

DEPARTMENT OF ADMINISTRATIVE SERVICES
 DIVISION OF PLANT AND PROPERTY MANAGEMENT
 BUREAU OF PURCHASE AND PROPERTY
 STATE HOUSE ANNEX
 CONCORD, NEW HAMPSHIRE 03301-6398

FROM: LAURA INGRAM, PURCHASING AGENT
 BUREAU OF PURCHASE & PROPERTY

DATE: July 22, 2019

TO: CHARLES ARLINGHAUS, COMMISSIONER
 DEPT. OF ADMINISTRATIVE SERVICES

Commodity: Reflective Sheeting for License Plates	Vendor: 3M Company
NIGP Code: 550-4500	Agency: DOS/DOC
Requisition #: NA	Amount: \$166,429

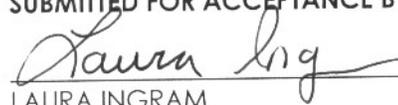
Permission is hereby requested to waive competitive bidding connected with the following; This request being made in compliance with the requirements of RSA 21-I:11 (b) and New Hampshire Code of Administrative Rules part 607.02 for the following reason(s);

The Division of Motor Vehicles respectfully request your authority and approval to request a brand specific contract for a period of 2 years for license plate sheeting using 3M brand sheeting to continue to provide reflective, pre-printed license plate sheeting that is used in the production of the motor vehicle license plates.

The Department of Administrative Services, in conjunction with the Division of Motor Vehicles will be issuing a Request for Information (RFI) in SFY20 to learn what options both new and existing are available to produce license plates. Technologies that the Division hopes to obtain information on include but are not limited to on-demand printing, different materials as well as various types of laminate material and application processes, to improve license plate production efficiency through new technology that will provide added flexibility as well. The current license plate manufacturing process is outdated and several of the machines utilized are well beyond the end of their useful life.

We are requesting the contract for the 3M Brand Sheeting as the sheeting process requires a large piece of equipment, sheeting applicator, used to adhere the specialized sheeting to the license plate aluminum. This equipment is brand specific currently provided by 3M. Whereas the Department of Administrative Services will be issuing an RFI followed by a Request for Proposal (RFP), it would be more cost efficient to continue with the current brand to ensure continuity until a new manufacturing process can be initiated. If a request for bid is issued now for two years, the vendor will be required to amortize the required production hardware for just a 24 month period.

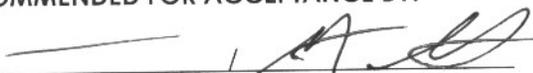
SUBMITTED FOR ACCEPTANCE BY:



 LAURA INGRAM
 BUREAU OF PURCHASE AND PROPERTY

DATE 7/22/19

RECOMMENDED FOR ACCEPTANCE BY:



 PURCHASING MANAGER/ADMINISTRATOR III

DATE 7/22/19

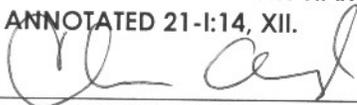
APPROVED FOR ACCEPTANCE BY:



GARY LUNETTA, DIRECTOR
DIVISION OF PROCUREMENT & SUPPORT SERVICES

DATE 7/30/19

ACCEPTED FOR THE STATE OF NEW HAMPSHIRE UNDER THE AUTHORITY GRANTED TO ME BY NEW HAMPSHIRE REVISED
STATUTES, ANNOTATED 21-I:14, XII.



CHARLES M. ARLINGHAUS, COMMISSIONER
DEPARTMENT OF ADMINISTRATIVE SERVICES

DATE 7-30-19



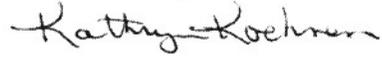
Subject: Reflective Sheeting for License Plates

AGREEMENT

The State of New Hampshire and the Contractor hereby mutually agree as follows:

GENERAL PROVISIONS

1. IDENTIFICATION.

1.1 State Agency Name State of New Hampshire Department of Administrative Services Bureau of Purchase and Property		1.2 State Agency Address State House Annex, Room 102 25 Capitol Street Concord, NH 03301	
1.3 Contractor Name 3M Company		1.4 Contractor Address 3M Center Bldg 235-3A-09 St Paul, MN 55144	
1.5 Contractor Phone # 651-737-4471	1.6 Account Number	1.7 Completion Date 10/31/2021	1.8 Price Limitation \$250,000
1.9 Contracting Officer for State Agency Laura Ingram, Purchasing Agent		1.10 State Agency Telephone Number 603-271-2009	
1.11 Contractor Signature 		1.12 Name and Title of Contractor Signatory Susan Broin Manager, Contracts	
1.13 Acknowledgement: State of <u>MN</u> , County of <u>Ramsey</u> On <u>July 30, 2019</u> , before the undersigned officer, personally appeared the person identified in block 1.12, or satisfactorily proven to be the person whose name is signed in block 1.11, and acknowledged that s/he executed this document in the capacity indicated in block 1.12.			
1.13.1 Signature of Notary Public or Justice of the Peace  [Seal]			
1.13.2 Name and Title of Notary or Justice of the Peace <u>Kathryn Koehnen</u> <u>Executive Assistant</u>			
1.14 State Agency Signature 		1.15 Name and Title of State Agency Signatory <u>Charles Arlinghaus</u> Commissioner	
1.16 Approval by the N.H. Department of Administration, Division of Personnel (if applicable) By: _____ Director, On: _____			
1.17 Approval by the Attorney General (Form, Substance and Execution) By: _____ On: _____			
1.18 Approval by the Governor and Executive Council By: _____ On: _____			

2. EMPLOYMENT OF CONTRACTOR/SERVICES TO BE PERFORMED. The State of New Hampshire, acting through the agency identified in block 1.1 ("State"), engages contractor identified in block 1.3 ("Contractor") to perform, and the Contractor shall perform, the work or sale of goods, or both, identified and more particularly described in the attached EXHIBIT A which is incorporated herein by reference ("Services").

