall warrant that it is familiar with and understands all provisions herein and shall warrant that it can comply with them. No additional compensation to bidder shall be authorized for services, expenses, or goods reasonably covered under these provisions that the bidder omits from its bid response.
12. Cancellation: LFUCG may unilaterally terminate the bid contract with the selected bidder(s) at any time, with or without cause, by providing at least thirty (30) days advance written notice unless a different advance written notice period is negotiated prior to contract approval. Payment for services or goods received prior to termination shall be made by the LFUCG provided these goods or services were provided in a manner acceptable to the LFUCG. Payment for those goods and services shall not be unreasonably withheld.

**WORKFORCE ANALYSIS FORM**

Name of Organization: Central Seal Company

Categories	Total	White (Not Hispanic or Latino)		Hispanic or Latino		Black or African-American (Not Hispanic or Latino)		Native Hawaiian and Other Pacific Islander (Not Hispanic or Latino)		Asian (Not Hispanic or Latino)		American Indian or Alaskan Native (not Hispanic or Latino)		Two or more races (Not Hispanic or Latino)		Total	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Administrators	4	4														4	
Professionals																	
Superintendents																	
Supervisors	7	7														7	
Foremen	10	9				1										10	
Technicians																	
Protective Service																	
Para-Professionals																	
Office/Clerical	3	3														3	
Skilled Craft	34	30	1			2						1				34	
Service/Maintenance	12	10				2										12	
<b>Total:</b>	<b>70</b>	<b>60</b>	<b>4</b>			<b>5</b>						<b>1</b>				<b>70</b>	

Prepared by: Chris Hibberd - President  Date: 04 / 17 / 2017

(Name and Title)

Revised 2015-Dec-15

**Lexington-Fayette Urban County Government**  
**MWDBE PARTICIPATION GOALS**

**A. GENERAL**

- 1) The LFUCG request all potential contractors to make a concerted effort to include Minority-Owned (MBE), Woman-Owned (WBE) and Disadvantaged (DBE) Business Enterprises and Veteran-Owned Small Businesses (VOSB) as subcontractors or suppliers in their bids.
- 2) Toward that end, the LFUCG has established 10% of total procurement costs as a Goal for participation of Minority-Owned, Woman-Owned and Disadvantaged Businesses on this contract.
- 3) **It is therefore a request of each Bidder to include in its bid, the same goal (10%) for MWDBE participation and other requirements as outlined in this section.**
- 4) The LFUCG has also established a 3% of total procurement costs as a Goal for participation for of Veteran-Owned Businesses.
- 5) **It is therefore a request of each Bidder to include in its bid, the same goal (3%) for Veteran-Owned participation and other requirements as outlined in this section.**

**B. PROCEDURES**

- 1) The successful bidder will be required to report to the LFUCG, the dollar amounts of all payments submitted to Minority-Owned or Woman-Owned subcontractors and suppliers for work done or materials purchased for this contract. (See Subcontractor Monthly Payment Report)
- 2) Replacement of a Minority-Owned, Woman-Owned or Veteran-Owned subcontractor or supplier listed in the original submittal must be requested in writing and must be accompanied by documentation of Good Faith Efforts to replace the subcontractor / supplier with another MWDBE Firm; this is subject to approval by the LFUCG. (See LFUCG MWDBE Substitution Form)
- 3) For assistance in identifying qualified, certified businesses to solicit for potential contracting opportunities, bidders may contact:
  - a) The Lexington-Fayette Urban County Government, Division of Central Purchasing (859-258-3320)
- 4) The LFUCG will make every effort to notify interested MWDBE and Veteran-Owned subcontractors and suppliers of each Bid Package, including information on the scope of work, the pre-bid meeting time and location, the bid date, and all other pertinent information regarding the project.

**C. DEFINITIONS**

- 1) A Minority-Owned Business Enterprise (MBE) is defined as a business which is certified as being at least 51% owned and operated by persons of African American, Hispanic, Asian, Pacific Islander, American Indian or Alaskan Native Heritage.
- 2) A Woman-Owned Business Enterprise (WBE) is defined as a business which is certified as being at least 51% owned and operated by one or more Non-Minority Females.
- 3) A Disadvantaged Business (DBE) is defined as a business which is certified as being at least

- d. Attended pre-bid meetings that were scheduled by LFUCG to inform MWDBEs and/or Veteran-Owned businesses of subcontracting opportunities
- e. Sponsored Economic Inclusion event to provide networking opportunities for prime contractors and MWDBE firms and Veteran-Owned businesses
- f. Requested a list of MWDBE and/or Veteran subcontractors or suppliers from LFUCG and showed evidence of contacting the companies on the list(s).
- g. Contacted organizations that work with MWDBE companies for assistance in finding certified MWDBE firms and Veteran-Owned businesses to work on this project. Those contacted and their responses should be a part of the bidder's good faith efforts documentation.
- h. Sent written notices, by certified mail, email or facsimile, to qualified, certified MWDBEs soliciting their participation in the contract not less than seven (7) days prior to the deadline for submission of bids to allow them to participate effectively.
- i. Followed up initial solicitations by contacting MWDBEs and Veteran-Owned businesses to determine their level of interest.
- j. Provided the interested MWDBE firm and/or Veteran-Owned business with adequate and timely information about the plans, specifications, and requirements of the contract.
- k. Selected portions of the work to be performed by MWDBE firms and/or Veteran-Owned businesses in order to increase the likelihood of meeting the contract goals. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate MWDBE and Veteran participation, even when the prime contractor may otherwise perform these work items with its own workforce.
- l. Negotiated in good faith with interested MWDBE firms and Veteran-Owned businesses not rejecting them as unqualified without sound reasons based on a thorough investigation of their capabilities. Any rejection should be so noted in writing with a description as to why an agreement could not be reached.
- m. Included documentation of quotations received from interested MWDBE firms and Veteran-Owned businesses which were not used due to uncompetitive pricing or were rejected as unacceptable and/or copies of responses from firms indicating that they would not be submitting a bid.
- n. Bidder has to submit sound reasons why the quotations were considered unacceptable. The fact that the bidder has the ability and/or desire to perform the contract work with its own forces will not be considered a sound reason for rejecting a MWDBE and/or Veteran-Owned business's quote. Nothing in this provision shall be construed to require the bidder to accept unreasonable quotes in order to satisfy MWDBE and Veteran goals.





## MINORITY BUSINESS ENTERPRISE PROGRAM

Sherita Miller, MPA  
Minority Business Enterprise Liaison  
Division of Central Purchasing  
Lexington-Fayette Urban County Government  
200 East Main Street  
Lexington, KY 40507  
[smiller@lexingtonky.gov](mailto:smiller@lexingtonky.gov)  
859-258-3323

**OUR MISSION:** The mission of the Minority Business Enterprise Program is to facilitate the full participation of minority and women owned businesses in the procurement process and to promote economic inclusion as a business imperative essential to the long term economic viability of Lexington-Fayette Urban County Government.

