



# Request for Quote

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS  
 ONE CAPITOL HILL  
 PROVIDENCE RI 02908

BUYER: Cowell Jr, John A  
 PHONE #: 401-574-8114

CREATION DATE : 16-MAR-12  
 BID NUMBER: 7449564  
 TITLE: VALIDATION STICKERS/FORMS - DOC  
 BLANKET START : 01-SEP-12  
 BLANKET END : 30-JUN-13  
 BID CLOSING DATE AND TIME: 09-APR-2012 11:15:00

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 DOA CONTROLLER  
 ONE CAPITOL HILL, 4TH FLOOR  
 SMITH ST  
 PROVIDENCE, RI 02908  
 US

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 DOC CORRECTIONAL INDUSTRIES  
 33 POWER ROAD  
 CRANSTON, RI 02920  
 US

Requisition Number: 1261299

Line	Description	Quantity	Unit	Unit Price	Total
1	LASER VALIDATION SECURITY STICKERS/FORMS WITH ENSURE IMAGE SERIES LV9000RI, OPTION B BLANKET REQUIREMENTS: 9/1/12-6/30/13, WITH OPTION TO RENEW FOR (4) ADDITIONAL YEARS.  NOTE TO SUPPLIER: UP TO 1 200 000.00 STICKERS/FORMS WILL BE PURCHASED ANNUALLY	6 000,000 0 0	Each		

Delivery: \_\_\_\_\_

Terms of Payment: \_\_\_\_\_

It is the Vendor's responsibility to check and download any and all addenda from the RIVIP. This offer may not be considered unless a signed RIVIP generated Bidder Certification Cover Form is attached and the Unit Price column is completed. The signed Certification Cover Form must be attached to the front of the offer.

## **Technical Specifications for centralized thermal transfer validation production system and forms with stickers**

The vendor will provide the following items:

- o 1 PC, monitor and battery backup
- o 3 thermal transfer printers
- o Thermal-Transfer ribbons (to print on both the forms and the stickers)
- o 1 laser printer & toner cartridges for reports
- o Blank fan-fold validation forms with reflective stickers (See Appendix A for form images.)
  - 600,000 2-sticker forms
  - 200,000 1-sticker forms
- o Software
- o All necessary cabling
- o Provision for routine maintenance services on the printers
- o All items shall be compatible provided by vendor

Correctional Industries will provide the following items:

- o Site preparation and utilities
- o Manual load balancing between the printers

### **A. Thermal Transfer Printers**

The thermal transfer printers will print 44 forms (cab cards) per minute

### **B. Software**

Vendor-provided software will meet the following requirements for operator management:

- Operator specified expiration month and year for print job
- Operator specified number of forms per print job.
- Operator directs print jobs to printer A, B or C.
- Operator prints quantity reports on a printer or in PDF format.
- Operator has the ability to edit the form design and sticker data.

### **Section 3 – Installation, Training, and Technical Support**

The vendor will provide resources for the initial installation of the PC and printers.

The vendor will train the designated Correctional Industries personnel on the use of the system and will provide the appropriate documentation for the system. The training will consist of:

- Operation of the printers
- Operation of the software
- Troubleshooting
- How to get help and technical support

The vendor will provide technical service for the entire system, including toll-free telephone support Monday through Friday during regular business hours. On-site preventive and emergency maintenance (after telephone support is unsuccessful) will be provided at no additional cost to the State. If required, on-site technical service will occur within three business days. Replacement parts must be readily available.

### **Section 4 - Purchasing of consumables**

Items purchased will be priced as follows:

- A. Option 1 - forms and printer ribbons combined as one price
  - a. price for form with two decals and price for form with one decal with ribbon included
- B. Option 2 - forms and printer ribbons priced separately
  - a. price for form with two decals and price for form with one decal
  - b. price for ribbons

## **Appendix A – Drawings: Registration Forms with Stickers**

### **A. Blank Forms**

### **B. Attachment 1B: Printed forms**



STATE OF RHODE ISLAND

DIVISION OF MOTOR VEHICLES

DO NOT MOISTEN STICKERS!  
APPLICATION INSTRUCTIONS

1. Thoroughly clean the license plate. Remove wax, tar and other foreign matter.
2. To remove individual stickers from the paper form, bend the sticker form backwards at the corner of the sticker and then lift the sticker from the form.
3. Position sticker directly on clean and dry plate in the bottom right corner of the plate.
4. Rub the sticker with your finger to apply pressure to the sticker so it will adhere to the plate.