3. EFFECTIVE DATE/COMPLETION OF SERVICES.

3.1 Notwithstanding any provision of this Agreement to the contrary, and subject to the approval of the Governor and Executive Council of the State of New Hampshire, this Agreement, and all obligations of the parties hereunder, shall not become effective until the date the Governor and Executive Council approve this Agreement ("Effective Date").

3.2 If the Contractor commences the Services prior to the Effective Date, all Services performed by the Contractor prior to the Effective Date shall be performed at the sole risk of the Contractor, and in the event that this Agreement does not become effective, the State shall have no liability to the Contractor, including without limitation, any obligation to pay the Contractor for any costs incurred or Services performed. Contractor must complete all Services by the Completion Date specified in block 1.7.

4. CONDITIONAL NATURE OF AGREEMENT. Notwithstanding any provision of this Agreement to the contrary, all obligations of the State hereunder, including, without limitation, the continuance of payments hereunder, are contingent upon the availability and continued appropriation of funds, and in no event shall the State be liable for any payments hereunder in excess of such available appropriated funds. In the event of a reduction or termination of appropriated funds, the State shall have the right to withhold payment until such funds become available, if ever, and shall have the right to terminate this Agreement immediately upon giving the Contractor notice of such termination. The State shall not be required to transfer funds from any other account to the Account identified in block 1.6 in the event funds in that Account are reduced or unavailable.

5. CONTRACT PRICE/PRICE LIMITATION/ PAYMENT.

5.1 The contract price, method of payment, and terms of payment are identified and more particularly described in EXHIBIT B which is incorporated herein by reference.

5.2 The payment by the State of the contract price shall be the only and the complete reimbursement to the Contractor for all expenses, of whatever nature incurred by the Contractor in the performance hereof, and shall be the only and the complete compensation to the Contractor for the Services. The State shall have no liability to the Contractor other than the contract price.

5.3 The State reserves the right to offset from any amounts otherwise payable to the Contractor under this Agreement those liquidated amounts required or permitted by N.H. RSA 80:7 through RSA 80:7-c or any other provision of law.

5.4 Notwithstanding any provision in this Agreement to the contrary, and notwithstanding unexpected circumstances, in no event shall the total of all payments authorized, or actually made hereunder, exceed the Price Limitation set forth in block 1.8.

6. COMPLIANCE BY CONTRACTOR WITH LAWS AND REGULATIONS/ EQUAL EMPLOYMENT OPPORTUNITY.

6.1 In connection with the performance of the Services, the Contractor shall comply with all statutes, laws, regulations, and orders of federal, state, county or municipal authorities which impose any obligation or duty upon the Contractor, including, but not limited to, civil rights and equal opportunity laws. In addition, the Contractor shall comply with all applicable copyright laws.

6.2 During the term of this Agreement, the Contractor shall not discriminate against employees or applicants for employment because of race, color, religion, creed, age, sex, handicap, sexual orientation, or national origin and will take affirmative action to prevent such discrimination.

6.3 If this Agreement is funded in any part by monies of the United States, the Contractor shall comply with all the provisions of Executive Order No. 11246 ("Equal Employment Opportunity"), as supplemented by the regulations of the United States Department of Labor (41 C.F.R. Part 60), and with any rules, regulations and guidelines as the State of New Hampshire or the United States issue to implement these regulations. The Contractor further agrees to permit the State or United States access to any of the Contractor's books, records and accounts for the purpose of ascertaining compliance with all rules, regulations and orders, and the covenants, terms and conditions of this Agreement.

7. PERSONNEL.

7.1 The Contractor shall at its own expense provide all personnel necessary to perform the Services. The Contractor warrants that all personnel engaged in the Services shall be qualified to perform the Services, and shall be properly licensed and otherwise authorized to do so under all applicable laws.

7.2 Unless otherwise authorized in writing, during the term of this Agreement, and for a period of six (6) months after the Completion Date in block 1.7, the Contractor shall not hire, and shall not permit any subcontractor or other person, firm or corporation with whom it is engaged in a combined effort to perform the Services to hire, any person who is a State employee or official, who is materially involved in the procurement, administration or performance of this Agreement. This provision shall survive termination of this Agreement.

7.3 The Contracting Officer specified in block 1.9, or his or her successor, shall be the State's representative. In the event of any dispute concerning the interpretation of this Agreement, the Contracting Officer's decision shall be final for the State.

8. EVENT OF DEFAULT/REMEDIES.

8.1 Any one or more of the following acts or omissions of the Contractor shall constitute an event of default hereunder ("Event of Default"):

8.1.1 failure to perform the Services satisfactorily or on schedule;

8.1.2 failure to submit any report required hereunder; and/or

8.1.3 failure to perform any other covenant, term or condition of this Agreement.

8.2 Upon the occurrence of any Event of Default, the State may take any one, or more, or all, of the following actions:

8.2.1 give the Contractor a written notice specifying the Event of Default and requiring it to be remedied within, in the absence of a greater or lesser specification of time, thirty (30) days from the date of the notice; and if the Event of Default is not timely remedied, terminate this Agreement, effective two (2) days after giving the Contractor notice of termination;

8.2.2 give the Contractor a written notice specifying the Event of Default and suspending all payments to be made under this Agreement and ordering that the portion of the contract price which would otherwise accrue to the Contractor during the period from the date of such notice until such time as the State determines that the Contractor has cured the Event of Default shall never be paid to the Contractor;

8.2.3 set off against any other obligations the State may owe to the Contractor any damages the State suffers by reason of any Event of Default; and/or

8.2.4 treat the Agreement as breached and pursue any of its remedies at law or in equity, or both.

