PARKING LOT RESTORATION SPECIFICATIONS

<u>The Contractor shall provide all required labor, material, maintenance of traffic (MOT), local and state inspections to provide a 100% completed project.</u>

1. PURPOSE

The purpose of this solicitation is to select a Contractor to make repairs, seal coat, install striping, and install wheel stops, to the parking lot listed in this RFQ. **Note:** The Contractor shall be responsible for blocking/barricading the parking lot prior to, during, and after all work. Blocking/barricading shall remain in place until all areas are fully cured and able to receive vehicular traffic. Work shall be scheduled to ensure that the parking lot is reopened and ready for use prior to the next regular business day.

2. SUBMITTALS TO BE PROVIDED PRIOR TO TIME OF BID AWARD

The Contractor will be contacted prior to bid award and shall submit electronically the manufacturer's specification sheets and suggested installation procedures for the products that the Contractor intends to use. Products to include, but are not limited to, crack seal, blotting material, herbicide, and asphalt emulsion seal coat. The Contractor shall also submit a copy of their warranty documenting at minimum the items and details listed in Section 20.

3. REFERENCES

All reference standards and specifications shall be the current issue or latest revision on the notice to proceed issue date.

- ASTM D5329: Standard Test Method for Sealants and Fillers, Hot Applied, For Joints and Cracks in Asphaltic and Portland Cement Concrete Pavements.
- ASTM D3111: Standard Test Method for Flexibility Determination of Hot-Melt Adhesives by Mandrel Bend Test Method.
- ASTM D113: Standard Test Method for Ductility of Bituminous Materials.
- ASTM D 2669: Standard Test Method for Apparent Viscosity of Petroleum Waxes Compounded with Additives (Hot Melts).
- ASTM D4: Standard Test Method for Bitumen Content.
- ASTM D6690: Standard Specification for Joint and Crack Sealants, Hot Applied, for Concrete and Asphalt Pavements.
- All pavements marking work shall be performed in accordance with the requirements of the latest edition of the Florida Department of Transportation standards including but not limited to "Standard Specifications for Road and Bridge Construction", "Design Standards" and the latest edition of the "Manual of Uniform Traffic Control Devices."

4. DESCRIPTION OF WORK

<u>VEGETATION REMOVAL</u>

Vegetation growing through the surface of driveways or parking lots that are being prepared for crack sealing &/or seal coating shall be removed and sterilized by the use of a propane torch unit eliminating all vegetation, dirt, moisture and seeds. At the option of the vendor, a herbicide may be applied prior to the surface treatment application. This shall be applied far enough ahead of the surface treatment application to sufficiently give the vegetation enough time to properly brown so that when completing the final sweeping before surface treatment no vegetation is left. The method of removal is subject to the approval of the County's Project Manager.

If a chemical herbicide is used, it shall be applied according to the manufacturer's specifications. The vegetation shall be totally browned before the crack seal and the seal coating is installed. The person applying the herbicide shall have, or be under the supervision of someone that has, the proper State of Florida Pesticide Applicators License. A copy of this license shall be supplied to the County's Project Manager upon request. A log of all herbicides shall be kept and a copy shall be supplied to the County's Project Manager. This log shall contain the following information:

a. The type of herbicide
b. The manufacture of the product
c. The mixture rate used
d. The application rate used
e. The application location
f. The application date and time
g. The weather conditions at the time of the application

POTHOLE REPAIR

All potholes shall be repaired before the crack seal is applied. The Contractor shall saw cut the existing asphalt a minimum of 6" past the pothole and associated cracking in all directions. All saw cuts shall be performed to leave only square or rectangular shaped repairs. Any jagged or misshaped repairs shall be rejected and replaced by the Contractor at no additional cost to the County.

The vendor shall remove the asphalt and any loose base material. The area shall be filled with Type S III hot mix asphalt. Once the asphalt has been properly compacted, the final result of the installation shall provide even transitions to the existing area and have joints that are not excessive and a good quality ride is provided. No more than one-quarter (¼) inch difference in height shall be allowed for the transition between the patch area and the adjacent area. Cold patch asphalt shall be allowed with approval from County's Project Manager.

CRACK SEALING

1. **Materials**

   a. The vendor shall use Crafco PolyFlex Type 3, product #34521 or equivalent crack sealer. Crack sealer shall be an asphalt-based product designed to be used to fill cracks and joints in asphalt. The product shall have the ability to seal out water.

   b. Crafco Detack blotting material shall be used as, cement dust, or equivalent equal.

