



Advertisement, Specification, Insurance Requirements, Sample Agreement, Sample Performance Bond
and Conditions and Instructions to Bidders

For

Contactless Smart Fare Media

Bid No.: **B26-43**

Electronic proposals are due at 1:00 P.M. on **October 12, 2026**

Executive Summary

The Port Authority of Allegheny County d.b.a. PRT has recently implemented eBusiness. eBusiness is a mechanism which allows contractors and vendors to electronically submit bids on PRT procurement events. It is a system of modules that provides everything from procurement to contract management and you will see advantages like these:

- Monitor Invoice Payments
- Improved Purchasing Process
- More Fluid, Automated and Single System Return Authorization
- Automated RFP/Bid Process Including Bidding, Procurement Contracts & Purchase Orders
- The Latest Technology from Workflow to E-mail Notification to Approval Process

The implementation of eBusiness represents a change in the method of the competitive bidding process; however, the PRT must continue to adhere to stringent governmental and internal procurement regulations.

Additionally, this document contains the Advertisement, Specification, Insurance Requirements, Sample Copies of the Agreement and Performance Bond, and the Conditions and Instructions to Bidders. It is recommended that you take the time to read the attached documents – especially the “Conditions and Instructions to Bidders”.

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Bid Schedule

Solicitation Post Date: September 11, 2026

Pre-Bid Meeting: September 28, 2026 at 11:00 AM

To join the Pre-Bid meeting through Microsoft Teams on your computer, mobile app or room device:

Meeting ID: 276 223 103 719 042

Passcode: rd3bK9UL

Dial in by Phone: 412-927-0245

Phone Conference ID: 111 596 360#

Deadline for Questions: October 2, 2026 at 12:00 PM (Noon)

Please submit any questions regarding this solicitation in writing to:

Keith Bayles and Samantha Tirk

kbayles@rideprt.org and stirk@rideprt.org

Subject line of email to read: "B26-43 Contactless Smart Fare Media"

Bid Submission Deadline: October 12, 2026 at 1:00 PM

Bid Opening: October 12, 2026 at 1:15 PM

To join the Bid Opening meeting through Microsoft Teams on your computer, mobile app or room device:

Meeting ID: 236 920 549 534 498

Passcode: D9DK96uR

Dial in by Phone: 412-927-0245

Phone Conference ID: 813 854 47#

**** PRT would prefer Bid Responses to be uploaded as a single file rather than multiple files if possible.**

PORT AUTHORITY OF ALLEGHENY COUNTY d.b.a. PRT

Electronic Bids will be received online at PRT's Ebusiness website (<http://ebusiness.portauthority.org>).

Bid submittals will be due at **1:00 PM on October 12, 2026** and will be read at **1:15 PM**, the same day, through your web browser via Microsoft Teams video conferencing, for the following:

Electronic Proposal - Ebusiness website (<http://ebusiness.portauthority.org>)

	Bid Number	Bid Name
1.	B26-43	Contactless Smart Fare Media

No bidder may withdraw a submitted Proposal for a period of 75 days after the scheduled time for opening of the sealed bids.

A Pre-Bid Conference will be held on the above solicitation on **September 28, 2026**, and can be joined through your web browser via Microsoft Teams video conference. Attendance at this meeting is not mandatory but is strongly encouraged.

Teams meeting information is available within the Bid Documents for this solicitation on rideprt.org and eBusiness.rideprt.org. Potential bidders may also email the contract specialist assigned to the solicitation.

Questions regarding any of the above bids will not be entertained by PRT after 12:00 PM (noon) on October 2, 2026.

These contracts may be subject to a financial assistance contract between Port Authority of Allegheny County d.b.a. PRT and the United States Department of Transportation. The Contractor will be required to comply with all applicable Equal Employment Opportunity laws and regulations.

Contractor is responsible for expenses related to acquiring a performance bond and insurance where applicable. All items are to be FOB delivered unless otherwise specified. Costs for delivery, bond, and insurance shall be included in bidder's proposal pricing.

Port Authority of Allegheny County d.b.a. PRT hereby notifies all bidders that it will affirmatively insure that in regard to any contract entered into pursuant to this advertisement, disadvantaged business enterprise will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.

The Board of PRT reserves the right to reject any or all bids.

All awards made in excess of \$100,000.00 shall require a performance bond of 50% of the contract value. All performance bond expenses shall be the responsibility of the contract awardee. Bidders are advised to build the cost of the performance bond into the pricing of their bid.

Pittsburgh Regional Transit
Contactless Fare Media
Cards and Tickets
REVISED March 2026

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Definitions

International Organization for Standardization (ISO) – Independent, non-governmental international standard development organization composed of representatives from the national standards organizations of member countries.

International Electrotechnical Commission (IEC) – International standards organization that prepares and publishes international standards for all electrical, electronic, and related technologies, ranging from power generation, transmission and distribution, semiconductors, fiber optics, batteries, solar energy, nanotechnology, and others.

InterNational Committee for Information Technology Standards (INCITS) – the central U.S. forum dedicated to creating technology standards

American National Standards Institute (ANSI) – A private, non-profit organization that administers and coordinates the U.S. voluntary standards and conformity assessment system.

ISO 27001 – Standard for Information Security Management Systems (ISMS) and defines requirements an ISMS must meet to manage risks related to the security of data owned or handled by a company.

ISO/IEC 14443 – Defines the standards for 13.56 MHz proximity contactless smart cards (RFID/NFC) with an approximately ten-centimeter (10cm) range.

ISO/IEC 14443-1 – Defines standards for physical characteristics.

ISO/IEC 14443-2 – Defines standards for radio frequency power and signal interface(s).

ISO/IEC 14443-3 – Defines standards for initialization and anticollision.

ISO/IEC 7810-ID1 – International standard that defines the physical characteristics for identification cards. Subsection ID1 is the specific format required for this solicitation.

ISO/IEC-10373 – International standard for cards and security devices for personal identification – test methods.

ISO/IEC DIS9798-2 – Draft International Standard (DIS) specifying entity authentication mechanisms using authenticated encryption algorithms to prove an entity's identity.

ANSI INCITS 322 – Defines standardized test methods for evaluating the durability of identification (ID) cards.

1.0 INTRODUCTION

Pittsburgh Regional Transit (“PRT”) is seeking to procure contactless smart fare media. The contract duration will be two (2) years from PRT’s date of Notice to Proceed (“NTP”) with one additional option year at the sole discretion of PRT.