DRIVE SAFELY AND SOBER! BUCKLE UP!



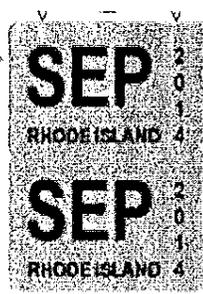
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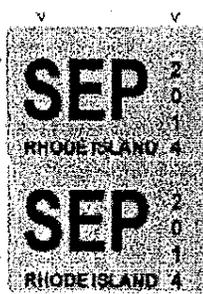
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## **Appendix B – Retroreflective Sheeting Specifications**

### **A. Section I - Scope and Classification**

This specification shall cover the requirements for registration receipt forms with thermal transfer printable retroreflective stickers, printers as well as other performance testing and support services. These preprinted forms with tipped retroreflective stickers containing customer verifiable directional security marks may be used as instruments of vehicle registration and other types of validation. The retroreflective stickers shall be manufactured from a special enclosed lens sheeting with an integral, directional and counterfeit-proof security mark.

#### **Description:**

A registration receipt form shall consist of a thermal transfer printable surface. This form will also contain a thermal transfer receptive validation sticker that may be detached from the form after printing for placement on a license plate of a vehicle

The retroreflective (hereafter referred to as “reflective”) stickers shall consist of lens elements enclosed within a transparent resin and shall have a single adhesive layer. This adhesive layer assures maximum adhesion to the license plate

The stickers shall display protective custom, directional security marks that are visible only at a specific viewing position and are extremely difficult to counterfeit. These security marks shall facilitate visual verification of authenticity.

The reflective stickers shall have a smooth, weather resistant surface and be receptive to a Validation Printing Matched Component Printing System. The print shall be solvent resistant and pass requirements outlined in Appendix II. The surface shall enable high quality imaging when processed according to the manufacturer’s recommendations.

The printers shall be used to print “on demand” documents and decals. The printer must use ribbons that have been tested and documented to be solvent resistant for use in printing on validation stickers

#### **Pre-qualification:**

Prospective contractors who desire to prequalify stickers governed by this specification should submit technical data exhibiting characteristics and processing parameters of the stickers, adhesives and equipment systems for the production of completed validation stickers. If a review of the technical data indicates that the proposed materials and equipment comply with the requirements of this specification, the prospective bidder or supplier shall be so notified.

The successful Bidders shall be required to provide technical data and performance history to show that the materials, equipment and services proposed can be successfully used for the license plate validation sticker issue of a sovereign state. At a minimum, the successful Bidders must provide samples and performance data on imaged stickers after 2000 hours, of unprotected exposure as stated in ASTM G155 Cycle 1. The performance data must have been obtained using samples made from the same sheeting and ribbon as being proposed by the Bidder

Finished stickers, including colors and printing, shall remain durable and shall provide a compatible surface for direct application of additional annual validation stickers of the same material

**B. Section II – Requirements**

**Form Design:**

The information required on the regular issue form is shown in Exhibit A. Information on the form will be printed in black. The Contractor will use a blank form and print all the fixed information at the same time the forms and stickers are printed with the variable information.

The State reserves the right to amend the fixed or variable information to be printed on the form at any time prior to award of the contract. Changes of fixed and variable information will not be made once layout is approved for first year of contract. Changes can be made prior to ordering of second year consumables. If the State elects to change fixed or variable information during contract, the State is able to make changes independent of the Contractor.

**(1) Legibility and Durability of Registration Form Printing**

The font size on the vehicle owner's registration card must provide readily legible information for law enforcement personnel. The printed information on the registration card must remain legible for a minimum of two years of normal service use such as carrying the folded card in a wallet or billfold or in the vehicle glove compartment.

**(2) Mailing Requirements**

To be determined by State and successful Contractor.

**(3) Perforations**

The forms can have a continuous horizontal and/or vertical perforation for separating the form into individual forms.

**(4) Bar Code**

The Contractor's printing system must have the ability to print 3 of 9, 128 or PDF417 barcodes on forms. The system must also be capable of printing barcodes on the stickers, but the type of barcodes will be limited by the size of the sticker.