To that end the city council adopted and implemented resolution 167-91—Disadvantaged Business Enterprise (DBE) 10% Goal Plan in July of 1991. The resolution states in part (a full copy is available in Central Purchasing):

*“A Resolution supporting adoption of the administrative plan for a ten percent (10%) Minimum goal for disadvantaged business enterprise participation in Lexington-Fayette Urban County Government construction and professional services contracts; Providing that as part of their bids on LFUCG construction contracts, general Contractors shall make a good faith effort to award at least ten percent (10%) of All subcontracts to disadvantaged business enterprises; providing that divisions of LFUCG shall make a good faith effort to award at least ten percent of their Professional services and other contracts to disadvantaged business enterprises...”*

A Disadvantaged Business Enterprise is defined as a business that has been certified as being at least 51% owned, operated and managed by a U.S. Citizen of the following groups:

- African-American
- Hispanic-American
- Asian/Pacific Islander
- Native American/Native Alaskan
- Non-Minority Female
- Economically and Socially Disadvantaged

In addition, to that end the city council also adopted and implemented resolution 167-91—Veteran-owned Businesses, 3% Goal Plan in July of 2015. The resolution states in part (a full copy is available in Central Purchasing):

*“A resolution adopting a three percent (3%) minimum goal for certified veteran-owned small businesses and service disabled veteran-owned businesses for certain of those Lexington-Fayette Urban County contracts related to construction for professional services, and authorizing the Division of Purchasing to adopt and implement guidelines and/or policies consistent with the provisions and intent of this resolution by no later than July 1, 2015.”*



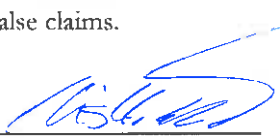
**LFUCG MWDBE PARTICIPATION FORM**  
 Bid/RFP/Quote Reference # 51-2017

The MWDBE and/or veteran subcontractors listed have agreed to participate on this Bid/RFP/Quote. If any substitution is made or the total value of the work is changed prior to or after the job is in progress, it is understood that those substitutions must be submitted to Central Purchasing for approval immediately. **Failure to submit a completed form may cause rejection of the bid.**

MWDBE Company, Name, Address, Phone, Email	MBE WBE or DBE	Work to be Performed	Total Dollar Value of the Work	% Value of Total Contract
1. Striping Solutions	WBE	Item #104 - Delineator Qwick Kurb	\$92,000	22%
2. R&B Sealing & Striping	Veteran	Item #103 - City Post 36"	\$26,250	6%
3.				
4.				

The undersigned company representative submits the above list of MWDBE firms to be used in accomplishing the work contained in this Bid/RFP/Quote. Any misrepresentation may result in the termination of the contract and/or be subject to applicable Federal and State laws concerning false statements and false claims.

Central Seal Company  
 Company  
04/17/2017  
 Date

Chris Hibberd   
 Company Representative  
President  
 Title



**MWDBE QUOTE SUMMARY FORM**

Bid/RFP/Quote Reference # 51-2017

The undersigned acknowledges that the minority and/or veteran subcontractors listed on this form did submit a quote to participate on this project. Failure to submit this form may cause rejection of the bid.

Company Name Central Seal Company	Contact Person Chris Hibberd
Address/Phone/Email P O Box 490 / Danville, KY 40422 859-236-2367	Bid Package / Bid Date 51-2017 / 04/17/2017

MWDBE Company Address	Contact Person	Contact Information (work phone, Email, cell)	Date Contacted	Services to be performed	Method of Communication (email, phone meeting, ad, event etc)	Total dollars \$\$ Do Not Leave Blank (Attach Documentation)	MBE * AA HA AS NA Female	Veteran
Striping Solutions 250 R Plance Lane Vanceburg, KY 41179	Bree Blevins	606-541-0088	4/3/17	Item #104	phone	\$92,000	Female	
R&B Sealing & Striping 8243 West KY 9 Vanceburg, KY 41179	Rodney Frye	606-796-0019	4/3/17	Item #103	phone	\$26,250		Yes

(MBE designation / AA=African American / HA= Hispanic American/AS = Asian American/Pacific Islander/ NA= Native American)

The undersigned acknowledges that all information is accurate. Any misrepresentation may result in termination of the contract and/or be subject to applicable Federal and State laws concerning false statements and claims.

Central Seal Company  
Company  
04/17/2017  
Date

Chris Hibberd  
Company Representative  
President  
Title

**LFUCG STATEMENT OF GOOD FAITH EFFORTS**

**Bid/RFP/Quote #** 51-2017

By the signature below of an authorized company representative, we certify that we have utilized the following Good Faith Efforts to obtain the maximum participation by MWDBE and Veteran-Owned business enterprises on the project and can supply the appropriate documentation.

\_\_\_\_\_ Advertised opportunities to participate in the contract in at least two (2) publications of general circulation media; trade and professional association publications; small and minority business or trade publications; and publications or trades targeting minority, women and disadvantaged businesses not less than fifteen (15) days prior to the deadline for submission of bids to allow MWDBE firms and Veteran-Owned businesses ~~firms~~ to participate.

\_\_\_\_\_ Included documentation of advertising in the above publications with the bidders good faith efforts package

\_\_\_\_\_ Attended LFUCG Central Purchasing Economic Inclusion Outreach event

\_\_\_\_\_ Attended pre-bid meetings that were scheduled by LFUCG to inform MWDBEs and/or Veteran-Owned Businesses of subcontracting opportunities

\_\_\_\_\_ Sponsored Economic Inclusion event to provide networking opportunities for prime contractors and MWDBE firms and Veteran-Owned businesses

\_\_\_\_\_ requested a list of MWDBE and/or Veteran subcontractors or suppliers from LFUCG and showed evidence of contacting the companies on the list(s).

\_\_\_\_\_ Contacted organizations that work with MWDBE companies for assistance in finding certified MWBDE firms and Veteran-Owned businesses to work on this project. Those contacted and their responses should be a part of the bidder's good faith efforts documentation.

\_\_\_\_\_ Sent written notices, by certified mail, email or facsimile, to qualified, certified MWDBEs soliciting their participation in the contract not less than seven (7) days prior to the deadline for submission of bids to allow them to participate effectively.

\_\_\_\_\_ Followed up initial solicitations by contacting MWDBEs and Veteran-Owned businesses to determine their level of interest.

Provided the interested MWBDE firm and/or Veteran-Owned business with adequate and timely information about the plans, specifications, and requirements of the contract.

Selected portions of the work to be performed by MWDBE firms and/or Veteran-Owned businesses in order to increase the likelihood of meeting the contract goals. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate MWDBE and Veteran participation, even when the prime contractor may otherwise perform these work items with its own workforce

\_\_\_\_\_ Negotiated in good faith with interested MWDBE firms and Veteran-Owned businesses not rejecting them as unqualified without sound reasons based on a thorough investigation of their capabilities. Any rejection should be so noted in writing with a description as to why an

**RISK MANAGEMENT PROVISIONS  
INSURANCE AND INDEMNIFICATION  
Bid #29-2017 Installation of LED Lighting Retrofit**

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**INDEMNIFICATION AND HOLD HARMLESS PROVISION**

- (1) It is understood and agreed by the parties that Contractor hereby assumes the entire responsibility and liability for any and all damages to persons or property caused by or resulting from or arising out of any act or omission on the part of Contractor or its employees, agents, servants, owners, principals, licensees, assigns or subcontractors of any tier (hereinafter "CONTRACTOR") under or in connection with this agreement and/or the provision of goods or services and the performance or failure to perform any work required thereby.
- (2) CONTRACTOR shall indemnify, save, hold harmless and defend the Lexington-Fayette Urban County Government and its elected and appointed officials, employees, agents, volunteers, and successors in interest (hereinafter "LFUCG") from and against all liability, damages, and losses, including but not limited to, demands, claims, obligations, causes of action, judgments, penalties, fines, liens, costs, expenses, interest, defense costs and reasonable attorney's fees that are in any way incidental to or connected with, or that arise or are alleged to have arisen, directly or indirectly, from or by CONTRACTOR's performance or breach of the agreement and/or the provision of goods or services provided that: (a) it is attributable to personal injury, bodily injury, sickness, or death, or to injury to or destruction of property (including the loss of use resulting therefrom), or to or from the negligent acts, errors or omissions or willful misconduct of the CONTRACTOR; and (b) not caused solely by the active negligence or willful misconduct of LFUCG.
- (3) In the event LFUCG is alleged to be liable based upon the above, CONTRACTOR shall defend such allegations and shall bear all costs, fees and expenses of such defense, including but not limited to, all reasonable attorneys' fees and expenses, court costs, and expert witness fees and expenses, using attorneys approved in writing by LFUCG, which approval shall not be unreasonably withheld.
- (4) These provisions shall in no way be limited by any financial responsibility or insurance requirements, and shall survive the termination of this agreement.
- (5) LFUCG is a political subdivision of the Commonwealth of Kentucky. CONTRACTOR acknowledges and agrees that LFUCG is unable to provide indemnity or otherwise save, hold harmless, or defend the CONTRACTOR in any manner.