PRT’s Automatic Fare Collection (“AFC”) system includes fareboxes, ticket vending machines, platform validators, sales office terminals, all of which have the necessary modules to read data on the fare media. The AFC system also includes a central computer system to monitor, manage, and control the equipment and to record and report transactions and other data.

2.0 PRODUCTION REQUIREMENTS

PRT will be procuring four types of fare media. They are as follows:

Ready2Ride Cards – DesFire EV3 type Extended Use Media (“EMU”) Cards

Reference Appendix B, Images One through Four

Limited Use Die-Cut Tickets – MiFare Ultralight C

Reference Appendix B, Images Five through Ten

Limited Use Stacked – These will be MiFare Ultralight C

Reference Appendix B, Images Eleven through Twelve

Dual Chip Cards – DesFire EV3 +iCLASS Prox Cards

Reference Appendix B, Images One through Four

The supplier shall produce all fare media in a manufacturing facility that complies with ISO 27001 for security.

Upon request, the supplier shall deliver all graphics and related material in electronic and other pertinent forms used in the manufacture of the fare media to PRT’s Project Manager.

3.0 GENERAL MEDIA REQUIREMENTS

3.1 Ready2Ride Cards – DesFire EV3 EUM Cards

Mifare DESfire EV3 4K smart cards to be used for extended use.

Inventory control number, a unique combination of ten (10) fully alpha, numeric, or a mixture of alpha-numeric characters, as specified by PRT, to be printed on the front of the card (Reference Appendix B, Image One).

Verification code consisting of a three (3) digit non-sequential number printed on the card.

Each card shall be encoded with a unique tokenID, signed digitally and stored on encrypted files further protected by security keys. Masabi uses an industry standard to encrypt the data.

Masabi will provide a Comma Separated Value (“CSV”) file to the smart card manufacturer with a row for each card. The details in the CSV file will be provided as text and can be written to the card without modification.

Comply with ISO/IEC 14443-1 for Physical Characteristics and ISO/IEC 7810-ID1 size for all dimensions.

Comply with ISO/IEC 14443-2 and ISO/IEC 14443-3

Be constructed of laminated layers, with Polyvinyl chloride (“PVC”) outer surfaces, or approved equal to accommodate printing and a central layer of Polyethylene terephthalate (“PET”) plastic

When pre-printed with PRT-specified graphics, include a thin clear plastic layer laminated to the card.

Comply with most recent versions of ISO/IEC-10373 and ANSI INCITS 322 for durability.

3.2 Limited Use – Die-cut and Stacked

MiFare Ultralight C to be used for short duration passes such as day passes.

Inventory control number, a unique combination of ten (10) fully alpha, numeric, or a mixture of alpha-numeric characters, as specified by PRT, to be printed on the card. Inventory control numbers shall be unique.

Comply with ISO/IEC 7810-ID1 size for all dimensions (except thickness)

Comply with ISO/IEC 14443-2 and ISO/IEC 14443-3

Be constructed of laminated layers, with paper outer surfaces to accommodate printing and a central layer of Polyethylene terephthalate (PET) plastic.

The Unique Identifier (“UID”) to be visible without presenting any key. If possible, UID’s should be non-consecutive

Each card is to be encoded with a unique tokenID, digitally signed.

Vendor will be provided a CSV file with a row for each card. The details in the CSV file will be provided as text, and can be written to the card without modification.

Additional specification details as needed will be shared with the vendor as required.

Compatible with graphics standard printing on both sides.

Thermal coating is NOT required on the die-cut limited use ticket stock.

3.3 Dual chip cards – DesFire EV3 and Hughes Identification Devices (“HID”) +iCLASS PROX Cards

Mifare DESfire EV3 4K smart cards for extended use both for transit and electronic door access.

Inventory control number, a unique combination of ten (10) fully alpha, numeric, or a mixture of alpha-numeric characters, as specified by PRT, to be printed on the card.

Verification code consisting of a three (3) digit non sequential number printed on the card.

Each card shall be encoded with a unique tokenID, signed digitally and stored in encrypted files further protected by security keys. Masabi uses an industry standard to encrypt the data.

Masabi will provide a CSV file to the smart card manufacturer with a row for each card. The details in the CSV file will be provided as text and can be written to the card without modification.

Comply with ISO/IEC 14443-1 for Physical Characteristics and ISO/IEC 7810-ID1 size for all dimensions.

Comply with ISO/IEC 14443-2 and ISO/IEC 14443-3

Be constructed of laminated layers, with PVC outer surfaces, or approved equal to accommodate printing and a central layer of (PET) plastic

When pre-printed with PRT-specified graphics, include a thin clear plastic layer laminated to the card.

Comply with most recent versions of ISO/IEC-10373 and ANSI INCITS 322 for durability.

3.3.1 HID portion of the cards

HID GLOBAL 1386LGGMN

ISOPROX II CARD 125KHZ 26BIT

PART #1386LGGMN

FORMAT: H10301

FACILITY CODE 20

4.0 PHYSICAL CHARACTERISTICS - Smart Card Media

4.1 Physical Characteristics

Thickness: 30 mil (0.030 inches)

Thickness tolerances as specified in ISO 7810 are acceptable

Length: 3.375 inches

Width: 2.125 inches

Card Body Construction: Laminated, PVC surface layers, PET core

Surface Finish: Glossy

Color: White

Graphics Compatible with thermal transfer and dye sublimation printing

Compatible with the Protechno PT6000 and PT5500 card printing system (both sides) after preprinting

4.2 Durability and Operating / Storage Environment – ALL MEDIA

Life Expectancy Minimum three (3) years in normal use

Printing shall be readable and fare media shall operate for three (3) years (provided that maximum write cycles has not been exceeded)

4.3 Mechanical, Electrical, Chemical Stress Tolerance per ISO/IEC-10373 and ANSI INCITS 322

Temperature -20 to +50°C (-4 to +122°F) per ISO 10373

Humidity 93% at 23°C (73°F)

Surface Quality No holes

Operating Distance and Range shall comply with Mifare Specifications

Mechanical Durability - The Cards shall operate even after 5 repeated applications of 368.8 foot-pounds (ft-lbs. (500 Newtons) of Force over the entire area of the card on the “flat” side within 5 seconds. The force applied should be impact rather than gradual. For example, a heavy object “dropping” on the card.