**Validation Stickers:**

**(1) Retro reflective Characteristics**

The unprinted reflective stickers shall have the following minimum coefficients of retroreflection expressed as candlepower per foot candle per square foot of material (candelas per lux per square meter). Test samples shall be oriented as specified in the manufacturer's instructions. The coefficient of retroreflection shall be measured in accordance with ASTM E-810, "Standard Test Method for Coefficient of Retroreflection of Retroreflective Sheeting," except that only one reading shall be taken at each position; the sample shall not be rotated 90 degrees.

<b>Entrance Angle</b>	-4 Deg	40 Deg
<b>Observation Angle</b>	2 Deg	
<b>White</b>	50	10

**(2) Rainfall Performance**

The coefficient of retroreflection of the same stickers, totally wet by rain, shall not be less than 90% of the above values. Wet performance measurements shall be conducted at 0.2 degrees observation and -4 degrees entrance angle in accordance with ASTM-E-810 and using the test set-up described in FHWA Specification FP-96, the latest revision of AASHTO M 268 and ASTM D 4956.

**(3) Adhesive and Protective Liner**

The pressure-sensitive adhesive shall form a durable bond to clean, dry reflective sheeting license plate surfaces or clean sticker surfaces of the same material. The minimum application temperature for the stickers is -10 deg , F (-23 deg C)

The adhesive shall not exude from the stickers' edges as to cause pieces to stick together during printing, handling or while packaged in shipment and distribution, as long as Bidders follow the manufacturer's recommendations for printing, handling and shipping.

**(4) Diffuse Daytime Color**

Through instrumental color testing, the diffuse daytime color of the reflective stickers before printing shall conform to color requirements as determined spectrophotometrically in accordance with ASIM E-1164 and E-1349, utilizing either 45/0 or 0/45 degree illumination/viewing conditions as described in E-1164 and E-1349 for retroreflective materials. Chromaticity and the Luminance Factor based on CIE tristimulus values for the 2° observer and Illuminant D65, shall be calculated in accordance with ASTM E-308. **Colors, after processing or imaging, shall remain similar for Daytime and Nighttime viewing.**

Color	Chromaticity Coordinate Corner Points		Luminance Factor
	X	Y	
White	303	290	Y (%) 35 Min.
	365	354	
	340	378	
	278	316	

**(5) Directional Security Marks (Custom Designed)**

The stickers shall have protective Custom Designed directional security marks which are an integral part of the sheeting, and which make unauthorized sticker reproduction extremely difficult. To assure authenticity, the integral security marks used on a nominal 1 inch x 1.5 inch (2.54 cm x 3.81 cm) sticker shall be separated by no more than .75 inch (1.91 cm). The security marks shall be of a design mutually agreed upon by the state and the manufacturer and shall meet the following additional requirements:

- Stickers (25 inches - 64 cm - from the ground) properly applied to a vertically-mounted license plate shall provide effective visual verification by exhibiting the following:
  - a. The marks shall be visible to a 6-ft (180 cm) tall viewer directly facing the sticker's surface at 30 degrees above the perpendicular to the sticker.
  - b. The marks shall not be visible to the viewer standing 2 ft (.6m) and 20 ft. (6.1m) from and directly facing the sticker;
  - c. The marks shall not be visible when viewed at an angle greater than 45 degrees to the left or right side of the sticker.

- The security marks shall: a) be verifiable in diffuse daylight and by retroreflected light at night; b) be visible on a sticker when held at arm's length and slightly tilted; c) not alter sticker colors or reduce sticker brightness below specified levels; and d) not be removable by chemical or physical means from the finished validation sticker, applied or unapplied, without irreparable damaged to the reflective system. These same marks shall not be visible when rotated 90 degrees from the first viewing position.

#### **(6) Colors**

When required by the state for the purposes of designating vehicle class or year of registration, the reflective stickers may be colored. In addition to meeting all of the serviceability aspects of this specification, the sticker color must be transparent. Adequate transparency is indicated when the sticker color appears similar under both diffused and retro reflected light. Appropriate characteristics such as color, reflectivity and the like would have to be compatible with the Contractor's system. The State and successful Contractor shall determine specifics of the final format.