2. **Equipment**

   a. Equipment used to install the sealant shall be as specified by the manufacturer and shall have the ability to maintain the proper temperature of the sealant throughout the sealing process. This heating unit shall be a jacketed double boiler melter and shall be equipped with an agitation system. The applicator hose shall have a recirculation system or be equipped with a temperature controlled heating system. Pouring pots or gravity-fed sealant applicators shall not be used for sealing cracks and joints.

   b. The compressor shall have a capacity of 75 C.F.M., or more, to ensure an adequate supply of air to effectively clean the cracks and joints. Any pneumatic tool lubricator must be bypassed and a water separator/filter must be installed at the hose inlet connection to keep water and oil out of the lines.

   c. A hot compressed air lance can be used to clean, dry, and pre-heat cracks and joints prior to applying sealant. The air lance shall consist of a compressor propane system providing a high temperature, high velocity blast of air.

3. Work Methods

a. All cracks or joints that are greater than one-quarter (1/4) inch shall be properly prepared and sealed using these crack sealing specifications and/or the manufacturer's specifications.

b. No sealant shall be installed unless the ambient and pavement temperature are forty (40) degrees and rising. There shall be no fog and no chance of rain. If rain or fog delays the sealing operation, the cracks and joints shall be allowed to dry and shall have additional cleaning as required to remove any debris that may have been washed into the cracks or joints. The cracks and joints shall be completely dry before the seal treatment can resume. The vendor may use the Hot Compressed Air Lance method of cleaning and drying the cracks and joints with the approval of the County's Project Manager. The vendor shall ensure the existing asphaltic concrete surface is not overheated if this method is used.

c. All cracks and joints shall be cleaned free of all deleterious materials, including any dust, old sealant, and organic material by using high-pressure air. All cracks and joints are to be clean and sufficiently dry before any crack sealing material is applied. All old material and other debris removed from the cracks and joints shall be removed from the pavement surface immediately. Any cracks and joints that are not sealed the same day they are prepared shall be blown out with high-pressure air before the sealing operation continues. The vendor shall limit the amount of dust created from this operation.

d. The temperature of the sealant shall be heated/maintained using the manufacturer's recommended procedures. The sealant compound shall be melted slowly with constant agitation until it is in a lump-free, free-flowing state, and within the temperature range recommended for application by the manufacturer. Care shall be taken to insure that the sealant is not heated above the recommended maximum temperature or for longer than the recommended time. The County's Project Manager shall have the right to reject the product if it is determined that this has occurred.

e. The sealant shall be applied in the crack or joint uniformly from the bottom to the top and shall be filled without formation of entrapped air or voids. The level of the sealant shall be even with the surface of the asphaltic concrete. At no time shall the sealant be recessed more than one-eighth (1/8) inch below or raised one-sixteenth (1/16) inch above the adjacent surface. A squeegee may be used to remove excess sealant from the pavement surface when a crack or joint is overfilled. At no time shall the sealant overburden be more than one (1) inch from the crack or joint edges.

f. A blotting material shall be broadcast or sprayed over the fresh sealant to prevent it from being picked up and tracked. Any excessive or spilled sealer shall be removed by the vendor using approved methods.

g. The vendor shall be responsible for any claims of crack seal tracking. If there is a claim, the vendor shall be responsible for applying more blotting material as necessary and addressing the tracked material by either removing or repairing the item that was affected.

5. Curing

a. Crack sealing shall have a minimum of 30 days or Manufacturer's recommended curing time before asphalt emulsion seal coat is applied.

6. Deficiencies and Repairs

a. Where the sealant settles in the crack or joint lower than one-eighth (1/8) inch below the adjacent asphaltic concrete surface, the surface of the sealant shall be cleaned and more sealant shall be installed to meet the specifications. The vendor shall be responsible to

remove any excess material that is greater than one-sixteenth (1/16) inch above the adjacent asphaltic concrete.

b. The sealant shall be removed at the County's Project Manager's discretion, and resealed if any of the following occur:

    1. The sealant contains imbedded foreign material other than dusting material.
    2. The sealant contains entrapped air bubbles.
    3. The sealant has de-bonded or pulled away from the crack or joint.
    4. The sealant has been excessively heated.