Appearance Varieties All Cards of a given variety shall be identical in appearance, except for pre-printed serial and inventory control numbers, which shall be unique for each card

4.4 Storage Environment

Cards viable up to 5 years in storage

Temperature: Up to 30°C (86°F)

Humidity: Up to 60% (non-condensing)

4.5 Memory and Logical Features, based on Mifare® NXP Chip (MF1 IC S50)

Total Memory: 1 kilobyte

16 sectors of 4 blocks with 16 bytes each (Each block contains 16 bytes)

Application Memory 6 kilobits

16 sectors of 3 data blocks of 128 bits

Electrically Erasable Programmable Read-Only Memory (“EEPROM”)

Security Block 1 additional 128-bit system block for each sector, indicating access rights and holding two secret keys (Key A and Key B to be provided by PRT and/or third party)

Card Identification Unique Serial Number (16 digits) and other data factory programmed in first data block

Security Features Hardwired cryptographic algorithm

Mutual three pass authentication (ISO/IEC DIS9798-2) plus encrypted transmission using session key

Anti-Collision Handling of multiple cards in reader field, independent addressing of each card

4.6 Transaction Speed (no collision)

Card selection with anti-collision: 3 ms

Mutual authentication: 2 ms

Read a block: 2.5 ms

Write a block: 9 ms

Maximum Read Operations: Unlimited

Maximum Write Operations: 100,000

Operating Frequency 13.56 MHz

Power Supply: Magnetic Induction Modulation and Bit Encoding

Compliant with ISO/IEC 14443-2 / Type A (CD 03/98)

Reader to Card: 100 % Amplitude Modulation, pulse position

Card to Reader: Load Modulation, 847 kHz subcarrier

OOK, Manchester coding

Communication Speed 106 kBaud

Communication Integrity Cyclic Redundancy Check ("CRC") 16 and Parity Bit

4.4 STACKED ULTRALIGHT TICKETS

The size of a Limited Use Ticket ("LUM") ticket is 54 mm x 85.6 mm (2.12" x 3.375")

Reference Appendix B, Image Thirteen.

LUM Cardstock- QTY: 2,000

Fanfold box of 1,000 (2 tickets per fold) FVM can hold 2 boxes per machine

5.0 CARD VARIETIES AND QUANTITIES

Fare media shall be supplied in the quantities and varieties stated in Appendix A. PRT reserves the right to order additional/different quantities of each card type. Quantities ordered will not exceed the aggregate total for any year.

6.0 PRE-PRINTED GRAPHICS

Pre-printed graphics on the front of the Card media shall be four color process Cyan, Magenta, Yellow, and Key (Black) ("CMYK") over 1 color K, full bleed Printing on the back shall be in one color.

All pre-printed graphics shall be protected by a clear overlay that covers the entire surface of the card.

PRT will supply designs for all pre-printed graphics in electronic form within ten days of NTP. Within thirty (30) days of receipt of PRT's graphic designs, the supplier shall supply at least ten proof samples of each card type identified in Section 2 of this specification for PRT review and

approval prior to commencing full production. Proof samples need not be functioning smart cards, but shall include samples of printed serial numbers and all other printed information.

PRT will approve or reject the proof samples within fourteen (14) calendar days of receipt. For each proof sample PRT rejects, the supplier shall provide at least ten corrected proof samples within fourteen (14) calendar days of notification of rejection.

7.0 SERIALIZATION

Each Ready2Ride card shall have a unique serial number pre-encoded on the embedded chip. These serial numbers shall be unalterable. Additionally, each Card shall have a unique, sequential inventory control number assigned to it at the time of manufacture. All inventory controls shall be unique across all forms of fare media.

All Cards, even those that are otherwise blank, shall have the serial and inventory control numbers laser etched or printed (under the clear laminate) on one side. The printed serial number shall consist of the entire serial number, plus a PRT-specified card type indicator. The inventory control number shall accommodate numbers eight digits long.

Within ten (10) days after NTP, PRT will supply the supplier with the starting number for the inventory control number and the card type identifier for all card types.

Also, within ten (10) days of NTP, PRT will supply the supplier with an electronic file containing the serial numbers of all Cards in circulation and in inventory. No Card supplied under this Contract shall have a serial number in which the last ten (10) digits are identical to those of a Card already in circulation or inventory.

8.0 ENCODING

The supplier shall encode all fare media with PRT-specific sensitive data, including the encryption keys (see Section 10). PRT or our fare collection system vendor (Masabi LLC) will supply the encoding data and format to the selected supplier within thirty (30) days of the NTP.

9.0 ENCRYPTION KEYS

PRT's encryption keys are defined and in place on fare media in circulation. The supplier and PRT shall jointly develop the procedures by which PRT will securely convey its encryption keys and other sensitive fare media data related to the to the supplier.

10.0 PROTECTION OF PRT-SPECIFIC SENSITIVE DATA

PRT-specific sensitive data includes:

- Card/Ticket data encoding format and definitions

- Card encoded data and field values

- PRT encryption keys

Prior to receipt of any PRT-specific sensitive data, the supplier shall execute a separate, binding, non-disclosure agreement.

The supplier shall treat all PRT-specific sensitive data with the utmost care and security. Under no circumstances shall the supplier release, share, or expose PRT specific sensitive data without the express written consent of PRT's specified designee.

The supplier shall be liable for all PRT costs to replace all PRT smart media in circulation and inventory if the supplier, through negligence or deliberate action, causes unauthorized release of some or all of PRT-specific sensitive data; affected media may include products provided by others.

11.0 QUALITY CONTROL AND DEFECTS

The supplier shall verify proper functioning of every Card/ticket after manufacture and before delivery to PRT.

Defective media identified at time of manufacture shall be replaced prior to delivery, and all inventory control sequence numbers shall be retained as sequential – there shall be no gaps in the inventory control sequence number.

It is understood that latent defects can occur subsequent to manufacture; however, at least 99.95% of delivered fare media shall function properly when first presented to an AFC system read/write device. The supplier shall replace all media that fail to function upon first use at no additional cost.

If the first-use failure rate exceeds 0.05%, PRT may, at its discretion, reject the batch, and the supplier shall replace the entire batch at no additional cost.

Over the expected useful life of the media, additional failures are expected; however, failures that occur prior to the expected useful life due to reasons other than abuse shall not exceed 1% of distributed fare media.