#### **(7) Outdoor Durability**

Validation stickers processed according to manufacturer's instructions shall be considered to perform effectively for the service life specified if:

- a. The stickers show no fading, cracking, blistering or peeling which will significantly impair the intended visibility or legibility of the sticker, and if
- b. The clean stickers retain at least 50% of the specified minimum brightness values for the performance life of 2 years. Measurements shall be made in the unprinted areas of the stickers at 0.2 deg observation angle and -4 deg entrance angle. The Coefficients of Retroreflection shall be measured using the test method outlined in Appendix I.

#### **(8) Processability**

Die cut stickers shall be supplied affixed onto paper stock to the size and shape specified. Print quality of finished stickers shall meet commonly accepted industry standards to include machine-readable symbology, when required.

#### **(9) Production Equipment**

The sticker manufacturer shall only warrant sticker performance when processed through the 3M™ VP5000 Matched Component System production equipment. The sticker manufacturer shall not be held accountable for print durability, reduced sticker retro-reflection or printer problems, if the equipment used is not the 3M VP5000 Matched Component System.

#### **(10) Cleanability**

The finished stickers, when printed in accordance with the recommendations of the reflective sticker manufacturer, shall be readily cleansed of normal dirt accumulation by washing with water and mild detergent.

The surface shall also be sufficiently solvent-resistant to permit cleaning with solvents commonly used to clean vehicle finishes. Accordingly, the surface printed colorant shall show no loss of legibility after exposure to 25 cycle rubs (one cycle equals one rub back and forth) with a type cotton swab with gasoline, kerosene, mineral spirits, VM & P naphtha, 409 cleaner, window cleaners, and other common cleaners used to clean automotive paint finishes. See Appendix II for the test method.

#### **(11) Wet Abrasion Resistance**

Finished stickers shall show good wet abrasion resistance after 1000 cycles of "Wet Scrub" testing. No appreciable wear or loss of legibility shall be observed. See Appendix II for the test method.

### **(12) Packaging and Delivery**

All reflective stickers and other materials shall be packaged in accordance with accepted commercial standards. Improperly packaged stickers or stickers on forms can lead to performance and imaging problems. Contact sticker manufacturer if there are any questions regarding the packaging, shipping and storage of stickers or stickers on forms.

#### **Printers:**

The printers will be used to print "on demand" documents and decals. The printer must produce reliable results when feeding and printing integrated registration and validation sticker documents. The printer must be able to use ribbons that have been tested and documented to be solvent resistant for use in printing validation stickers. The printer must have at least a one-year warranty period.

Items listed below should be considered as the minimum specifications:

- Rated Speed: 2-8 inches per second
- Thermal transfer printing
- 16 MB SDRAM
- USB 2.0 Port
- Real-time clock
- Advanced counter
- RS-232 serial port
- Bidirectional parallel port
- XML-enabled printing
- Ethernet port
- Printhead resolution is 300 dots/inch

## Appendix E - Validation Sheeting Retroreflective Characteristics

The coefficient of Retroreflection shall be measured on flat, clean, unprinted Validation Stickers and shall have the following minimum values at 0 2° observation angle, expressed as candlepower per foot-candle per square foot (candelas per lux per square meter) of material. Measurements shall be conducted in accordance with ASTM E-810, "Standard Test Method for Coefficient of Retroreflection of Retroreflective Sheeting".

Integral Colored Sheeting	Entrance Angles	
	4°	40°
White	50	10
Blue	14	5
Lemon-yellow	28	11

## Appendix F - Testing Of Thermal transfer Printed Validation Stickers

These testing procedures cover the testing of thermal transfer printed validation stickers for abrasion resistance and resistance to cleaners and solvents. Note: Only cleaners and solvents commonly used on or around vehicle paint finishes need be tested.

### A. Wet Scrub Abrasion Resistance

References: Federal Test Method Standard 141a, Method 6142; Gardner Laboratory Bulletin WG 2000

#### Equipment:

The test used here is a modification of the Federal Test Standard No. 141a, Method 6142, "Scrub Resistance". An apparatus such as Gardner Model M-105 or the Gardner Straight Line Washability and Abrasion Tester No 1364 is required.