**FINANCIAL RESPONSIBILITY**

BIDDER/CONTRACTOR understands and agrees that it shall, prior to final acceptance of its bid and the commencement of any work, demonstrate the ability to assure compliance with the above Indemnity provisions and these other risk management provisions.

**INSURANCE REQUIREMENTS**

YOUR ATTENTION IS DIRECTED TO THE INSURANCE REQUIREMENTS BELOW, AND YOU MAY NEED TO CONFER WITH YOUR INSURANCE AGENTS, BROKERS, OR CARRIERS TO DETERMINE IN ADVANCE OF SUBMISSION OF A RESPONSE THE AVAILABILITY OF THE INSURANCE COVERAGES AND ENDORSEMENTS REQUIRED

## Deductibles and Self-Insured Programs

**IF YOU INTEND TO SUBMIT A SELF-INSURANCE PLAN IT MUST BE FORWARDED TO LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT, DIVISION OF RISK MANAGEMENT, 200 EAST MAIN STREET, LEXINGTON, KENTUCKY 40507 NO LATER THAN A MINIMUM OF FIVE (5) WORKING DAYS PRIOR TO THE RESPONSE DATE.**

Self-insurance programs, deductibles, and self-insured retentions in insurance policies are subject to separate approval by Lexington-Fayette Urban County Government's Division of Risk Management, upon review of evidence of BIDDER/CONTRACTOR's financial capacity to respond to claims. Any such programs or retentions must provide LFUCG with at least the same protection from liability and defense of suits as would be afforded by first-dollar insurance coverage. If BIDDER/CONTRACTOR satisfies any portion of the insurance requirements through deductibles, self-insurance programs, or self-insured retentions, BIDDER/CONTRACTOR agrees to provide Lexington-Fayette Urban County Government, Division of Risk Management, the following data prior to the final acceptance of bid and the commencement of any work:

- a. Latest audited financial statement, including auditor's notes.
- b. Any records of any self-insured trust fund plan or policy and related accounting statements.
- c. Actuarial funding reports or retained losses.
- d. Risk Management Manual or a description of the self-insurance and risk management program.
- e. A claim loss run summary for the previous five (5) years.
- f. Self-Insured Associations will be considered.

## Safety and Loss Control

CONTRACTOR shall comply with all applicable federal, state, and local safety standards related to the performance of its works or services under this Agreement and take necessary action to protect the life, health and safety and property of all of its personnel on the job site, the public, and LFUCG.

## Verification of Coverage

BIDDER/CONTRACTOR agrees to furnish LFUCG with all applicable Certificates of Insurance signed by a person authorized by the insurer to bind coverage on its behalf prior to final award, and if requested, shall provide LFUCG copies of all insurance policies, including all endorsements.

## Right to Review, Audit and Inspect

CONTRACTOR understands and agrees that LFUCG may review, audit and inspect any and all of its records and operations to insure compliance with these Insurance Requirements.

## DEFAULT

BIDDER/CONTRACTOR understands and agrees that the failure to comply with any of these insurance, safety, or loss control provisions shall constitute default and that LFUCG may elect at its option any single remedy or penalty or any combination of remedies and penalties, as

2017 – 2019

LEXINGTON – FAYETTE URBAN COUNTY GOVERNMENT

DEPARTMENT OF ENVIRONMENTAL QUALITY & PUBLIC WORKS

SPECIFICATIONS FOR

**CITY STREET STRIPING AND MARKING**

Methyl Ethyl Ketone	0.25	0.25
Xylene	0.30	0.30

- (6) The vehicle must include trace amounts, not to exceed 0.01 pounds per gallon of paint, of lead dryer, cobalt drier and anti-skinning agent.
- (7) All bids should include documentation of actual chemical composition and reference to governmental agencies and specifications whereby the materials bid are successfully being used. The Lexington- Fayette Urban County Government (LFUCG) reserves the right to reject delivered materials if a laboratory examination determines that the composition does not conform to the documentation included with the bid.

### **3. Application of Striping**

- (1) Paint shall be applied at a rate of not less than 16.5 gallons per mile of solid 4-inch line and 24.8 gallons per mile of solid 6-inch line. Glass beads shall be applied at a rate of not less than 5 pounds per gallon of paint.
- (2) The 4-inch lines shall have clean edges and shall not be less than 4-inches or more than 6-inches. The 6-inch lines shall have clean edges and shall not be less than 6-inches or more than 8-inches in width. .These tolerances may not apply when deviations are caused by undulation in the pavement surface.
- (3) The skip lines shall have a stripe-to-gap ratio of 10-foot paint stripe to a 30-foot gap. The length of the stripe shall not be less than 10-foot nor more than 10 feet 6 inches. The stripe gap cycle shall not be less than 39 feet 6 inches nor longer than 40 feet 6 inches.

### **4. Application Equipment**

- (1) The striper used for the markings must be self-propelled and capable of heating the paint to provide uniform flow and enhance quick drying of the paint. This striper must have a guide boom or optical pointer in order to attain smooth and straight lines. The equipment must use air pressure or pump pressure to maintain proper paint pressure at all times. The equipment shall be capable of applying a single line or parallel lines of the specified width and in any combination of a skip line and a solid line in one pass.
- (2) The equipment shall be equipped with a paint cutoff device to provide clean, square marking ends of the paint lines.

### **5. Paint Marking Removal**



**SPECIFICATIONS**  
**Thermoplastic Pavment Marking**  
**White or Yellow**

**1. DESCRIPTION**

This specification covers a reflectorized pavement striping material of the type that is applied to a road surface in a molten state with premixed glass beads by spray or extrusion means, with a supplemental surface application of glass spheres. When applied properly and at the designated thickness and width the stripe shall, upon cooling, be reflectorized and be able to resist deformation by traffic. The applied material shall be impervious to degradation by motor oil, diesel fuel, grease deposits and ice-preventative chemicals.

**2. MATERIAL REQUIREMENTS**

The thermoplastic pavement marking materials used in this contract shall meet the following specifications. This specification covers reflectorized oil and grease impervious thermoplastic road marking materials which are (1) hot extrusion applied with a surface application of glass spheres and (2) heat fused applied. The properly applied markings shall be reflectorized and able to durably resist degradation and deformation by traffic.

The thermoplastic materials shall be homogenously composed of pigment, filler, resins, and glass reflectorizing spheres, and shall be available in both yellow and white.

Composition: The pigment, beads and filler shall be uniformly dispersed in the resin. The materials shall be free from all skins, dirt, and foreign objects and shall comply with requirements according to Table 1. Only new materials shall be acceptable for use on this project.