12.0 SAMPLES

Bidder shall provide ten (10) sample(s) of each type of fare media as detailed in Section 2.0 to PRT no later than seven (7) calendar days after the request date by PRT. Cost for providing samples and delivery shall be borne by the Bidder.

Samples shall comply with this Specification in its entirety, including but not limited to any special requirements that are specified. All items shall be a current and standard product of an established manufacturer.

Samples will be field tested and compared to current products already in use by PRT. Proposed products' performances shall meet or exceed that of the compared product(s).

In this process, PRT will provide the encryption keys and any additional information deemed necessary by our fare collection vendors to produce the aforementioned various fare media to the apparent low bidder. PRT can, upon request, provide known working samples from our own inventory that the bidder can read as an example of the expected fare media encoding and functionality. Samples from the bidder shall be fully working samples and be capable of providing all fare instruments detailed within this specification as if in PRT's retail sales environment. PRT will test the samples in its ticket vending machines and evaluate the samples to the following minimum criteria:

- Capability to provide the PRT's graphics on the fare instrument
- Visual inspection of fare media
- Feeding through the machine without jams
- Fare is transferred from the card to the fare box (when used)

PRT will have sole discretion to determine whether such material(s) is satisfactory and acceptable.

13.0 BIDDER QUALIFICATIONS

The Bidder shall provide with their Bid, documentation demonstrating a minimum of five (5) years of experience in manufacturing similar Contactless Smart Fare Media for large account businesses, government agencies, or non-profit organizations. Please include three (3) references with Bid submittal.

14.0 DELIVERIES

Deliveries of fare media shall be made under controlled conditions, with the cards packaged in bundles of two hundred (200). The packaging for each bundle shall be sequentially numbered and bar-coded. Supplier shall seal individual boxes with reinforced security tape or alternative measure subject to approval by PRT. Supplier shall weigh each box individually to at least a hundredth of a pound to guarantee proper quantity, and affix a label from the scale to the side of the box (NOT the top) and shrink wrap the boxes. Shrink wrapped box(es) should be packaged into cartons for shipping. Cartons must be firmly secured with reinforced tape on all seams to ensure that the contents have not been tampered with in route. Each shipping carton shall be secured with tamper proof security tape pre-printed with the supplier's name in such a way as to make it obvious if an attempt had been made to open the carton prior to receipt at Pittsburgh Regional Transit.

Stacked or folded limited use tickets shall be packaged as two stacks of one thousand (1,000) tickets, folded two tickets to a fold (see section 4.1).

All deliveries shall be F.O.B. Destination delivered to the following address during the hours of 8:30a.m. to 2:30 p.m. Monday through Friday:

Pittsburgh Regional Transit
Joe Maritato, Cash Management Department
2235 Beaver Avenue
Pittsburgh, PA 15233-1080

Our loading dock is located on Island Avenue between Beaver and Preble Avenues.

PRT may, at its discretion, request delivery of the contracted quantity of each type of fare media in discrete batches. Each batch will contain at least ten thousand (10,000) units. The supplier shall deliver the initial batch of fare media within twelve (12) weeks of approval of the trial samples and receipt of all PRT-specific sensitive data. The supplier shall deliver subsequent batches of media within thirty (30) days after receiving PRT's order.

Until the contracted quantities are delivered, the supplier shall store at least one batch of each media type for future deliveries (e.g., produced/encoded Ready2Ride cards) and ship to PRT this stored inventory within five days of notice by PRT.

For each batch, the supplier shall provide an electronic file, in CSV format, containing the inventory control numbers and associated serial numbers of all fare media in each bundle, for all bundles in the batch. All files shall contain no more than twenty-five thousand (25,000) rows of data.

PRT has the right to place an order for at least one batch up to the expiration of the contract. Supplier shall be expected to perform and deliver any quantities ordered on a purchase order dated prior to the expiration of the agreement. For example, if the agreement expires on November 1, 2028, and PRT provides a purchase order on October 31, 2028, supplier shall be expected to deliver the quantities ordered regardless of any questions as to samples, serialization, or artwork. The purchase order date shall be considered the order date.

Any order outside of the continental United States must be shipped via air transport rather than via sea, and order must be FOB Destination.

15.0 INVOICES

Invoices shall be sent to:

Pittsburgh Regional Transit
Tia Gunn, Finance
345 Sixth Avenue, Floor 3
Pittsburgh, PA 15222-2527

16.0 PRODUCTION AND STORAGE SECURITY

The supplier shall maintain security during the manufacture, production, and storage of fare media and maintain full compliance with ISO 27001 security measures.

The supplier shall also:

- Track all materials used in the production of the fare media. The cards shall be manufactured in a secured area, accessible only to personnel involved in the manufacturing and handling of the cards. An accountability log shall be kept at all times during production, packaging and delivery of the cards.

- With delivery of each batch, the supplier must submit to PRT's Project Manager a certified record of the fare media produced on a form registered by the production equipment at the end of each production run. The fare media shall be packed under the supervision of responsible personnel and kept in a secure location prior to shipment. Each package/bundle of fare media shall be clearly labeled with sufficient information (such as shift file name, batch number, product information, card expiration date, and a packing slip of all card serial numbers in the box) to be readily put into the PRT's inventory.

- Dispose of all scrap and rejected fare media so that they are rendered unusable. The supplier shall also provide a certified record of disposal to PRT's Project Manager after disposal of the defective cards at the time of delivery of each batch.

Deliver all surplus cards and tickets generated during production (separately) to PRT's Project Manager when requested by PRT.

17.0 PRT ACCEPTANCE TESTING

All delivered fare media shall be subject to acceptance testing by PRT's Project Manager. The PRT Project Manager or designee shall sample bundles of delivered cards and tickets and verify that the fare media works with the AFC system.

If media is found defective during this testing or not in compliance with any aspect of the requirements in the Contract, then PRT, at its discretion, may reject the entire batch and return it to the supplier for replacement. In such case, the supplier shall deliver replacement fare media in no more than four (4) weeks from time of notification.

18.0 REPLACEMENT MEDIA

The supplier shall replace any first-use defective cards or tickets found in a batch, at no additional cost to PRT. The replacement fare media shall be included in the subsequent batch order.

For the final batch, the supplier shall provide additional cards representing the cumulative first-use defect rate from the previous batches. For example, if all previous batches had a cumulative first-use defect rate of 0.04%, then the final batch shall contain: the ordered amount, the replaced defective cards from the previous batch, plus 0.04% of the final batch order (e.g., cumulative; if the failure rate of ten (10) orders (ten orders of 10,000 units), defect rate of 0.04%, final batch will require an additional 4,000 cards to replace the defected media).