9. DATA/ACCESS/CONFIDENTIALITY/ PRESERVATION.

9.1 As used in this Agreement, the word "data" shall mean all information and things developed or obtained during the performance of, or acquired or developed by reason of, this Agreement, including, but not limited to, all studies, reports, files, formulae, surveys, maps, charts, sound recordings, video recordings, pictorial reproductions, drawings, analyses, graphic representations, computer programs, computer printouts, notes, letters, memoranda, papers, and documents, all whether finished or unfinished.

9.2 All data and any property which has been received from the State or purchased with funds provided for that purpose under this Agreement, shall be the property of the State, and shall be returned to the State upon demand or upon termination of this Agreement for any reason.

9.3 Confidentiality of data shall be governed by N.H. RSA chapter 91-A or other existing law. Disclosure of data requires prior written approval of the State.

10. TERMINATION. In the event of an early termination of this Agreement for any reason other than the completion of the Services, the Contractor shall deliver to the Contracting Officer, not later than fifteen (15) days after the date of termination, a report ("Termination Report") describing in detail all Services performed, and the contract price earned, to and including the date of termination. The form, subject matter, content, and number of copies of the Termination Report shall be identical to those of any Final Report described in the attached EXHIBIT A.

11. CONTRACTOR'S RELATION TO THE STATE. In the performance of this Agreement the Contractor is in all respects an independent contractor, and is neither an agent nor an employee of the State. Neither the Contractor nor any of its officers, employees, agents or members shall have authority to bind the State or receive any benefits, workers' compensation or other emoluments provided by the State to its employees.

12. ASSIGNMENT/DELEGATION/SUBCONTRACTS. The Contractor shall not assign, or otherwise transfer any interest in this Agreement without the prior written consent of the N.H. Department of Administrative Services. None of the Services shall be subcontracted by the Contractor without the prior written consent of the State.

13. INDEMNIFICATION. The Contractor shall defend, indemnify and hold harmless the State, its officers and employees, from and against any and all losses suffered by the State, its officers and employees, and any and all claims, liabilities or penalties asserted against the State, its officers and employees, by or on behalf of any person, on account of, based or resulting from, arising out of (or which may be claimed to arise out of) the acts or omissions of the Contractor. Notwithstanding the foregoing, nothing herein contained shall be deemed to constitute a waiver of the sovereign immunity of the State, which immunity is hereby reserved to the State. This covenant in paragraph 13 shall survive the termination of this Agreement.

14. INSURANCE.

14.1 The Contractor shall, at its sole expense, obtain and maintain in force, and shall require any subcontractor or assignee to obtain and maintain in force, the following insurance:

14.1.1 comprehensive general liability insurance against all claims of bodily injury, death or property damage, in amounts of not less than \$250,000 per claim and \$2,000,000 per occurrence; and

14.1.2 fire and extended coverage insurance covering all property subject to subparagraph 9.2 herein, in an amount not less than 80% of the whole replacement value of the property.

14.2 The policies described in subparagraph 14.1 herein shall be on policy forms and endorsements approved for use in the State of New Hampshire by the N.H. Department of Insurance, and issued by insurers licensed in the State of New Hampshire.

14.3 The Contractor shall furnish to the Contracting Officer identified in block 1.9, or his or her successor, a certificate(s) of insurance for all insurance required under this Agreement. Contractor shall also furnish to the Contracting Officer identified in block 1.9, or his or her successor, certificate(s) of insurance for all renewal(s) of insurance required under this Agreement no later than fifteen (15) days prior to the expiration date of each of the insurance policies. The certificate(s) of insurance and any renewals thereof shall be attached and are incorporated herein by reference. Each certificate(s) of insurance shall contain a clause requiring the insurer to endeavor to provide the Contracting Officer identified in block 1.9, or his or her successor, no less than ten (10) days prior written notice of cancellation or modification of the policy.

15. WORKERS' COMPENSATION.

15.1 By signing this agreement, the Contractor agrees, certifies and warrants that the Contractor is in compliance with or exempt from, the requirements of N.H. RSA chapter 281-A ("Workers' Compensation").

15.2 To the extent the Contractor is subject to the requirements of N.H. RSA chapter 281-A, Contractor shall maintain, and require any subcontractor or assignee to secure and maintain, payment of Workers' Compensation in connection with activities which the person proposes to undertake pursuant to this Agreement. Contractor shall furnish the Contracting Officer identified in block 1.9, or his or her successor, proof of Workers' Compensation in the manner described in N.H. RSA chapter 281-A and any applicable renewal(s) thereof, which shall be attached and are incorporated herein by reference. The State shall not be responsible for payment of any Workers' Compensation premiums or for any other claim or benefit for Contractor, or any subcontractor or employee of Contractor, which might arise under applicable State of New Hampshire Workers' Compensation laws in connection with the performance of the Services under this Agreement.

16. WAIVER OF BREACH. No failure by the State to enforce any provisions hereof after any Event of Default shall be deemed a waiver of its rights with regard to that Event of Default, or any subsequent Event of Default. No express failure to enforce any Event of Default shall be deemed a waiver of the right of the State to enforce each and all of the provisions hereof upon any further or other Event of Default on the part of the Contractor.

17. NOTICE. Any notice by a party hereto to the other party shall be deemed to have been duly delivered or given at the time of mailing by certified mail, postage prepaid, in a United States Post Office addressed to the parties at the addresses given in blocks 1.2 and 1.4, herein.

18. AMENDMENT. This Agreement may be amended, waived or discharged only by an instrument in writing signed by the parties hereto and only after approval of such amendment, waiver or discharge by the Governor and Executive Council of the State of New Hampshire.