**TABLE 1**

<b>COMPONENT</b>	<b>WHITE</b>	<b>YELLOW</b>
Binder (see note A )	18.0% min	18.0% min
Glass Beads (AAASHTO M247 Type D )	30.0 – 40.0%	30.0 – 40.0%
Titanium Dioxide	10.0% min	--
Yellow Pigments (see note B)	--	2.0% min
Calcium Carbonate	42.0% max	50.0% max

**Note A:** The alkyd binder shall consist of a mixture of synthetic resins (at least one of which is solid at room temperature) and a high boiling point plasticizer. At least one third of binder

The "Drop-On" glass beads shall be smooth, clear and free from air inclusions. The beads shall have a minimum refractive index of 1.50 and shall be a minimum of 80% true spheres overall, and minimum 70% true spheres on each sieve. The beads shall be moisture proof coated and shall meet the requirements of AASHTO M-247-81 Section 4.4.2 to insure optimum embedment of 60-65 percent (60-65%) in various thermoplastic traffic marking systems. The material shall set to bear traffic in not more than 2 minutes when the air temperature is 50 degrees F and not more than 10 minutes when the air temperature is 90 degrees F.

Bond Strength – After heating the thermoplastic material for four hours at 425 degrees F the bond strength to Portland Cement Concrete shall exceed 180 psi (1.24 Mpa Method ASTM D4796-88)

Cracking Resistance – For at least 90 days after application the materials shall show no cracks other than with substrate cracking.

Smear and Softening Resistance – During the life of the materials, the applied markings shall not smear or soften apart from substrate movement.

### **3. QUALITY ASSURANCE**

Methods of Sampling and Testing: The LFUCG reserves the right to require the contractor to perform any quality assurance testing necessary to determine compliance with these specifications. Testing required shall be by industry standard and shall be the responsibility of the contractor and performed at no cost to the LFUCG.

The Contractor shall obtain and provide to the Engineer, as part of the material submittal package, a written material specification compliance certification from the thermoplastic manufacturer, stating that the material being used on this contract meets the materials specifications in the Contract.

### **4. APPLICATION REQUIREMENTS**

The molten applied thermoplastic material shall readily screed/extrude at temperatures between 400 degrees F and 440 degrees F from the approved equipment to produce a line which shall be continuous and uniform in shape having sharp dimensions.

The application of additional glass beads by drop-on methods shall be at a minimum rate of 8 lbs. per 100 sq ft of marking. Ambient and surface temperatures shall be at least 50 degrees F and rising at the time of application.

Method of Application:

The Contractor shall furnish and install machine-applied extruded and/or sprayed hot thermoplastic with glass spheres (pre mixed and drop-on) in the proper ratio to immediately produce a highly reflective marking as described elsewhere in these specifications, in accordance with the details in this contract and the following provisions.

Surface Preparation:

In order to insure maximum possible adhesion, the pavement surface upon which the pavement markings are to be placed shall be properly cleaned from grease, oil, mud, dust, dirt, grass, loose gravel, and other deleterious material prior to the application of the Thermoplastic pavement markings, and/or primer/sealer. Cleaning is required on all surfaces which are to receive new pavement markings, and shall be considered incidental to the application of the markings.

Primer-Sealer:

When a line is required to be placed in the same location as an existing painted line, and existing painted markings not required to be removed are visible, they shall be retraced (i.e. new markings installed in exactly the same locations, patterns, and dimensions as the old markings). However, if the existing markings are to be removed or are not visible, or if new roadway surface has been placed before markings installation occurs, or if the contract requires a line to be installed where none currently exists, the Contractor will be required to pre-mark as directed by the Engineer and subsequently shall install the required markings in accordance with the requirement of other sections of the specifications.

The actual placement of the pavement markings at any such site shall not be performed until the pre-marking has been inspected and approved by the Engineer. Pre-marking is incidental to the pavement marking installation work and there will be no separate payment for pre-marking.

## 7. WARRANTIES

The thermoplastic pavement marking materials and glass beads furnished under this contract shall assume the manufacturer's warranty for these materials and shall be guaranteed by the supplier against failure due to traffic oil degradation.

The contractor shall assume all costs arising from the use of patented materials, equipment, devices or processes used on or incorporated in the work, and agrees to indemnify and hold harmless the LFUCG and its duly authorized representatives from all suits at law or action of every nature for, or on account of, the use of any patented materials equipment, devices or processes. Further, the material shall meet the requirements of this specification for a period of one year.

surface of the material so that the surface is covered in what is best described as a “checkerboard” pattern of glass beads and abrasive materials. The abrasive material must have a minimum hardness of 9 (Mohs scale). The factory applied coated surface beads shall have a minimum of 80% true spheres, minimum refractive index of 1.50, and meet the following gradation:

Size Gradation		Retained, %	Passing, %
US Mesh	Um		
12	1700	0 - 2%	98 - 100%
14	1400	0 - 6%	94 - 100%
16	1180	1 - 21%	79 - 99%
18	1000	28 - 62%	38 - 72%
20	850	62 - 71%	29 - 38%
30	600	67 - 77%	23 - 33%
50	300	86 - 95%	5 - 14%
80	200	97 - 100%	0 - 3%

3.2. Pigments: Light Green: The material shall be manufactured with appropriate pigment to ensure that the resulting colors complies with the Light Green color as specified in the FHWA Memorandum dated April 15<sup>th</sup>, 2011: Interim Approval for Optional Use of Green Colored Pavement for Bike Lanes (IA-14).

3.2.1. Daytime chromaticity coordinates for the color used for green colored pavement shall be as follows:

1		2		3		4	
X	y	x	y	x	y	x	y
0.230	0.754	0.266	0.500	0.367	0.500	0.444	0.555

3.2.2. Nighttime chromaticity coordinates for the color used for green colored pavement shall be as follows:

1		2		3		4	
X	y	x	y	x	y	x	y
0.230	0.754	0.336	0.540	0.450	0.500	0.479	0.520

3.2.3. The pigment system must not contain heavy metals or any carcinogen, as defined in 29 CFR 1910.1200 in amounts exceeding permissible limits as specified in relevant Federal Regulations.

3.3. Heating indicators: The top surface of the material (same side as the factory applied surface beads/abrasives) shall have regularly spaced indents. The closing of these indents during application, shall act as a visual cue that the material has reached a molten state allowing for satisfactory adhesion and proper bead and abrasives embedment, and as a post-application visual cue that the application procedures have been followed.

3.4. Skid Resistance: The surface of the preformed thermoplastic material shall contain factory applied non-skid material with a minimum hardness of 9 (Mohs scale). Upon application the material shall provide a minimum skid resistance value of 60 BPN when tested according to ASTM E 303.

3.5. Thickness: The material must be supplied at a minimum thickness of 90 mils (2.29 mm) or 125 mils (3.15 mm).

3.6. Retroreflectivity: The material, when applied in accordance with manufacturer’s guidelines, must demonstrate a uniform

level of sufficient nighttime retroreflection when tested in accordance to ASTM E 1710. The applied material must have an initial minimum intensity reading of  $50 \text{ mcd} \cdot \text{m}^{-2} \cdot \text{lx}^{-1}$ , as measured with a Delta pavement marking retroreflectometer. Note: Initial retroreflection and skid resistance are affected by the amount of heat applied during installation. When ambient temperatures are such that greater amounts of heat are required for proper installation, initial retroreflection and skid resistance levels may be affected.