If premature failures (those that occur prior to the expected useful life and are due to reasons other than abuse) exceed the allowed rate, the supplier shall provide replacement fare media for all premature failures.

19.0 DESTRUCTION

Supplier shall keep records of serial numbers and quantities of any and all cards and tickets produced for PRT that are destroyed for any reason. Supplier shall offer a minimum of 12 months for record retention. Destruction shall be conducted in a manner approved in writing by PRT and it shall alter the physical properties of the fare media in such a manner as to render them unusable. A copy of the destruction records shall be provided to PRT's Project Manager within three (3) days of destruction.

20.0 APPENDICES

A. - Ticket Quantities.

B. - Example Drawing

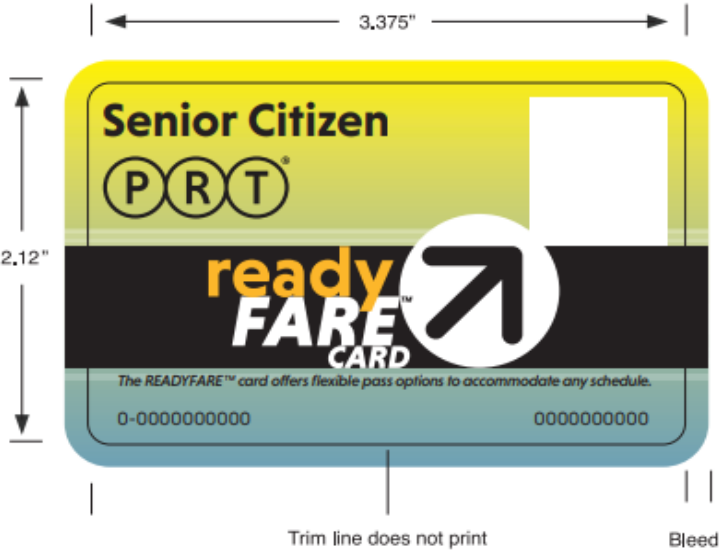
Appendix A

Year One (1)				
Card Type	Front Print	Rear Print	Quantity	Term
Full Fare Cards	Standard Ready2Ride	Full Terms and Conditions	250,000	Year 1
Senior Cards	Reduced Fare Senior Design	Modified Terms and Conditions	50,000	Year 1
Limited Use Die-Cut Tickets – MiFare UltraLight C	Day Pass, Three (3) Hour Full Fare, or Three (3) Hour Half Fare	Full Terms and Conditions OR Modified Terms and Conditions	300,000	Year 1
Limited Use – Stacked	Ready Fare LUM Template	Full Terms and Conditions	300,000	Year 1
Dual Chip	Blank	Blank	5,000	Year 1

Year Two (2)				
Card Type	Front Print	Rear Print	Quantity	Term
Full Fare Cards	Standard Ready2Ride	Full Terms and Conditions	200,000	Year 2
Senior Cards	Reduced Fare Senior Design	Modified Terms and Conditions	50,000	Year 2
Limited Use Die-Cut Tickets – MiFare UltraLight C	Day Pass, Three (3) Hour Full Fare, or Three (3) Hour Half Fare	Full Terms and Conditions OR Modified Terms and Conditions	300,000	Year 2
Limited Use – Stacked	Ready Fare LUM Template	Full Terms and Conditions	300,000	Year 2
Dual Chip	Blank	Blank	5,000	Year 2

Appendix B
Senior cards

Image One



Front

Image Two

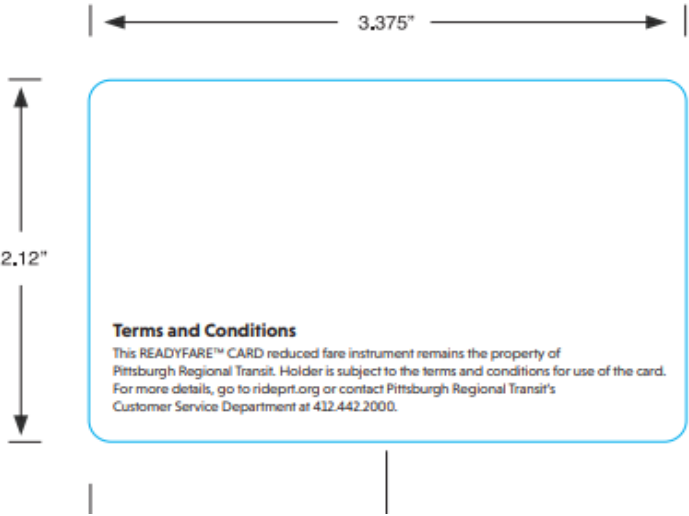
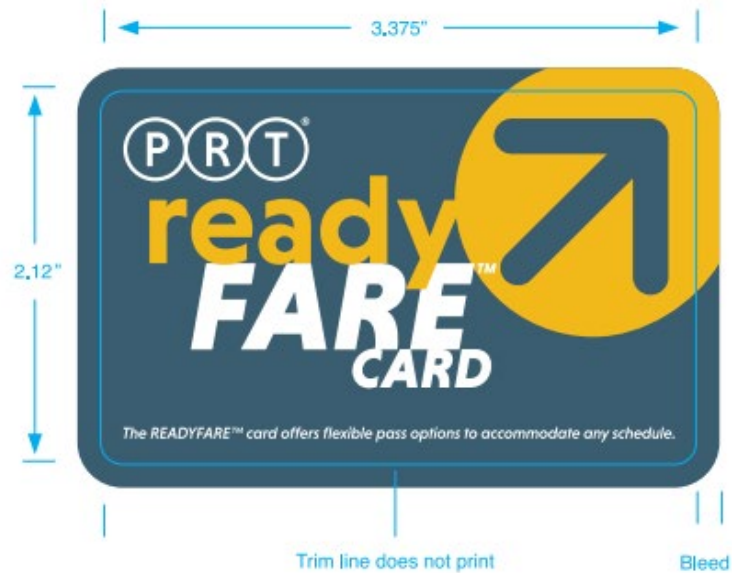
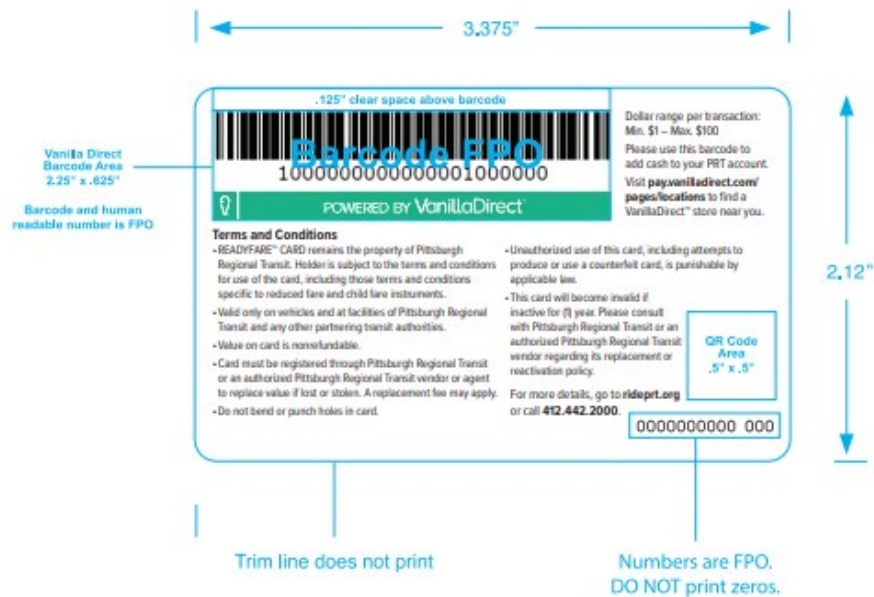