ASPHALT EMULSION SEAL COATING

a. Prior to application of coatings protect adjacent curbs, walks, fences, buildings and other items in the work area.

b. Prior to seal coating asphalt repairs and crack sealing shall have sufficient curing time as required by the manufacturer's specifications. The surface shall also be thoroughly cleaned and free from all loose material, dirt, and debris using brooms, air blowers and/or power sweepers. Surface must be dry before coatings are installed.

c. Vegetation removal, crack sealing, and asphalt repair repairs shall be completed as described above.

d. Scrub and clean grease, oil, and gasoline spots with soap and water and prime according to seal coat manufacturer's specifications.

e. Apply two coats of asphalt emulsion seal coat according to manufacturer's specifications.

f. Application of the asphalt emulsion seal coat shall be done by using rubber faced squeegees, brooms, distributor bar /wand, or combinations of these or other techniques as approved by the County's Project Manager.

g. Care shall be exercised to leave no unsightly appearance from handwork and the surface shall appear uniform with the machine surface. The same type of finish as applied by the spreader box shall be required

h. Sealed areas shall be barricaded to traffic and may not be opened to traffic during the curing period as recommended by seal coat manufacturer's installation instructions.

STRIPING

1. Paint Striping:

Paint striping shall be installed to match existing except that accessible parking spaces shall be installed to meet most current ADA requirements. Van accessible spot(s) shall be installed per ADA requirements. All work shall be performed in accordance with the requirements of latest edition, at the time the work request is issued to the Contractor, of the following manuals and publications, including, but not limited to: Section 710 from the Florida Department of Transportation "2013 Standard Specifications for Road and Bridge Construction" and any other sections applicable, Florida Department of Transportation "Design Standards" and the Federal Highway Administration "Manual of Uniform Traffic Control Devices.

2. **Curb and Wheel Stop Painting**

Wheel stops shall be painted to match existing and in accessible spaces shall be painted blue. Curbs shall be painted to match existing.

3. **Final Inspection**

The Contractor shall self-inspect all markings using the May 27, 2005 Florida Method of Test for Traffic Striping Retroreflectivity Designation: FM 5-579 or the latest editions now in force or hereafter adopted, to test and certify width, thickness, color and retroreflectivity. The Contractor shall submit the results to the County at the completion of the project. The County reserves the right to verify all test results. The County's test shall be final and binding.

Upon written notice from the Contractor that the work is complete, the County will review the submitted test results and if the County deems necessary, test the completed work using the May 27, 2005 Florida Method of Test for Traffic Striping Retroreflectivity Designation: FM 5-579 or the latest editions now in force or hereafter adopted, to test and certify retroreflectivity, width, thickness and color. The County will notify the Contractor of any deficiencies. The Contractor will correct all deficiencies before final acceptance and payment is made.

An eighty ($80) dollar inspection fee shall be assessed to the Contractor if an area tested by the County does not comply with the County specified standard, which fee shall be assessed upon has to be inspected a third time, an eighty ($80) dollar inspection fee shall be assessed to the contractor for the third inspection and another eighty ($80) dollar inspection fee for each subsequent inspection for that same area. The fee is assessed to offset the additional costs associated with County labor and vehicle usage required for unnecessary inspections. The fee(s) shall be deducted from the final invoice for that release order.

CONCRETE WHEEL STOPS

Replace damaged or broken concrete wheel stops to match existing. Wheel stops shall be constructed from minimum 3500 psi concrete reinforced with a #4 steel rebar and installed per manufacturers specifications.

5. LABOR, FUEL, EQUIPMENT, & MATERIALS SHALL BE SUPPLIED BY THE CONTRACTOR

Unless otherwise stated in this solicitation the Contractor shall furnish all labor, fuel, equipment, and materials necessary for satisfactory contract performance. When not specifically identified in the technical specifications, such materials and equipment shall be of a suitable type and grade for the purpose. All material, workmanship, and equipment shall be subject to the inspection and approval of the County's Project Manager.

6. BUSINESS HOURS OF OPERATION

All work is to be performed after regular County working hours.

7. WARRANTY

All work performed under this contract shall be warranted for a minimum period of two (2) years for the materials and labor from the completion of the project and acceptance by the County.

The Contractor shall provide a written warranty that includes, but is not limited to, statements that warrant against the following:

1. the sealer losing its protection value or fading

2. the coating flaking, chipping, or suffering a loss of adhesion
3. abnormal wear

In the event that any of the listed deficiencies occur within the warranty period the Contractor will recoat with the specified material the affected area at no cost to the County.

It is the Contractor's responsibility to supply all material, labor, equipment and expertise to perform warranty work at no additional cost to the County. The Contractor shall provide the County with certification that all materials, mixtures, and workmanship meet or exceed the requirements specified herein. The Contractor shall complete all warranty repairs and permanent replacement as directed by the County, maintaining traffic control as specified herein. The Contractor shall repair said areas within thirty (30) calendar days from notification by the County.

In the event of any failure of the repaired area, in accordance with the performance criteria herein, the County and the Contractor will determine if the failure is due to the materials or workmanship being at fault. If the failure is due to the materials or workmanship being at fault, the Contractor shall repair the failed areas at no cost to the County.