## **SPECIFICATIONS**

### **Integrated Multi-polymer Pavement Marking Material (HPS8)**

#### **1. Scope**

1.1. This specification covers a reflectorized engineered multi-polymer pavement marking material that can be applied to road surfaces, including Portland Cement Concrete (PCC) and aged asphalt without need of a primer/sealer. However, primer is recommended for use on concrete and aged asphalt surfaces when used in extended warranty projects. The material is 100% solids and can be applied by standard thermoplastic application equipment at thicknesses as low as 60 mil and up to 120 mil. The applied thickness will have a direct correlation to product durability as thicker markings will result in greater durability. Long-term retro reflectivity is obtained through the incorporation of both AASHTO Type 1 and Type 3 glass beads in the product. Upon cooling to normal pavement temperature, HPS 8 provides a very durable marking material for low and high volume traffic areas. In order to qualify as a pavement marking that can be applied to concrete surfaces without a sealer, the material must meet or exceed the requirements listed in Section 5.

#### **2. Referenced Documents**

##### **2.1. Federal Standards:**

- Federal Test Standard No. 5958
- AASHTO Standard Test Method M 249
- AASHTO Standard Test Method T 250
- ASTM Standard Test Method D 4796 (Bond Strength)
- ASTM Standard Test Method D 5420 (Impact Resistance)
- ASTM Standard Test Method D 4960 (Color)
- Others as referenced within specification

#### **3. Definitions**

##### **3.1. Retroreflective Optics:**

- 3.1.1. **Glass Beads:** Spherical glass manufactured for use with pavement marking materials to provide retroreflective properties to the marking, allowing them to be visible when viewed at night under automobile headlights.
- 3.1.1.1. **Small Glass Beads:** Also referred to as standard glass beads. This can refer to a number of products of various sizes, but as defined in this document it refers to a glass bead product meeting the requirements of AASHTO M247 Type 1 or Type 2.
- 3.1.1.2. **Large Glass Beads:** These glass beads meet the requirements of AASHTO M247 Type 3 or Type 4 as called for in the specification.
- 3.1.1.3. **High Refractive Index Glass Beads:** These glass beads typically meet the requirements of AASHTO M247 Type 1 or Type 2 except the refractive index of the glass bead is between 1.70 and 1.95.
- 3.1.2. **Composite Optics:** A multi-component retroreflective particle comprised of a pigmented core (typically white or yellow combined with very small glass or ceramic beads having a refractive index of between 1.90 and 2.4)

#### **4. Materials**

- 4.1. The pavement marking material shall be homogeneously composed of pigments, resins, polymers (adhesive constituent), glass reflectorizing spheres and other fillers.
- 4.2. The pavement marking material shall be available in white, yellow, and black from the same manufacturer. The manufacturer shall have the option of formulating the material according to manufacturer's own specifications. However, certain physical and chemical requirements specified in Section 4 must be met.

7.1.1.3. Existing waterborne paint may be overlaid with multi-polymer pavement marking provided that it is a single layer of paint not more than 10 mils in thickness with minimal drop on glass bead coverage. Waterborne paint markings that do not meet these criteria must be removed prior to the application of the multi-polymer pavement marking material.

7.1.1.4. Existing polyester, epoxy, or other type pavement marking paints must be completely removed from all road surfaces prior to the installation of multi-polymer pavement marking material.

7.1.2. Concrete (PCC) Road Surfaces:

7.1.2.1. All existing thermoplastic, polyester, epoxy, or other type pavement marking paints must be removed completely.

7.1.2.2. Surface Preparation and Curing Compound Removal- Clean, and remove curing compound as necessary to insure that the markings adhere to the pavement. Obtain approval for all surface preparation methods prior to implementing.

7.1.2.3. Pavements shall be free of grease, oil, mud, dust, dirt, grass, loose gravel and other deleterious material, prior to applying pavement markings.

7.1.2.4. Prepare the pavement surface, including removal of curing compound, a minimum of 2 " inch wider than the pavement markings to be placed, such that, an additional 1 inch of prepared area is on all sides of the pavement markings after they are applied.

7.1.2.5. Remove all curing compound and surface laitance from application area of Portland cement concrete pavements. Remove where pavement markings will be placed. Perform curing compound removal by shot blasting, sand blasting, or water blasting. Ensure that the surface is free of all residue, laitance and debris prior to applying the pavement marking.

7.1.2.6. When surface preparation and curing compound removal operations are completed, blow the pavement surface clean by compressed air to remove residue or debris.

7.1.2.7. Conduct all pavement surface preparation including curing compound removal in such a manner that the pavement or joint material is not damaged or left in a condition that will mislead or misdirect the motorist. Repair any damage caused to the pavement, or joint materials caused by surface preparation or the removal of curing compound by acceptable methods. Where pavement surface preparation results in obscuring existing pavement markings of a lane occupied by traffic, immediately remove the residue, including dust, by approved methods.

7.1.3. Primer Application—Although a primer is not required for this product on concrete pavements, it is recommended for use on concrete and aged, oxidized asphalt pavements when used in extended warranty projects. The primer shall be a two part epoxy primer recommended by the pavement marking manufacturer and shall be applied at the rate and in the manner specified. For concrete pavements the requirements spelled out in 7.1.2 shall be followed prior to the application of the primer and the pavement marking.

7.2. Material Application: Durability of road markings is directly related to the applied mil thickness of the multi-polymer pavement marking material. Therefore, in order to achieve the performance described herein, the subsequent requirements listed below must be followed:

7.2.1. Pavement Surface: The pavement surfaces where the multi-polymer pavement marking is to be applied must be clean and dry and at a minimum temperature of 50°F to 65°F and rising depending upon the application method being used (Screed extrude @ 50°F, Spray @ 55°F and Ribbon extrude @ 65°F). Even though the surface may appear dry, it is best to check for sub-surface moisture to improve bond and minimize moisture pops. Check by taping a one foot

8.4. Do not apply when dew point is within 5 degrees of the ambient temperatures.

8.5. Material at application is hot – wear personal protective equipment as described in MSDS

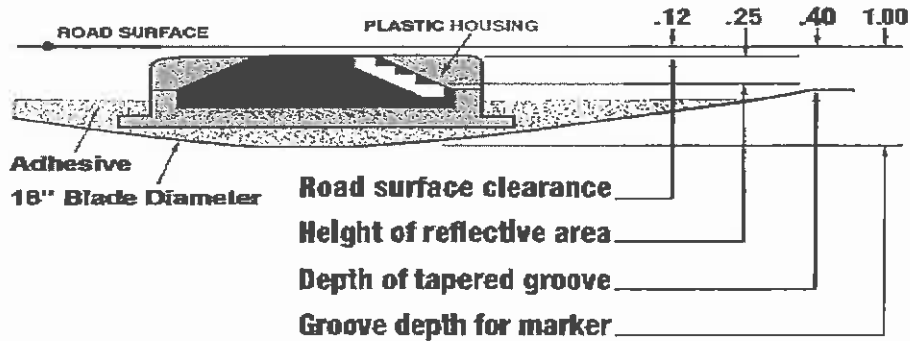
## **9. Storage Life**

The material shall maintain the requirements of this specification for a minimum period of one year. When properly stored the multi-polymer pavement marking material must melt uniformly with no evidence of skins or unmelted particles for this one year time period. Any material failing to do so shall be replaced by the manufacturer at their expense. Proper storage includes inside or covered storage to protect from moisture, and temperatures below 120oF. Outside storage for short intervals is acceptable as long as the material is kept dry.