Image Three



Front



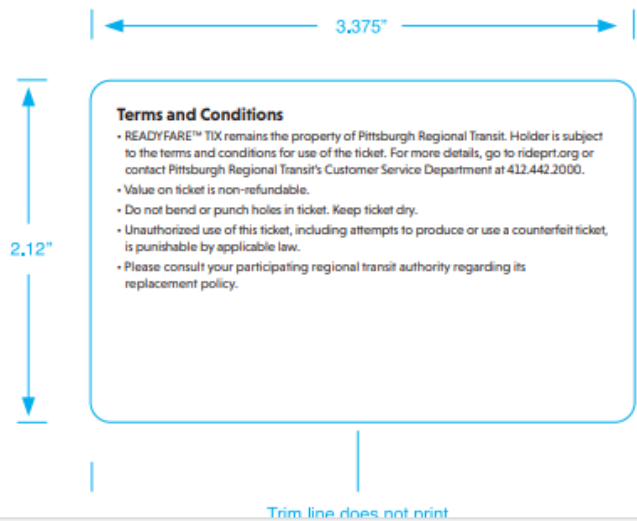
Ready Fare Tix 1 Day Pass

Image Five



Front

Image Six



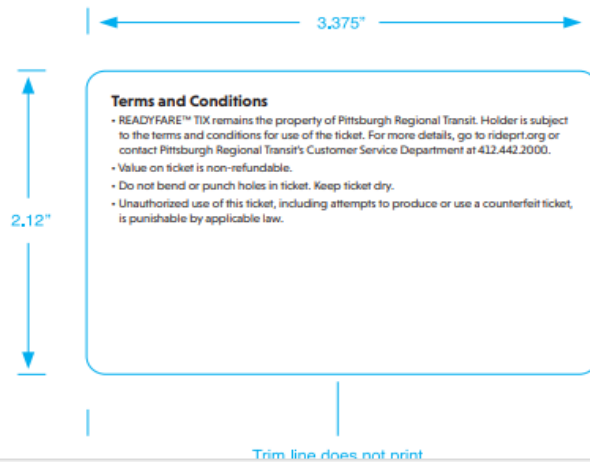
Ready Fare Tix 3 Hour Pass

Image Seven



Front

Image Eight



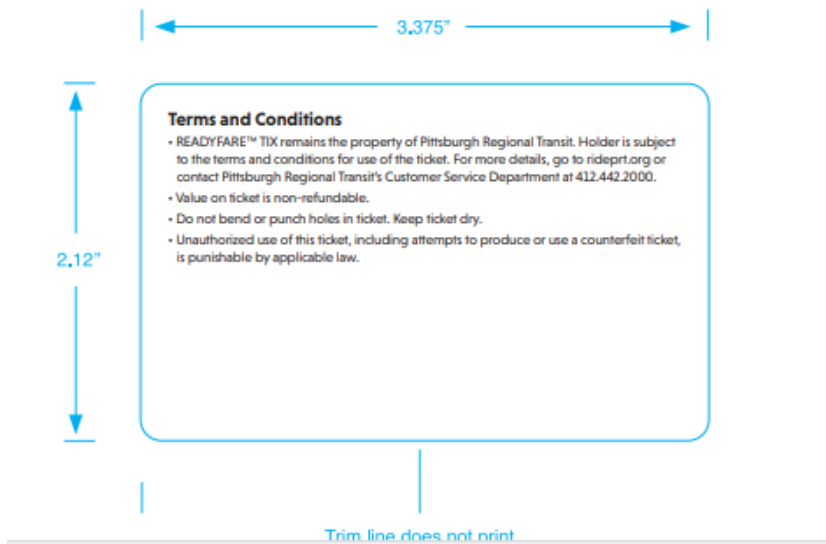
Ready Fare Tix 3 Hour Pass

Image Nine



Front

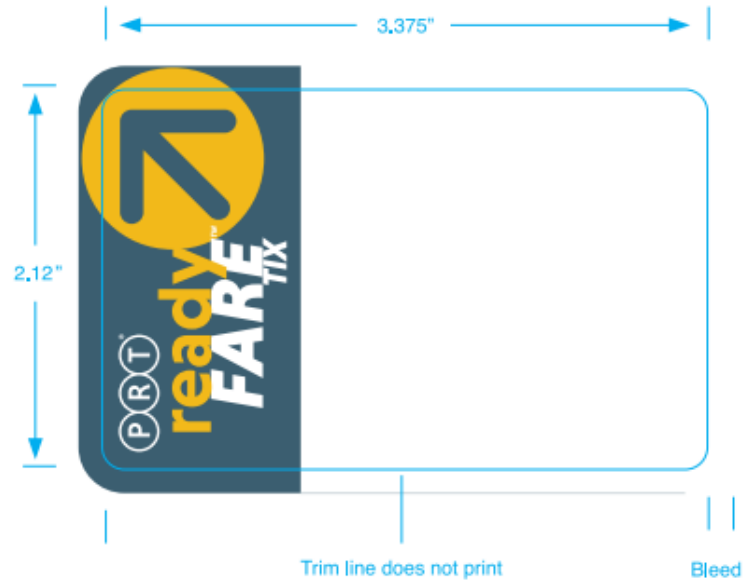
Image Ten



Limited Use STACKED

Ready Fare Tix

Image Eleven



Front

Image Twelve

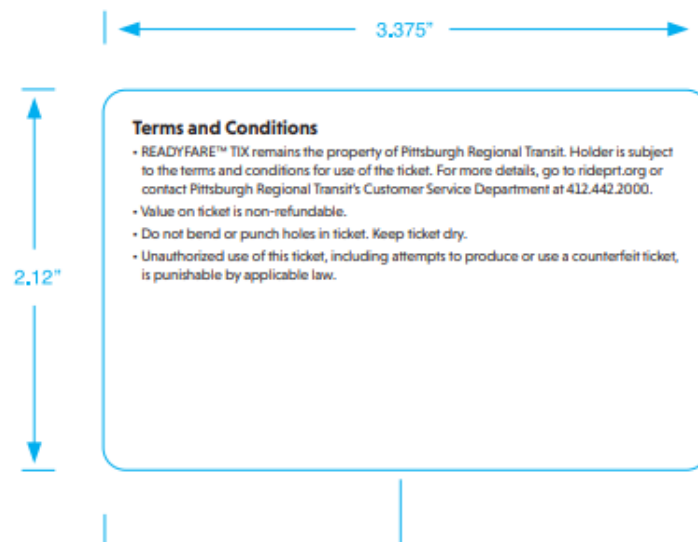
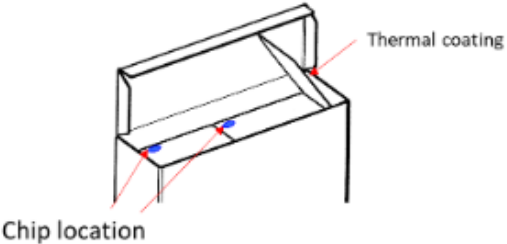
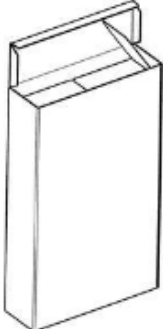


Image Thirteen

Box - 2 tickets across Estimated ticket quantity: 1000 <u>Box Dimension</u> Width : 65mm/2.5in max Length : 179mm/7.05in max Height : 300mm/11.81in max Ticket height in the box: 225mm 8.86in max	 Thermal coating Chip location	
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Insurance

General. Contractor shall procure, and cause any subcontractors to procure, before the Contract Services are commenced hereunder, and maintain at its own cost and expense, during the entire period of the performance under this Agreement, the types and amounts of insurance listed in this Section with insurance companies authorized to operate in Pennsylvania and with insurance companies having a minimum A- rating as then stated by A.M. Best. Limits shall be primary and non contributory. Evidence of coverage shall be provided on an annual basis and/or upon request of Port Authority of Allegheny County d/b/a Pittsburgh Regional Transit.

Limits may be satisfied by any combination of primary and excess or umbrella per occurrence policies. In the event that the required limits must be satisfied by any combination of primary and excess or umbrella the policies shall provide drop down coverage and provide at least as broad of coverage as the underlying policies.

Worker's Compensation and Employer's Liability.

(a) Workers' Compensation - Statutory Limits

(b) Employer's Liability in an amount not less than:

\$500,000 Each Accident
\$500,000 Disease - Policy Limit
\$500,000 Disease - Each Employee

Note:

- (i) Coverage shall be provided in accordance with the laws of the Commonwealth of Pennsylvania and the laws of such other jurisdictions as may apply.
- (ii) The Contractor shall require, and hereby certifies, that each of its Subcontractors maintains Workers' Compensation Insurance in accordance herewith, and shall provide to PRT written evidence of such coverage then in effect for each Subcontractor upon PRT's request.