19. CONSTRUCTION OF AGREEMENT AND TERMS. This Agreement shall be construed in accordance with the laws of the State of New Hampshire, and is binding upon and inures to the benefit of the parties and their respective successors and assigns. The wording used in this Agreement is the wording chosen by the parties to express their mutual intent, and no rule of construction shall be applied against or in favor of any party.

20. THIRD PARTIES. The parties hereto do not intend to benefit any third parties and this Agreement shall not be construed to confer any such benefit.

21. HEADINGS. The headings throughout the Agreement are for reference purposes only, and the words contained therein shall in no way be held to explain, modify, amplify or aid in the interpretation, construction or meaning of the provisions of this Agreement.

22. SPECIAL PROVISIONS. Additional provisions set forth in the attached EXHIBIT C are incorporated herein by reference.

23. SEVERABILITY. In the event any of the provisions of this Agreement are held by a court of competent jurisdiction to be contrary to any state or federal law, the remaining provisions of this Agreement will remain in full force and effect.

24. ENTIRE AGREEMENT. This Agreement, which may be executed in a number of counterparts, each of which shall be deemed an original, constitutes the entire Agreement and understanding between the parties, and supersedes all prior Agreements and understandings relating hereto.

Exhibit A
Scope of Services

3M Company (hereinafter referred to as the "Contractor") hereby agrees to provide the State of New Hampshire, with Reflective Sheeting for License Plates.

SECTION I - GENERAL

These specifications shall cover the materials, performance characteristics, quality, and testing of retroreflective sheeting and support services necessary to produce finished license plates.

A. DESCRIPTION:

1. The retroreflective license plate shall consist of retroreflective (hereinafter referred to as "reflective" only) sheeting laminated to a specified aluminum substrate that is then embossed and message roll coated according to the sheeting manufacturer's recommendations.
2. The reflective sheeting shall consist of lens elements enclosed within a transparent resin and shall have a pre-coated pressure sensitive adhesive backing protected by a removable liner. The pre-printed design, in the reflective sheeting, shall be buried below the sheeting surface to insure reliable long-term durability.
3. The reflective sheeting, when applied to the license plate substrate and blanked to finished size, shall contain at the discretion of the Director of Motor Vehicles:
 - a. Identifying marks for purposes of on-vehicle traceability, warranty enforcement and anti-counterfeiting in accordance with these specifications. The warranty marks shall be buried below the sheeting surface for durability and shall incorporate the manufacturer's production run number that designates the source of manufacture, year of manufacture, and specific lot from which the material was supplied. The warranty marks shall not interfere or detract from the graphic design or reduce sheeting brightness and shall be durable for the service life of the license plate.
 - b. Contractor shall demonstrate their capability to provide these security devices.
4. Pre-printed reflective sheeting shall conform to the design, colors and sheeting type as approved by the state and reflective sheeting manufacturer. When using white background sheeting, all graphic inks shall be transparent to facilitate the same daytime/nighttime appearances.
5. In addition to a square foot price for pre-printed reflective sheeting, Contractor shall include pricing of unprinted white reflective sheeting (annual and multi-year) and any colored sheeting offered. The specifications contained herein shall apply to all standard size plate classifications and are inclusive of all special category plates issued by the State wherein reflective material is requested.

B. QUALIFICATIONS

Contractor shall meet the following criteria:

1. To assure high quality license plate performance, durability and service, the Contractor shall provide the State with proof of successful L/P manufacturing in other states. The Contractor shall:
 1. Show evidence of successful manufacture and application of preprinted license plate sheeting, thinners, and roll coat inks as parts of a totally integrated license plate system.
 2. Provide state-of-the-art, operational application equipment at no charge, as a fundamental component of a totally integrated license plate system. The Contractor shall show manufacturing experience in other states.
 3. The Contractor shall provide a list of equipment and flow diagrams.
 4. Provide list and qualifications of experienced, full-time graphic design, customer service, technical service and sales service personnel.
 5. Provide expert equipment installation service and on-site technical service within 48 hours at no charge; provide immediate toll-free call-in technical service.
 6. Provide next day delivery of stocked equipment parts; provide the State with detailed list.
 7. Ship sheeting rolls via "bulk-pack" configuration per layer for ease of handling in the tag shop.

- h. Conform to all performance requirements of this specification as specified in Section II and as tested by the State designated testing lab.
2. The Contractor shall provide all necessary samples for the agency or their designated testing facility to certify the material compliance with these specifications. At the request of the agency, the Contractor may also be required to compensate the agency or their testing agents for the cost of any material testing.
 3. A corporate officer shall certify that all license plate sheeting and roll coat inks purchased by the State are covered by the sheeting manufacturer ISO 9001 Registration.
 4. The Contractor shall submit technical data exhibiting characteristics of all materials proposed. Information submitted shall include detailed processing conditions for each phase of license plate manufacture. Such information shall also include times and temperatures required for curing roll coat pastes used in the production of completed license plates.
 5. Failing to conform to any of these qualification requirements may result in cancellation of the contract.

C. PERIODIC EVALUATION:

The State reserves the right to periodically evaluate the performance of materials. Samples for periodic evaluation of performance shall be selected at random from materials submitted on State purchase orders. Failure of materials to comply with the requirements of this specification shall be cause for removal.

D. TECHNOLOGICAL IMPROVEMENTS

The Contractor may, with agreement of the State, incorporate technological improvements that better optimize the license plate production process and/or license plate performance. This may include any automated license plate production systems as approved by the New Hampshire Division of Motor Vehicles.