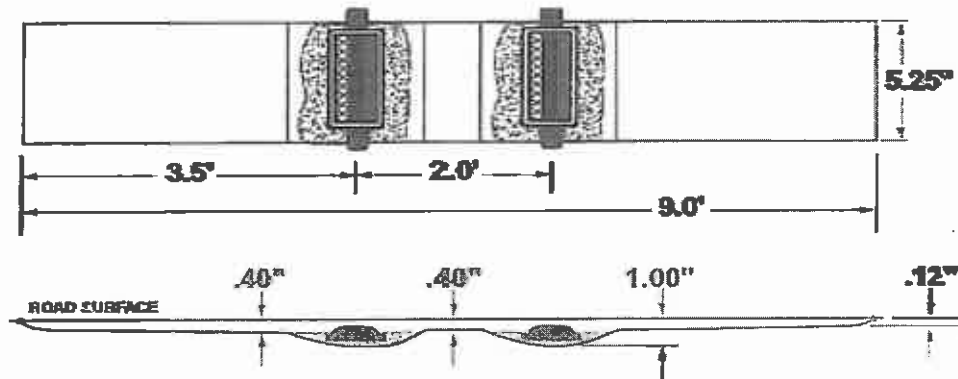
## **10. Packaging and Markings**

The multi-polymer pavement marking material shall be sold in one ton increments (2000 pounds). The material shall be packaged in suitable containers to which it will not adhere during shipment and storage. The container of the multi-polymer pavement marking material shall weigh approximately 50 lb. (23kg). Each container shall designate user information, manufacturer's name and address, batch number and date of manufacture. Each batch manufactured shall have its own separate number. The label shall carry appropriate user warnings and instructions.

construction procedures that ensure proper adhesion of the markers to the pavement surface according to the manufacturer's recommendations. Remove all excess adhesive from in front of the reflective faces. If any adhesive or foreign matter cannot be removed from the reflective faces, or if any marker fails to properly adhere to the pavement surface, remove and replace the marker at no additional cost to the LFUCG.



- b. **Location and Spacing.** Install the markers in the pattern for high reflectivity with two (2) IPMs per groove. Locate and space markers as shown in the current standard drawings (note: use Inlaid Pavement Markers wherever Type V Pavement Markers are called for). Do not install markers on bridge decks. Do not install a marker on top of a pavement joint or crack. Offset the recessed groove a minimum of 2 inches from any longitudinal pavement joint or crack and at least one inch from the painted stripe, ensuring that the finished line of markers is straight with minimal lateral deviation. Give preference to maintaining the 2-inch offset between recessed groove and joint as opposed to keeping the line of markers straight.



Place inlaid markers as much in line with existing pavement striping as possible. Place markers installed along an edge line or channelizing line so that the near edge of the plastic housing is no more than one inch from the near edge of the line. Place markers installed along a lane line between and in line with the dashes. Do not place markers over the lines except where the lines deviate visibly from their correct alignment, and then only after obtaining the Engineer's prior approval of the location.

If conflicts between recessed groove placement in relation to pavement joint and striping cannot be resolved, obtain the Engineer's approval to eliminate the marker or revise the alignment.



## **SPECIFICATIONS**

### **Raised Pavement Marker**

#### **1. MATERIALS**

- a. Markers.** Use a KYTC Type 5 iron casting with a KYTC Type 4 mono or bi-directional lens.
- b. Adhesive.** Conform to the manufacturer's recommendations.

#### **2. CONSTRUCTION** Before installing the markers, furnish the manufacturer's current recommendations for adhesives and installation procedures to the Engineer.

Use one brand and design throughout the project.

The Engineer will specify either mono-directional or bi-directional markers and the lens color.

Remove all excess adhesive from in front of the reflective faces.

If any adhesive or foreign matter cannot be removed from the reflective faces, or if any marker fails to properly adhere to the pavement surface, remove and replace the marker.

- a. KYTC Type V Markers.** Install KYTC Type V Markers in slots cut into the pavement according to the manufacturer's recommendations. Do not cut the slots until the pavement has cured sufficiently to prevent tearing or raveling. Prepare the pavement surfaces, and install the markers according to the manufacturer's recommendations and the following requirements. Remove all dirt, grease, oil, loose or unsound layers, and any other materials from the marker area which would reduce the bond of the adhesive. Maintain pavement surfaces in a clean condition until placing markers. Use materials, equipment, and construction procedures that ensure proper adhesion of the markers to the pavement surface.

- b. Location and Spacing.** Install markers as specified by the Engineer. Do not install on bridge decks.

Under no circumstances install a marker on top of a pavement joint or crack. Offset markers a minimum of 2 inches from any longitudinal pavement joint or crack and at least one inch from the painted stripe, ensuring that the finished line of markers is straight with minimal lateral deviation. Preference should be given to maintaining the 2-inch offset between marker and joint as opposed to keeping the line of markers straight. If conflicts between marker placement in relation to pavement joint and striping cannot be resolved, markers may be eliminated with the Engineer's approval.

Place KYTC Type V markers as much in line with existing pavement striping as possible. For facilities with double yellow centerlines, place the markers between the 2 lines provided the minimum 2-inch gap requirement between the marker and the longitudinal pavement joint or crack is not violated. For instances when the double yellow centerline may bound the longitudinal

## **SPECIFICATIONS**

### **Crosswalk sign-in-lane**

Contractor will supply and install In-Street Pedestrian Crosswalk signs at locations as directed by the LFUCG.

Signs shall meet MUTCD specifications.

The signs shall be 12" x 36" florescent yellow green diamond grade reflective sheeting with 10" x 24" white 3M High intensity sheeting insert. The signs shall be mounted on a white post and panel with an anti-twist reactive spring assembly that rebounds to upright when struck and is installed on an 8" x 8" Black Surface Mount Fixed Base, Suggested supplier Impact Recovery Systems 4955 Stout Drive, San Antonio TX 78219 or an approved equal.

### **Lane Delineator Post**

Contractor will supply and install 42" Lane Delineator Post at locations as directed by the LFUCG.

Post shall meet MUTCD specifications.

The post shall be 3" x 42" round top with two (2) 3" bands of retro-reflective sheeting. The post shall be equipped with an anti-twist reactive spring assembly that rebounds to upright when struck and is installed on an 8" x 8" Black Surface Mount Fixed Base, Suggested supplier Impact Recovery Systems 4955 Stout Drive, San Antonio TX 78219 or an approved equal.

### **Lane Delineator City Post**

Contractor will supply and install 28" or 36" Lane Delineator City Post at locations as directed by the LFUCG.

Post shall meet MUTCD specifications.

The post shall be 3.25" x 28" or 36" round top with two (2) 3" bands of retro-reflective sheeting. The post assembly shall include post, 4" anchor cup, and anchor cup plug. Suggested supplier: Pexco, Davidson Traffic Control Products 3110 70<sup>th</sup> Ave. E, Tacoma, WA 98424 ([www.davidsontraffic.com](http://www.davidsontraffic.com)) or an approved equal.