Commercial General Liability.

In an amount not less than:

\$4,000,000 General Aggregate
\$4,000,000 Products – Completed Operations Aggregate
\$2,000,000 Personal and Advertising Injury
\$2,000,000 Each Occurrence

Notes:

- (i) Contractor shall maintain such Products and Completed Operations liability coverage for at least (1) year after final payment.
- (ii) Contractual exclusion shall be deleted from Personal and Advertising Liability coverage section.

(ii) Policy shall provide that “Port Authority of Allegheny County d/b/a Pittsburgh Regional Transit” be named as an Additional Insured for Contractor's full limits of coverage on a primary and non-contributory basis, but in no case less than the limits specified. Policy shall be endorsed with a waiver of subrogation clause with respect to Port Authority of Allegheny County d/b/a Pittsburgh Regional Transit, and neither Contractor nor its insurer shall have any claim against Port Authority of Allegheny County d/b/a Pittsburgh Regional Transit to the extent the claim is or should have been covered by insurance.

Business Automobile Liability.

With a Combined Single Limit not less than:

\$1,000,000 Each Accident

Notes:

(i) Policy shall cover the use of all owned, hired and non-owned vehicles.

(ii) Policy shall provide that “Port Authority of Allegheny County d/b/a Pittsburgh Regional Transit” be named as an additional insured for Contractor’s full limits of coverage on a primary and non-contributory basis, but in no case less than the limits specified. Policy shall be endorsed with a waiver of subrogation clause with respect to Port Authority of Allegheny County d/b/a Pittsburgh Regional Transit, and neither Contractor nor its insurer shall have any claim against Port Authority of Allegheny County d/b/a Pittsburgh Regional Transit to the extent the claim is or should have been covered by insurance.

Technology Errors & Omissions Insurance

In an amount not less than:

\$2,000,000 Each Claim

Notes:

(i) The Policy shall provide coverage for loss or disclosure of electronic data, media and content rights, infringement and liability, network security failure, copyrights infringement and bodily injury and property damage due to the failure of the products or services.

(ii) The Policy retroactive date shall be effective to the date of this Contract and the extended reporting period or policy renewal must provide that the Policy shall respond to claims made for at least twenty-four (24) months after final completion of the Contract Services.

