MONROE COUNTY
NEW YORK

ADDENDUM No. 3 to SPECIFICATIONS AND RELATED DOCUMENTS

FOR

CONSTRUCT TAXIWAY P FROM TAXIWAY F TO THE RUNWAY 10-28 THRESHOLD

DATE: JULY 12, 2012
FAA AIP No. 3-36-0102-78-12
NYSDOT PIN 4908.81

TO ALL BIDDERS:

The following constitutes ADDENDUM NO. 3 of the Contract Documents. Each Bidder shall acknowledge receipt of this addendum on Page P-4 of the PROPOSAL.

All Revisions to the Drawings called for in this Addendum shall be reflected in the construction drawings issued to the successful bidder at the project Pre-Construction meeting.

Sheets ADD3-1 thru ADD3-2, Proposal ADD3-P-10 thru ADD3-P-22, ADD3-586-1 thru ADD3-586-4 and ADD3-P-620-5 thru ADD3-P-620-8.

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CONTRACT DRAWINGS:

A. Revisions to the Drawings

1. **Maintenance and Protection of Traffic Notes and Details (MPT-1)** Note 12 will be revised to read:
   12. Before Re-Striping Permanent Markings the White and Yellow temporary Striping that requires removal shall be eradicated under item P-620-5.4

2. **Maintenance and Protection of Traffic Notes and Details (MPT-2)** All White or Yellow temporary markings shown on this sheet that require removal for the installation of permanent markings shall be removed by high pressure hydro blasting per section 620-3.5 of the specifications, all costs shall be included in Item P-620-5.4.

B. Revisions to the Specifications

1. **Proposal:** Replace pages P-10 through P-22(including ADD2-10 and ADD2-20) with pages ADD3-P-10 through ADD3-P-22.

2. **Add Specification 586 MISCELLANEOUS STRUCTURAL RECONSTRUCTION pages ADD3-586-1 through ADD3-586-4.**

3. **Specification P-620 RUNWAY AND TAXIWAY PAINTING: Replace pages P-620-5 through P-620-8** with ADD3-P-620-5 through ADD3-P-620-8

B. Clarifications

1. **Item 586.01 Drill and Grout Reinforcing Bars** was add to the Proposal.

2. **Item P620-5.4 Eradicate Existing Pavement Marking** was add to the Proposal.

GREATER ROCHESTER INTERNATIONAL AIRPORT
CONSTRUCT TAXIWAY 'P' FROM TAXIWAY 'F' TO THE RUNWAY 28 THRESHOLD
BID SUMMARY FORM

ITEM NUMBER	ESTIMATE OF QUANTITIES	ITEMS WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT BID PRICE		AMOUNT OF BID	
			DOLLARS	CENTS	DOLLARS	CENTS
586.01	**280**	**DRILL AND GROUT REINFORCING BARS** FOR: _____ _____ Per **LF**				
604.07C	3	ALTERING DRAINAGE STRUCTURES, CORE HOLE FOR PIPE FOR: _____ _____ Per EA				
625.01	1	SURVEY AND STAKEOUT FOR: _____ _____ Per LS				
637.11	5	ENGINEER'S OFFICE - TYPE 1 FOR: _____ _____ Per MONTH				
D-701-5.1-1205	34	REINFORCED CONCRETE PIPE - 12" DIAMETER - CLASS V FOR: _____ _____ Per LF				

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			DOLLARS	CENTS	DOLLARS	CENTS
D-705-5.106P	2,200	6" PERFORATED CORRUGATED HDPE UNDERDRAIN PIPE FOR: _____ _____ Per LF				
D-710-6.1	9,350	GEOTEXTILE UNDERCUT FABRIC FOR: _____ _____ Per SY				
D-751-5.2A	1	CATCH BASIN 3'X3.5' FOR: _____ _____ Per EA				
D-751-5.2B	1	MANHOLE - 10' DIAMETER FOR: _____ _____ Per EA				
L-108-5.1	2,675	CABLE TRENCHING FOR: _____ _____ Per LF				

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			DOLLARS	CENTS	DOLLARS	CENTS
L-108-5.1A	2,675	CABLE TRENCHING FOR COUNTERPOISE FOR: _____ _____ Per LF				
L-108-5.2	5,400	1/C #8 5KV TYPE C CABLE IN TRENCH OR NEW DUCT FOR: _____ _____ Per LF				
L-108-5.3	3,900	#6 BARE COUNTERPOISE WIRE, INSTALLED IN TRENCH OR IN DUCT FOR: _____ _____ Per LF				
L-108-5.4	165	2/C #8 W/GND THWN/THHN 600V CABLE FOR: _____ _____ Per LF				
L-108-6.2	2,800	INSTALL (6) STRAND CORING ALTOS ALL-DIELECTRIC FIBER OPTIC COMM. CABLE FOR: _____ _____ Per LF				