SECTION II - PERFORMANCE STANDARDS

A. LICENSE PLATE SHEETING

1. Substrate

The sheeting shall be laminated to properly conversion coated aluminum substrate recommended by the sheeting manufacturer.

2. Diffuse Daytime Color

Through instrumental color testing, the diffuse daytime color of the reflective sheeting shall conform to color requirements as determined spectrophotometrically in accordance with ASTM 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.

The color specification limits for white license plate sheeting are listed on the following chart. (See Appendix I for other sheeting colors).

COLOR SPECIFICATION
Chromaticity Coordinates

Pairs	White Corner Points		Luminance Factor
	x	y	Y%
1	.303	.287	42 min.
2	.368	.353	
3	.340	.380	
4	.274	.316	

3. Adhesive and Protective Liner:

- a. The precoated adhesive shall form a durable bond to flat conversion coated license plate surfaces as recommended by the reflective sheeting manufacturer.

- b. The protective liner attached to the adhesive shall be removable by peeling without soaking in water or other solvents and shall be easily removed after accelerated storage for four hours at 150°F (66°C) under weight of 2.5 lbs. per square inch (1.14KG per 6.45 sq. cm).
- 4. Roll Coating
 - a. The reflective sheeting shall be roll coated and compatible with transparent and opaque colors manufactured by the sheeting manufacturer.
 - b. The Contractor shall supply roll coat inks that meet State and Federal VOC regulations.
 - c. The roll coat ink shall be durable for the service life of the license plate and shall not fade, crack or peel from the surface of the license plate.
- 5. Inventory Control
 - a. To assist the license plate tag shop with inventory control problems, the Contractor shall mark the sheeting with an integral, directional image that incorporates the lot number so that the tag shop can employ first in/first out principles.

B. FINISHED LICENSE PLATES

Test panels shall be prepared in accordance with Section III, Para. A.

1. Retroreflective Characteristics

- a. The coefficient of retroreflection for the sheeting shall be measured on flat, clean, finished license plate test panels prepared per III.A 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". Measurements on reflective sheeting with a preprinted graphic design shall be taken in an unprinted sheeting area.

Color	Entrance Angle	
	-4°	40°
White	50	16
Yellow	25	10
Orange	25	10
Lemon-Yellow	25	10
Gold	25	10
Green	18	7
Blue	18	7
Red	9	3

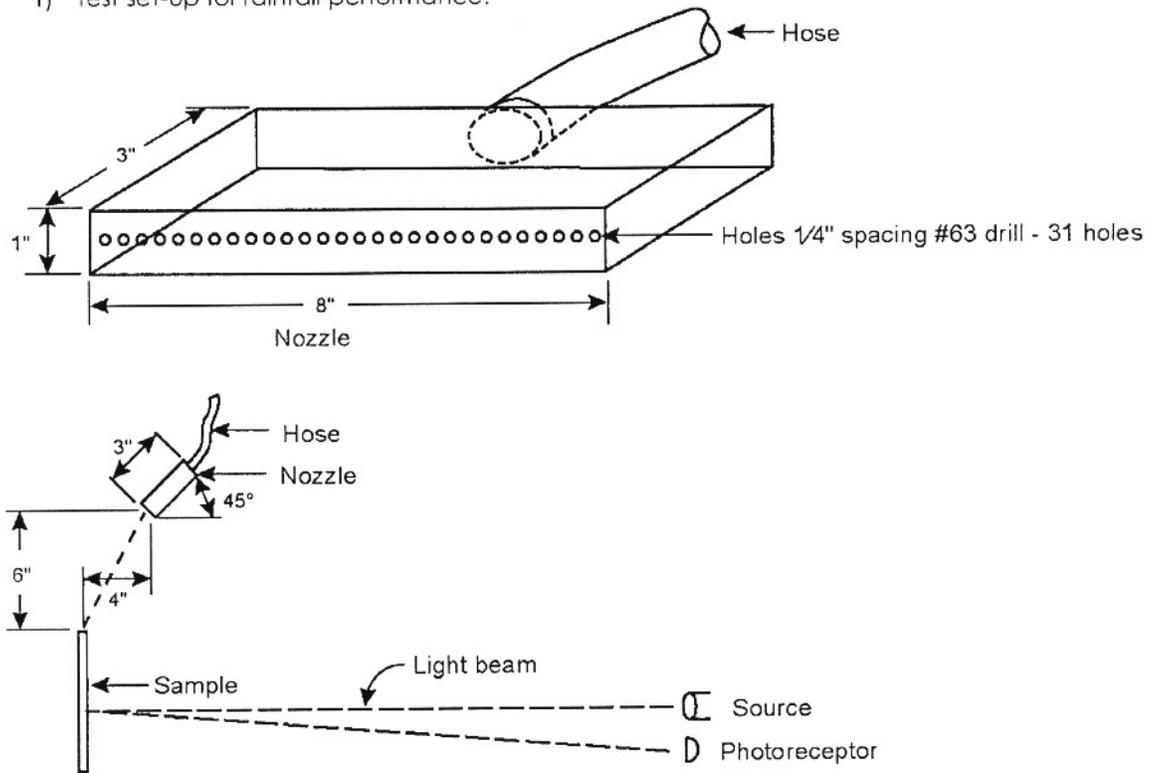
2. Resistance to Accelerated Weathering.

- a. The sheeting shall be weather resistant and show no appreciable discoloration, crazing, cracking, blistering, lifting or dimensional change and the surface shall continue to be essentially smooth to provide direct application of validation stickers, determined after the following accelerated weathering tests:
- b. Laboratory testing – 2,000 hours in Xenon arc weatherometer using ASTM G 155 -Type BH, Method A. Samples shall maintain 70% of retroreflective table values shown in II, B. 1.
- c. Outdoor accelerated testing – Samples shall be placed in a 24 month unprotected outdoor exposure, facing the equator and inclined 45 degrees from the vertical. Retroreflective measurements, taken after cleaning, shall result in 70% or more retention of the table values shown in II, B. 1.