Cyber Liability

In an amount not less than:

\$2,000,000 Each Claim

Notes:

- (i) The policy shall expressly provide, but not be limited to, coverage for the following: the unauthorized use/access of a computer system; the defense of any regulatory action involving a breach of privacy; failure to protect confidential information (personal and commercial information) from disclosure; notification costs, whether or not required by statute; network security liability; defense costs; and privacy liability.

Approval. Contractor shall not commence work under this Agreement until it has forwarded to Port Authority of Allegheny County d/b/a Pittsburgh Regional Transit, for review and approval, certificate(s) of the insurance required. Port Authority of Allegheny County d/b/a Pittsburgh Regional Transit shall be given a minimum of 30 days' notice in the event of change or cancellation of any of the insurance required. The fact that Contractor has obtained the insurance required in this Agreement shall in no manner lessen nor affect Contractor's other obligations set forth in any provision of this Agreement. The policies of insurance referenced above are not to contain any deductible or self insured retention, as applicable to PRT as an additional insured. In the event the insurance policies purchased by Contractor pursuant to the above insurance requirements contain any deductible or self insured retention provisions, Contractor shall provide PRT with disclosure of said deductible or self insurance retention prior to execution of the Contract, which will be subject to PRT approval. If PRT approves any insurance policy that includes a deductible or self insured retention, Contractor shall be responsible for payment of any and all deductibles or self insured retentions, whether owing from the named insured or PRT as an additional insured, applicable to the policies of insurance referenced above

Indemnification. Contractor, for itself, its officers, members, employees, agents, consultants, contractors, subcontractors, and its successors and assigns, shall indemnify (including but not limited to indemnification for costs of defense), and hold harmless Port Authority of Allegheny County d/b/a Pittsburgh Regional Transit, its officers, members, employees, agents, consultants, contractors, subcontractors and its successors and assigns, from and against any losses, costs, liability or damage, and attorney's fees, including but not limited to claims for property damage, bodily injury or wrongful death, claimed against, suffered by, or incurred by Port Authority of Allegheny County d/b/a Pittsburgh Regional Transit, its officers, members, employees, agents, consultants, contractors, subcontractors and its successors and assigns, as a result of or arising in connection with and to the extent of Contractor's performance of the Project or otherwise relating to Contractor's use of Port Authority of Allegheny County d/b/a Pittsburgh Regional Transit property pursuant to this Agreement. This indemnification provision further applies to any claims brought by any employee, subcontractor, or employee of a subcontractor of Contractor against Port Authority of Allegheny County d/b/a Pittsburgh Regional Transit, and Contractor expressly waives protections afforded under the Pennsylvania Workers' Compensation Act as is necessary to comply with its responsibilities under this indemnity provision.

Certificate Holder.

Port Authority of Allegheny County d/b/a Pittsburgh Regional Transit, 345 Sixth Avenue,
Pittsburgh, PA 15222

SAMPLE AGREEMENT

THIS AGREEMENT made this [Date], by and between PORT AUTHORITY OF ALLEGHENY COUNTY d.b.a. Pittsburgh Regional Transit ("PRT"), a body corporate and politic organized and existing under the laws of the Commonwealth of Pennsylvania and having its principal office in the City of Pittsburgh, Allegheny County, Pennsylvania, hereinafter called "PRT", and [Contractor's Name], with principal office at [Contractor's Address], hereinafter called "Contractor".

WHEREAS, Contractor submitted to the PRT a proposal to furnish certain item or items for the prices specified, and said proposal was accepted by PRT.

NOW, THEREFORE, Contractor and PRT agree as follows:

1. Contractor shall furnish the following when ordered at the prices shown:

[SAMPLE]

2. The Contract Documents are made a part hereof with like force and effect as though recited herein at length and are comprised of the following:

- (a) Invitation for Proposals
- (b) Proposal
- (c) Certification
- (d) Specification
- (e) Conditions and Instructions to Bidders
- (f) All addenda issued prior to the time of opening Proposals
- (g) Insurance [if required]

3. PRT, upon delivery of above equipment, parts, materials and/or supplies in accordance with this Agreement and the Contract Documents, and upon submission of invoices, shall pay the current amounts due for current deliveries under this Agreement.

PORT AUTHORITY OF ALLEGHENY COUNTY d.b.a. PRT

By _____

CONTRACTOR

(Company Name)

By _____
(Signature and Title)

SAMPLE PERFORMANCE BOND

(FOR CONTRACTS TOTALING \$100,000 AND OVER)

KNOW ALL MEN BY THESE PRESENTS, That we, _____,
_____, as PRINCIPAL, and _____,
_____, as SURETY, are held and firmly bound
unto Port Authority of Allegheny County d.b.a. PRT, hereinafter called PRT, in the sum of
_____ DOLLARS (\$ _____), said
sum being at least 50% of the contract price, for the payment of which sum well and truly to be made, we
bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these
presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the Principal entered into a
certain contract, hereto attached, with PRT, dated [Date], for:

[SAMPLE]

NOW, THEREFORE, if the Principal shall well and truly perform and fulfill all the undertakings,
covenants, terms, conditions and agreements of said contract during the original term of said contract and
any extensions thereof that may be granted by PRT, with or without notice to the Surety, and during the
life of any guaranty required under the contract, and shall also well and truly perform and fulfill all the
undertakings, covenants, terms, conditions and agreements of any and all duly authorized modifications
of said contract that may hereafter be made, then Principal and Surety shall have no further obligation to
PRT under the contract, otherwise this obligation shall remain in full force and effect.

IN WITNESS WHEREOF, the above bound parties have executed this instrument this
_____ day of _____, 20____, the name of each corporate party being hereto
affixed and these presents duly signed by its undersigned representatives, pursuant to authority of its
governing body.

[SAMPLE]

[SAMPLE]

[SAMPLE]

[SAMPLE]

[SAMPLE]

PRINCIPAL

(IF A SOLE PROPRIETOR)

(Name of Company)

(Handwritten Signature of Owner)

(IF A PARTNERSHIP)

(Name of Owner - TYPED)

(Name of Company)

(Handwritten Signature of General Partner)

(Name of General Partner - TYPED)

(IF A CORPORATION)

(Name of Corporation)

by _____
(Handwritten Signature)

(Name and Title - TYPED)

[SAMPLE]

[SAMPLE]

[SAMPLE]

[SAMPLE]

[SAMPLE]

SURETY

WITNESS:

(Handwritten Signature)

(Corporate Surety Company Name)

(Title)

(Business Address)

by _____
(Handwritten Signature)

(Name and Title - TYPED)