#### Sample Preparation:

- Prepare samples by adhering two test stickers to conversion coated aluminum weathering panels available from The Q-Panel Co., 26200 First St., Cleveland, Ohio 44145 (216-835-8700). Panels measure 11 x 2.75 inches. After applying the stickers, roll them down firmly with a small wallpaper rubber roller (approximate 1.5 inch dia).
- Allow samples to stand for 48 hours in a constant temperature/humidity room before testing.

#### Procedure:

- After conditioning the brush in lukewarm warm water for 30 minutes, shake out the excess water. Then condition the brush in a 0.5 percent detergent (Dreft) solution for 5 minutes. Place the Chinese hogs bristle brush in the brush holder.
- Mount the test panel in the test apparatus. The test apparatus may need to be modified slightly to accommodate the 11 x 2.75 inches test panel.
- Turn on the machine and allow 1,000 scrub cycles to pass before stopping the machine. During the test period, a 0.5% detergent (Dreft) solution is dripped on the test panel at the approximate rate of 12 drops per minute through a titration column or just enough to keep the panel wet.
- Rinse and dry the test panel.
- Results:

If the sticker print does not show sufficient wear so that the tester can see the substrate sheeting, the sample sticker passes the test.

### B. Resistance to Solvents and Cleaners

- Test Solvents: mineral spirits, kerosene, VM & P naphtha, methanol and gasoline (Note: Solvents that damage automobile paint or lacquer finishes should not be used as a test solvent).
- Test Cleaners: "409", window glass, ammonia, bug and tar remover (with petroleum distillates or mineral spirits)

**Procedure:**

- Wet a type cotton swab (mounted on the end of a stick) with the respective solvent or test cleaner.
- The tester holds the swab at a 45 degree angle to the test sticker and with approximately 40 grams of pressure, wipes the wet swab back and forth across the printed sticker for 10 cycles (one cycle is once across the sample and back). The tester conducts the same test on a second sample for 25 cycles.

**Results:**

The sample passes if the solvent or cleaner does not solvate the print sufficiently to wear through to the substrate and cause loss of legibility.

**C. Daytime and Nighttime Reflectivity**

To ensure that the colors of the imaged stickers remain the same when viewed under daylight and retro reflected light.

**Procedure:**

Bring stickers into a room that can be darkened enough to simulate nighttime viewing conditions. Note sticker colors before beginning test. Position stickers vertically on a wall, board or in standing position on table. Turn on flashlight before turning off room lights. Hold flashlight at tip of nose and note color of stickers under retro reflective light.

**Results:**

The color of the non-imaged area and imaged area should be the same as viewed with room lights on. If imaged area looks black under retro reflective light, opaque colorants have been used. If non-imaged area shows a diminished reflectivity, a coating has been applied that alters the appearance of the stickers under retro reflective light.

**Contract Terms and Conditions**

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## **Terms and Conditions**

### **BID STANDARD TERMS AND CONDITIONS**

### **TERMS AND CONDITIONS FOR THIS BID**

#### **CLOTHING SAMPLES**

IF SAMPLES ARE REQUESTED, THEY MUST BE PROVIDED WITHIN TEN (10) WORKING DAYS OF REQUEST DATE. FAILURE TO DO SO MAY RESULT IN DISQUALIFICATION OF BID.

#### **PURCHASE AGREEMENT BID**

**BIDDING** (a) A single price shall be quoted for each item against which a proposal is submitted. This price will be the maximum in effect during the agreement period. Any price decline at the manufacturer's level shall be reflected in a reduction of the agreement price to the State. (b) Quantities, if any, are estimated only. The agreement shall cover the actual quantities ordered during the period. Deliveries will be billed at the single, firm, awarded unit price quoted regardless of the quantities ordered. (c) Bid price is net F O B destination and shall include inside delivery at no extra cost. (d) Bids for single items and/or a small percentage of total items listed, may, at the State's sole option, be rejected as being non-responsive to the intent of this request. **ORDERING** (a) The User Agency(s) will submit individual orders for the various items and various quantities as may be required during the agreement period. (b) Exception - Regardless of any agreement resulting from this bid, the State reserves the right to solicit prices separately for any extra large requirements for delivery to specific destinations.

#### **DELIVERY PER AGENCY**

DELIVERY OF GOODS OR SERVICES AS REQUESTED BY AGENCY.