3. Rainfall Performance

- a. The Coefficient of Retroreflection of the same finished license plate test panels, measured on the same flat area of the test panels, totally wet by rain, shall not be less than 90 percent of the values specified above. The photometric performance during rainfall shall be determined as follows:

1) Test set-up for rainfall performance:



Place source and photoreceptor in horizontal plane

- 2) Place the test panel in an upright position 6 inches (15.2 cm) below and 4 inches (10.1 cm) in front of the nozzle as shown below:
 - 3) Apply sufficient water pressure so that the upper surface of the spray envelope strikes the top of the panel.
 - 4) With water falling on the panel, measure the coefficient of retroreflection. Wet performance measurements shall be conducted at 0.2° observation and -4° entrance angles in accordance with ASTM E-810.
4. Daytime/Nighttime Color
 - a. To assist in positive daytime/nighttime identification of license plates, the color of the reflective background of the sheetings, including any pre-printed design, shall be similar in daylight and by illumination at night.
 5. Flexibility - Embossing
 - a. The sheeting shall, when correctly applied to treated aluminum, conform to the minimum/maximum tolerances for embossing and/or debossing dies as used by the manufacturing facility that supplies finished plates to the state and as recommended by the sheeting manufacturer.
 - b. Finished, embossed license plates shall show no appreciable wrinkling, cracking, or squirming at or around embossed/debossed areas.
 6. Cleanability.
 - a. Finished license plates, manufactured in accordance with the recommendations of the reflective sheeting manufacturer, shall be easily cleansed of normal dirt accumulation by washing with water and mild detergent. A test panel shall be sprayed with water-suspended soils collected

- from the underside of vehicle fenders, mixed with water in the proportion of five pounds (2.27 kg) of soil to one gallon (3.78 liters) of water, and poured through a paint strainer.
- b. The mixture shall then be sprayed onto the panel while particles are in suspension. After the panel is thoroughly dry, it shall be cleaned by washing with a mixture of water and mild detergent, rinsed with clean water and wiped dry for examination. The panel shall show no appreciable difference when compared to a new clean panel.
7. Solvent Resistance
 - a. License plate panels prepared per III.A shall be sufficiently solvent resistant to withstand exposure to mineral spirits, turpentine, toluene, xylene, and methyl alcohol without dissolving, wrinkling, puckering, blistering or edge lifting.
 - b. Test panels shall be 1" x 6" strips cut from license plate blanks. Strips of the license plate shall be immersed in a container with 4 inches of each solvent separately, at room temperature. Solvents and immersion time shall be as follows:
 - 1) Mineral spirits and turpentine - immersed for 10 minutes.
 - 2) Toluene, xylene and methyl alcohol - immersed for 1 minute.
 - c. At the end of the immersion time remove the samples from the containers and allow to dry before examining for any wrinkling, puckering, blistering, edge lifting or dissolving of the sheeting and adhesive. Failure of samples shall be cause for rejections.
 8. Gasoline Resistance
 - a. Finished license plates shall be sufficiently gasoline resistant to withstand exposure to gasoline when tested as follows.
 - b. Test panels shall be immersed in a commercially available unleaded gasoline for a period of one minute. After removal from the gasoline the test panels shall be air-dried. The test panels shall show no evidence of dulling, whitening, softening, puckering, blistering, crinkling, or dissolving of the exterior film, inks, or adhesive, or separation from the aluminum substrate.

SECTION III - TEST PANELS AND QUALITY CONFORMANCE

A. TEST PANELS

1. Finished license plate test panels 6" x 12" (15.2cm x 30.5cm) shall be provided for testing and evaluation within ten (10) calendar days if required by the state, and shall be produced of the same materials, on the same equipment and by the same general processes of substrate preparation, laminating, embossing or debossing, roll coating and oven drying as the production plates, in accordance with the sheeting manufacturer's recommendations. Note the following test panel exceptions for II. B. (1, 6, 8, 9) testing.
2. Special test panels for photometric, cold weather resistance and solvent resistance testing shall be produced as above, except that they shall not be embossed (for ease of testing) and they shall not be roll coated. These test panels shall be cured for a minimum of 25 minutes at 190-260°F (to simulate oven drying) and shall be conditioned for at least 24 hours at 72° ± 4°F (22° ± 2°C) and 50% ± 2% R.H. prior to testing.

B. QUALITY CONFORMANCE

1. Failure of the reflective sheeting to meet any requirement specified herein shall be cause for refusal to accept materials until evidence has been provided by the manufacturer that corrective action has been taken to eliminate deficiencies.

SECTION IV - PERFORMANCE LIFE & WARRANTIES

A. PERFORMANCE LIFE

1. Reflective sheeting applied and processed into finished license plates according to the sheeting manufacturer's instruction shall be considered to perform effectively for the service life specified (excluding those plates showing mechanical damage) if:
 - a. The plates show no fading, cracking, blistering or peeling which shall significantly impair the intended visibility or legibility of the plate, and if

- b. The clean rear plate retains at least 9 candlepower per foot-candle per plate (.84 candelas per lux per plate) for the length of the intended issue being bid. (up to a period of 5 years).¹
2. Measurements shall be conducted at 0.2° observation angle and -4° entrance angle. Coefficient of Luminous Intensity shall be measured using the test method outlined in ASTM E-810 except that the coefficient of luminous intensity shall be determined in accordance with ASTM E-808-01 Para. 3.2.2 and ASTM E-809-02 Para. 12.3. Note: Reflective license plates with a graphic preprinted design may not meet this requirement as large graphic printed areas may affect the reflectivity levels of the finished license plates.