Item No.	Item (Include unit bid price written in words)	Unit	Qty.	Unit Price	Item Total
1	Paint 4' Letter/Number Twenty Dollars zero Cents	EA	200	20.00	\$4,000.00
2	Paint 8' Letter/Number Thirty Dollars zero Cents	EA	200	30.00	\$6,000.00
3	Paint Railroad "R" 6' 6" Thirty Dollars zero Cents	EA	5	30.00	\$150.00
4	Paint Permanent 16" for Railroad Five Dollars zero Cents	LF	50	5.00	\$250.00
5	Paint Stright Arrow Fifty Dollars zero Cents	EA	25	50.00	\$1,250.00
6	Paint Curved Arrow Fifty Dollars zero Cents	EA	25	50.00	\$1,250.00
7	Paint Combination Arrow Seventy Dollars zero Cents	EA	20	70.00	\$1,400.00
8	Paint Lane Drop Symbol Seventy-five Dollars zero Cents	EA	10	75.00	\$750.00
9	Paint Yield Symbol (24" Base, 36" Height) Five Dollars zero Cents	EA	10	5.00	\$50.00
10	Paint Handi-Cap Symbol Fifty Dollars zero Cents	EA	10	50.00	\$500.00
11	Paint 3-Way Combination Arrow One-hundred Dollars zero Cents	EA	10	100.00	\$1,000.00
12	Paint Curve & U-Turn Combination Arrow One-hundred Dollars zero Cents	EA	5	100.00	\$500.00
13	Paint U-Turn Arrow Seventy-five Dollars zero Cents	EA	5	75.00	\$375.00

Item No.	Item (Include unit bid price written in words)	Unit	Qty.	Unit Price	Item Total
14	Arrow - Fish Hook One-hundred fifty _____ Dollars zero _____ Cents	EA	5	150.00	\$750.00
15	Paint Elongated Curve Arrow (12'x 3') Eighty _____ Dollars zero _____ Cents	EA	5	80.00	\$400.00
16	Paint Bike Symbol(Bicycle Rider - Helmeted-3' 4" x 6') Seventy-five _____ Dollars zero _____ Cents	EA	15	75.00	\$1,125.00
17	Paint Shared Lane Marking - Bike Sharrow Seventy-five _____ Dollars zero _____ Cents	EA	15	75.00	\$1,125.00
18	Paint Area Shading - White Two _____ Dollars zero _____ Cents	SQFT	200	2.00	\$400.00
19	Paint Area Shading - Yellow Two _____ Dollars zero _____ Cents	SQFT	200	2.00	\$400.00
20	Paint Permanent Pavement Striping - 4 inch - White zero _____ Dollars thirty-five _____ Cents	LF	10000	0.35	\$3,500.00
21	Paint Permanent Pavement Striping - 4 inch - Yellow zero _____ Dollars thirty-five _____ Cents	LF	5000	0.35	\$1,750.00
22	Paint Permanent Pavement Striping - 6 inch - White zero _____ Dollars forty _____ Cents	LF	2500	0.40	\$1,000.00
23	Paint Permanent Pavement Striping - 6 inch - Yellow zero _____ Dollars forty _____ Cents	LF	2500	0.40	\$1,000.00
24	Remove Permanent Pavement Striping One _____ Dollar zero _____ Cents	SQFT	500	1.00	\$500.00

Item No.	Item (Include unit bid price written in words)	Unit	Qty.	Unit Price	Item Total
25	Thermo 4' Letter/Number Seventy-five _____ Dollars zero _____ Cents	EA	200	75.00	\$15,000.00
26	Thermo 8' Letter/Number One-hundred _____ Dollars zero _____ Cents	EA	200	100.00	\$20,000.00
27	Thermo Railroad R Five _____ Dollars fifty _____ Cents	EA	5	5.50	\$27.50
28	Thermo Stright Arrow Seventy _____ Dollars zero _____ Cents	EA	25	70.00	\$1,750.00
29	Thermo Curved Arrow Eighty _____ Dollars zero _____ Cents	EA	25	80.00	\$2,000.00
30	Thermo Combination Arrow Ninety-five _____ Dollars zero _____ Cents	EA	20	95.00	\$1,900.00
31	Thermo Lane Drop Symbol Two-hundred ninety _____ Dollars zero _____ Cents	EA	10	290.00	\$2,900.00
32	Thermo Yield Symbol (24" Base, 36" Height) Fifty _____ Dollars zero _____ Cents	EA	10	50.00	\$500.00
33	Thermo Handi-Cap Symbol One-hundred seventy-five _____ Dollars zero _____ Cents	EA	10	175.00	\$1,750.00
34	Thermo 3-Way Combination Arrow Two-hundred fifteen _____ Dollars zero _____ Cents	EA	10	215.00	\$2,150.00
35	Thermo Curve & U-Turn Combination Arrow Two-hundred thirty-five _____ Dollars zero _____ Cents	EA	5	235.00	\$1,175.00
36	Thermo U-Turn Arrow One-hundred sixty-five _____ Dollars zero _____ Cents	EA	5	165.00	\$825.00
37	Thermo - Fish Hook Four-hundred _____ Dollars zero _____ Cents	EA	5	400.00	\$2,000.00

Item No.	Item (Include unit bid price written in words)	Unit	Qty.	Unit Price	Item Total
38	Thermo Elongated Curve Arrow (12'x 3') One-hundred _____ Dollars zero _____ Cents	EA	5	100.00	\$500.00
39	Thermo Bike Symbol(Bicycle Rider - Helmeted-3' 4" x 6') Two-hundred sixty-five _____ Dollars zero _____ Cents	EA	15	265.00	\$3,975.00
40	Thermo Shared Lane Marking - Bike Sharrow Three-hundred twenty _____ Dollars zero _____ Cents	EA	15	320.00	\$4,800.00
41	Thermo 4' Width zero _____ Dollars eighty _____ Cents	LF	200	0.80	\$160.00
42	Thermo 4" Width Dashed Six _____ Dollars fifty _____ Cents	LF	200	6.50	\$1,300.00
43	Thermo 6" Width Three _____ Dollars fifty _____ Cents	LF	200	3.50	\$700.00
44	Thermo 6" Width Dashed Six _____ Dollars fifty _____ Cents	LF	200	6.50	\$1,300.00
45	Thermo 8" Width Dashed Six _____ Dollars fifty _____ Cents	LF	150	6.50	\$975.00
46	Thermo 12" Width Five _____ Dollars twenty-five _____ Cents	LF	200	5.25	\$1,050.00
47	Thermo 16" Width Five _____ Dollars fifty _____ Cents	LF	200	5.50	\$1,100.00
48	Thermo 24" Width Six _____ Dollars zero _____ Cents	LF	200	6.00	\$1,200.00
49	Thermo Area shading - Yellow Five _____ Dollars twenty-five _____ Cents	SQFT	150	5.25	\$787.50
50	Thermo Area Shading - White Five _____ Dollars twenty-five _____ Cents	SQFT	150	5.25	\$787.50

Item No.	Item (Include unit bid price written in words)	Unit	Qty.	Unit Price	Item Total
51	Thermo Area Shading - Green _____ Ten _____ Dollars _____ zero _____ Cents	SQFT	150	10.00	\$1,500.00
52	Thermo Bike Sharrow PANEL - Green - 10' Height _____ Eight-hundred twenty _____ Dollars _____ zero _____ Cents	EA	10	820.00	\$8,200.00
53	Thermo Bike Rider Panel - Green - 4' x 20' _____ One-thousand sixty-five _____ Dollars _____ zero _____ Cents	EA	10	1,065.00	\$10,650.00
54	Thermo 4' Letter/Number for use on PCCP _____ One-hundred fifty _____ Dollars _____ zero _____ Cents	EA	50	150.00	\$7,500.00
55	Thermo 8' Letter/Number fo use on PCCP _____ Two-hundred _____ Dollars _____ zero _____ Cents	EA	50	200.00	\$10,000.00
56	Thermo Railroad "R" 6' 6"for use on PCCP _____ Eighteen _____ Dollars _____ zero _____ Cents	EA	6	18.00	\$108.00
57	Thermo Stright Arrow for use on PCCP _____ Two-hundred fifteen _____ Dollars _____ zero _____ Cents	EA	10	215.00	\$2,150.00
58	Thermo Curved Arrow for use on PCCP _____ Two-hundred fifty-five _____ Dollars _____ zero _____ Cents	EA	10	255.00	\$2,550.00
59	Thermo Combination Arrow for use on PCCP _____ Four-hundred forty _____ Dollars _____ zero _____ Cents	EA	10	440.00	\$4,400.00
60	Thermo Lane Drop Symbol for use on PCCP _____ Six-hundred seventy-five _____ Dollars _____ zero _____ Cents	EA	5	675.00	\$3,375.00
61	Thermo Yield Symbol (24" Base, 36" Height) for use on PCCP _____ Fifty _____ Dollars _____ zero _____ Cents	EA	5	50.00	\$250.00
62	Thermo Handi-Cap Symbol for use on PCCP _____ Three-hundred _____ Dollars _____ zero _____ Cents	EA	5	300.00	\$1,500.00