B. WARRANTY PROVISIONS

1. The sheeting shall be imaged with a directional, integral warranty mark, so as to be traceable to the specific manufacturer's production run numbers from which the material originated. If at any time during the specified performance life of the reflective material provided, a one half of one percent sample of clean, rear plates produced from a given production run (identified by the integral warranty mark) reveals that 10 percent or more of that sample are found to be defective in visual or brightness performance requirements as defined herein, the Contractor shall be responsible for replacement of all plates manufactured from that specific lot of material.
2. The Contractor shall be responsible for all replacement costs associated with a specific lot; a maximum liability assessment of \$5.00 per plate shall be invoked for failed plates associated with a specific lot. Reimbursement of the State shall be in dollars and/or materials equal to the assessed damage, at the State's discretion.
3. To assure effective identification, the warranty marks shall be approximately 1.125 inches in diameter on standard 6" x 12" plates and shall be of a design mutually agreed upon by the State and the sheeting manufacturer. The manufacturer may vary the number, design and placement of the marks for motorcycle or smaller license plate sizes.
4. The warranty marks shall be verifiable on a license plate once properly affixed to the vehicle's designated mounting area, from an approximate head-on distance of six (6) feet;
 - (1.) Warranty marks shall not be observable at 2 feet or 20 feet or when the viewer steps to one side from the head-on viewing position so as not to compete or conflict with vital plate information.
 - OR
 - (2.) Warranty marks shall change appearance when the view steps to one side creating more than 45° angle to the plate so as not to compete or conflict with vital plate information.
5. The warranty marks shall be verifiable under both ambient light and retroreflected light at night, shall not interfere or conflict with the plate design or aesthetics, shall not alter sheeting colors or reduce sheeting brightness below specified levels and shall be required at the discretion of State.

SECTION V - SUPPORT SERVICES

A. PLATE DESIGN SERVICE

1. The Contractor shall, without additional cost, maintain a full-time professional design service to assist the state in creating a license plate of high legibility, recognition and desired aesthetics. The design shall become the property of the State of New Hampshire.
2. Consistency of printing and roll coat inks shall be maintained throughout the contract period. The supplier shall provide for and maintain an exact color to existing and/or selected designs by the State. The Contractor shall be required to furnish sheeting based on the current license plate design/format or any approved State design. Failure to maintain colors in accordance with this section shall be cause for contract cancellation.
3. Special-plate-category designs shall be provided in standard roll form so that they can be manufactured into finished plates by the same process and on the same machinery as used for the basic design(s)

¹ Assumes white sheeting background

covered by this contract. The Contractor shall be able to provide these designs in quantities as limited as one 300-ft. roll of material.

4. The state reserves the right to redesign any or all of the plates required under these specifications during any resulting contract period.

B. TECHNICAL SERVICE

1. License Plate Materials and Manufacturing Equipment

- a. The Contractor shall, without additional cost, provide the license plate manufacturing shop with expert technical service and product information. A list of expert technical service personnel, their qualifications and experience shall be provided.
- b. On-site technical service shall, without additional cost, be available within 48 hours of notification by the manufacturing shop of production difficulties.

C. EQUIPMENT

1. The reflective Contractor shall provide the necessary operational equipment for the intended contract period to laminate unprinted or pre-printed sheeting to the substrate inclusive of, but not limited to, the graphic reflective sheeting applicator including stretch control mechanism, and corresponding registry feed controls. The equipment may be used/refurbished (operational) or new.

Contractor shall install application and registry equipment at the License plate manufacturing location, and provide reflective sheeting for production in order to demonstrate over a period of 7 days that the equipment meets these specifications. The Contractor shall cover costs during this 7-day period. This shall include reimbursement to the State of New Hampshire for all aluminum used in this testing, compensation for any labor dedicated by New Hampshire Correctional Industries employees for this trial period and shall be liable for any damage to other State of New Hampshire equipment.

2. All required training shall be completed and equipment installed and operational within forty-five (45) days of notice of award of contract. Installation and training shall be acceptable upon consistently running the required line(s) at representative speeds not to exceed 100 strokes per minute with a rejection rate of 2% or less. The acceptability of the blanks shall be determined by the issuing agency in conjunction with the license plate plant management.
3. The Contractor shall provide a list of available stocked parts to the license plate manufacturing shop. In event of equipment failure the Contractor shall ship stocked replacement parts by express carrier within the next day
4. The Contractor shall reimburse the cost of any waste materials, including metal and sheeting generated because of installation and testing of application and registry equipment to the state. Any salary costs generated because the Contractor requested to work during other than the normal scheduled work hours of the license plate plant employees shall be borne by the Contractor.
5. Upon expiration of the contract, the Contractor's equipment shall be removed within thirty (30) days unless an extension of the sheeting contract has been negotiated Contractor.
6. The Contractor shall provide Preventative Maintenance to all equipment used in the process of applying sheeting and creating the license plates.
7. The Contractor shall provide emergency repair services for all equipment used in the process of applying sheeting and creating license plates. One phone number shall be supplied for contact and response time shall be within 4 hours of initial call.

Contact Information: 1-877-777-3571

mvsscontactcenter@mmm.com

SECTION VI - PACKAGING AND SHIPPING

To ensure easy access and proper inventory control, the reflective sheeting shall be shipped in bulk packages. To prevent roll damage, each pallet of bulk packages shall be designed to prevent double stacking by the shipper. Production run sequence numbers shall be affixed to the outside of each shipping package that corresponds to the materials contained therein. Each roll shall be additionally designated by a core identifier stamped or affixed with a permanent label to the inside of each roll

core. A shipping or packaging list shall be affixed to one box on a pallet identifying all production runs contained within the shipment.

SECTION VII - DELIVERY SCHEDULE

All deliveries shall be provided F.O.B. to the State of New Hampshire's designated point of delivery. The first expected delivery of reflective sheeting shall be no later than forty-five (45) days following official notification of contract award, initial order and receipt of State approved artwork. All subsequent orders shall be F.O.B. destination with expected delivery within thirty (30) days after receipt of order.

SECTION VIII - ACCOUNTABILITY

The manufacturer shall be accountable for all sheeting from the place of manufacture to the point of delivery. All over-run materials remaining in the manufacturer's possession after discontinuation of any design or the contract's cancellation, shall be destroyed and used for no other purpose.

SECTION IX - PROCESSING

- A. The reflective sheeting processing shall be in accordance with the recommendations of the manufacturer. All processing procedures for reflective material, thinners, solvents and inks shall be exact at the Contractor's expense, with equipment and procedures currently employed by the State.
- B. The sheeting manufacturer shall periodically properly remove all waste, thinners, and roll coat inks. In addition, the sheeting Contractor shall remove wastes from other consumables used in the production of license plate.
- C. The Contractor shall be required to deliver, free of charge, all clear coatings, thinners and inks on an "as needed" basis. Delivery in the amounts required shall be completed within fifteen (15) days after receipt of order.
- D. The contract shall be for projected volumes, which are estimates only. The contract shall be for actual amounts ordered during the selected contract production period. Delivery schedules and quantities shall be coordinated with the state's designated manufacturer.

APPENDIX I

COLOR SPECIFICATION

Chromaticity Coordinate

	Color	Corner x	Points y	Luminance Factor Y%
1.	White	.303 .368 .340 .274	.287 .353 .380 .316	42 Min.
2.	Yellow	.498 .557 .479 .438	.412 .442 .520 .472	28-38
3.	Lemon Yellow	.455 .514 .440 .395	.455 .485 .558 .508	40-50
4.	Orange	.505 .550 .600 .478	.354 .412 .360 .385	14-24
5.	Blue	.181 .270 .230 .103	.069 .220 .250 .246	11-20
6.	Green	.210	.275	15-25

		.280	.385	
		.180	.520	
		.080	.310	
7.	Red	.613	.297	5-10
		.636	.364	
		.558	.352	
		.708	.292	
8.	Gold	.435	.465	15-35
		.475	.420	
		.420	.370	
		.385	.420	

Exhibit B
Payment Terms

The contract price limitation for this Contract is \$250,000.

The invoice shall be submitted clearly indicating the location, date of completion and contract price.

The Contract price shall be paid within thirty (30) days after receipt of invoice(s) and acceptance of the work to the State's satisfaction.

3M	\$PER SQ FT	\$ PER ROLL
ROLL 12-1/16" - PRE-PRINTED		
36,000 SQ FT OR GREATER		
ONE (1) COLOR (P/N 285PE)	\$0.845	\$764.46
TWO (2) COLOR	\$0.865	\$782.55
THREE (3) COLOR	\$0.885	\$800.65
FOUR (4) COLOR (P/N 281PE)	\$0.945	\$854.93
ROLL 12-1/16" - PRE-PRINTED		
LESS THAN 36,000 SQ FT		
ONE (1) COLOR (P/N 285PE)	\$0.895	\$809.7
TWO (2) COLOR	\$1.795	\$1623.91
THREE (3) COLOR	\$1.795	\$1623.91
FOUR (4) COLOR (P/N 281PE)	\$0.995	\$900.16
FIVE (5) COLOR	\$1.795	\$1623.91
SIX (6) COLOR	\$1.795	\$1623.91
ROLL 7-1/16" - PRE-PRINTED		
36,000 SQ FT OR GREATER		
ONE (1) COLOR	\$1.05	\$463.48
TWO (2) COLOR	\$1.07	\$472.30
THREE (3) COLOR	\$1.09	\$481.13
FOUR (4) COLOR	\$1.11	\$489.96
ROLL 7-1/16" - PRE-PRINTED		
LESS THAN 36,000 SQ FT		
ONE (1) COLOR (P/N C28XXX)	\$1.795	\$792.32
TWO (2) COLOR (P/N C28XXX)	\$1.795	\$792.32
THREE (3) COLOR (P/N C28XXX)	\$1.795	\$792.32
FOUR (4) COLOR (P/N C28XXX)	\$1.795	\$792.32
ROLL 12-1/16" X 100 YARDS- PRE-PRINTED		

LESS THAN 36,000 SQ FT		
ONE (1) COLOR (P/N C28XXX)	\$1.795	\$541.30
TWO (2) COLOR (P/N C28XXX)	\$1.795	\$541.30
THREE (3) COLOR (P/N C28XXX)	\$1.795	\$541.30
FOUR (4) COLOR (P/N C28XXX)	\$1.795	\$541.30
FIVE (5) COLOR (P/N C28XXX)	\$1.795	\$541.30
SIX (6) COLOR (P/N C28XXX)	\$1.795	\$541.30
ROLL 12-1/16" X 100 YARDS- UN-PRINTED		
LESS THAN 36,000 SQ FT		
UN-PRINTED WHITE SHEETING (P/N NHE04770)	\$1.00	\$904.65
UN-PRINTED COLORED SHEETING	\$1.10	\$995.16

Payments shall be made via ACH and/or Procurement Card (P-Card –Visa Credit Card). Use the following link to enroll with the State Treasury for ACH payments:

<http://www.nh.gov/treasury/Divisions/DocsForms/Tforms.htm?inc=P>

The resulting contract(s) has mandatory Procurement Card usage for agencies enrolled in the State P-Card

Exhibit C
Special Provisions

1. No special provisions