Item No.	Item (Include unit bid price written in words)	Unit	Qty.	Unit Price	Item Total
63	Thermo 3-Way Combination Arrow for use on PCCP _____ Six-hundred _____ Dollars _____ zero _____ Cents	EA	5	600.00	\$3,000.00
64	Thermo Curve & U-Turn Combination Arrow for use on PCCP _____ Seven-hundred _____ Dollars _____ zero _____ Cents	EA	5	700.00	\$3,500.00
65	Thermo U-Turn Arrow for use on PCCP _____ Five-hundred thirty _____ Dollars _____ zero _____ Cents	EA	5	530.00	\$2,650.00
66	Thermo - Fish Hook for use on PCCP _____ Six-hundred _____ Dollars _____ zero _____ Cents	EA	5	600.00	\$3,000.00
67	Thermo Elongated Curve Arrow (12'x 3') for use on PCCP _____ Three-hundred _____ Dollars _____ zero _____ Cents	EA	3	300.00	\$900.00
68	Thermo Bike Symbol(Bicycle Rider - Helmeted-3' 4" x 6') for use on PCCP _____ Three-hundred forty-five _____ Dollars _____ zero _____ Cents	EA	5	345.00	\$1,725.00
69	Thermo Shared Lane Marking - Bike Sharrow for use on PCCP _____ Four-hundred _____ Dollars _____ zero _____ Cents	EA	5	400.00	\$2,000.00
70	Thermo 4' Width for use on PCCP _____ Eight _____ Dollars _____ zero _____ Cents	LF	300	8.00	\$2,400.00
71	Thermo 4" Width Dashed for use on PCCP _____ Twelve _____ Dollars _____ zero _____ Cents	LF	300	12.00	\$3,600.00
72	Thermo 6" Width for use on PCCP _____ Ten _____ Dollars _____ zero _____ Cents	LF	100	10.00	\$1,000.00
73	Thermo 6" Width Dashed for use on PCCP _____ Twelve _____ Dollars _____ zero _____ Cents	LF	100	12.00	\$1,200.00



Item No.	Item (Include unit bid price written in words)	Unit	Qty.	Unit Price	Item Total
74	Thermo 8" Width Dashed for use on PCCP Twelve Dollars zero Cents	LF	100	12.00	\$1,200.00
75	Thermo 12" Width for use on PCCP Fourteen Dollars zero Cents	LF	100	14.00	\$1,400.00
76	Thermo 16" Width for use on PCCP Eighteen Dollars zero Cents	LF	100	18.00	\$1,800.00
77	Thermo 24" Width for use on PCCP Nineteen Dollars fifty Cents	LF	100	19.50	\$1,950.00
78	Thermo Area shading - Yellow for use on PCCP Fourteen Dollars zero Cents	SQFT	100	14.00	\$1,400.00
79	Thermo Area Shading - White for use on PCCP Fourteen Dollars zero Cents	SQFT	100	14.00	\$1,400.00
80	Thermo Area Shading - Green for use on PCCP Fifteen Dollars zero Cents	SQFT	100	15.00	\$1,500.00
81	Remove Thermoplastic Five Dollars zero Cents	SQFT	1000	5.00	\$5,000.00
82	HPS-8 Permanent Pavement Striping - 4 inch - White One Dollars fifty Cents	LF	1500	1.50	\$2,250.00
83	HPS-8 Permanent Pavement Striping - 4 inch - Imbedded - White Two Dollars fifty Cents	LF	1500	2.50	\$3,750.00
84	HPS-8 Permanent Pavement Striping - 4 inch - Yellow One Dollars fifty Cents	LF	750	1.50	\$1,125.00
85	HPS-8 Permanent Pavement Striping - 4 inch - Imbedded - Yellow Two Dollars fifty Cents	LF	750	2.50	\$1,875.00

Item No.	Item (Include unit bid price written in words)	Unit	Qty.	Unit Price	Item Total
86	HPS-8 Permanent Pavement Striping - 6 inch - White Two _____ Dollars twenty-five _____ Cents	LF	750	2.25	\$1,687.50
87	HPS-8 Permanent Pavement Striping - 6 inch - Imbedded - White Three _____ Dollars twenty-five _____ Cents	LF	750	3.25	\$2,437.50
88	HPS-8 Permanent Pavement Striping - 6 inch - Yellow Two _____ Dollars twenty-five _____ Cents	LF	750	2.25	\$1,687.50
89	HPS-8 Permanent Pavement Striping - 6 inch - Imbedded - Yellow Three _____ Dollars twenty-five _____ Cents	LF	750	3.25	\$2,437.50
90	HPS-8 Remove Integrated Multipolymer One _____ Dollars seventy-five _____ Cents	LF	750	1.75	\$1,312.50
91	Spray Thermo Permanent Pavement Striping - 4 inch - White zero _____ Dollars fifty _____ Cents	LF	4000	0.50	\$2,000.00
92	Spray Thermo Permanent Pavement Striping - 4 inch - Yellow zero _____ Dollars fifty _____ Cents	LF	1000	0.50	\$500.00
93	Spray Thermo Permanent Pavement Striping - 6 inch - White zero _____ Dollars sixty _____ Cents	LF	1000	0.60	\$600.00
94	Spray Thermo Permanent Pavement Striping - 6 inch - Yellow zero _____ Dollars sixty _____ Cents	LF	500	0.60	\$300.00
95	Remove Spray Thermo zero _____ Dollars seventy-five _____ Cents	LF	500	0.75	\$375.00
96	Crosswalk sign-in-lane Three-hundred fifty _____ Dollars zero _____ Cents	EA	15	350.00	\$5,250.00

Item No.	Item (Include unit bid price written in words)	Unit	Qty.	Unit Price	Item Total
97	Lane delineator post Fifty-five _____ Dollars zero _____ Cents	EA	100	55.00	\$5,500.00
98	Pavement Marker - inlaid Thirty-five _____ Dollars zero _____ Cents	EA	500	35.00	\$17,500.00
99	Pavement Marker-surface KYTC Type 5 Twenty-five _____ Dollars zero _____ Cents	EA	500	25.00	\$12,500.00
100	Rumble Strips Five _____ Dollars zero _____ Cents	LF	500	5.00	\$2,500.00
101	Rumble strips-transverse Five _____ Dollars zero _____ Cents	LF	500	5.00	\$2,500.00
102	Delineator - City Post 28" One-hundred fifty _____ Dollars zero _____ Cents	EA	250	150.00	\$37,500.00
103	Delineator - City Post 36" One-hundred sevety-five _____ Dollars zero _____ Cents	EA	150	175.00	26,250.00
104	Delineator - Qwick Kurb One-hundred fifteen _____ Dollars zero _____ Cents	LF	800	115.00	\$92,000.00
<b>Bid Total</b>					<b>\$416,683.00</b>