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			DOLLARS	CENTS	DOLLARS	CENTS
L-110-5.2	2,630	2-INCH DIAMETER PVC CONDUIT, TYPE 1 FOR: _____ _____ Per LF				
L-110-5.2L	220	LOWER EXISTING 2" RIGID GALVANIZED STEEL CONDUIT FOR: _____ _____ Per LF				
L-110-5.2R	25	RGS CONDUIT, 2 INCH DIAMETER FOR: _____ _____ Per LF				
L-110-5.31	50	CONCRETE DUCT BANK ENCASEMENT FOR: _____ _____ Per LF				
L-110-5.32T	30	3" X 2-WAY ELECTRICAL DUCT BANK, IN TURF FOR: _____ _____ Per LF				

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			DOLLARS	CENTS	DOLLARS	CENTS
L-110-5.4L	220	LOWER EXISTING 4" RIGID GALVANIZED STEEL CONDUIT FOR: _____ _____ Per LF				
L-110-5.42	110	TWO-WAY 4" CONCRETE ENCASED ELECTRICAL DUCT BANK FOR: _____ _____ Per LF				
L-114-6.22	335	DIRECTIONAL DRILL (1) 2" HDPE SDR-11 DUCT FOR: _____ _____ Per LF				
L-115-5.1	4	4' SQUARE ELECTRICAL MANHOLE FOR: _____ _____ Per EA				
L-115-5.2	5	2' DIA., FOUR-WAY 2" ELECTRICAL JUNCTION STRUCTURE W/ COVER FOR: _____ _____ Per EA				

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			DOLLARS	CENTS	DOLLARS	CENTS
L-125-5.1	5	REMOVE EXISTING LIGHT AND BASE FOR: _____ _____ Per EA				
L-125-5.2	40	NEW MEDIUM INTENSITY LED TAXIWAY EDGE LIGHT ON NEW BASE FOR: _____ _____ Per EA				
L-125-5.3E	14	NEW MEDIUM INTENSITY LED TAXIWAY EDGE LIGHT, INSTALLED ON EXISTING BASE FOR: _____ _____ Per EA				
L-130-2.010	18	NEW SIGN LEGEND PANEL WITH TEXT - SIZE 2 FOR: _____ _____ Per EA				
L-130-2.011	8	NEW SIGN LEGEND PANEL, BLANK - SIZE 2 FOR: _____ _____ Per EA				

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			DOLLARS	CENTS	DOLLARS	CENTS
L-130-6.1	3	REMOVE AND DISPOSE OF SIGN AND BASE FOR: _____ _____ Per EA				
L-130-6.1213A	1	INSTALL NEW SIZE 2, 1 MODULE, DOUBLE-FACED, STYLE 3 LED SIGN ON NEW BASE FOR: _____ _____ Per EA				
L-130-6.1223A	1	INSTALL NEW SIZE 2, 2 MODULE, DOUBLE-FACED, STYLE 3 LED SIGN ON NEW BASE FOR: _____ _____ Per EA				
L-130-6.1233A	2	INSTALL NEW SIZE 2, 3 MODULE, DOUBLE-FACED, STYLE 3 LED SIGN ON NEW BASE FOR: _____ _____ Per EA				
L-130-6.1243A	1	INSTALL NEW SIZE 2, 4 MODULE, DOUBLE-FACED, STYLE 3 LED SIGN ON NEW BASE FOR: _____ _____ Per EA				

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			DOLLARS	CENTS	DOLLARS	CENTS
L-130-6.2B	1	INSTALL DOUBLE-SIDED TRAFFIC SIGN AND BASE FOR: _____ _____ Per EA				
L-300-5.2	1	INSTALL SECURITY CAMERA FOR: _____ _____ Per LS				
L-853-6.1	12	RETROREFLECTIVE SNOW PLOW MARKER (IN TURF) FOR: _____ _____ Per EA				
P-101-5.1A	525	ASPHALT PAVEMENT EXCAVATION, REMOVED OFF SITE FOR: _____ _____ Per SY				
P-101-5.5B	360	MISCELLANEOUS COLD MILLING FOR: _____ _____ Per SY				

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			DOLLARS	CENTS	DOLLARS	CENTS
P-101-5.6	325	SAWCUTTING ASPHALT AND CONCRETE PAVEMENT FOR: _____ _____ Per LF				
P-152-4.1	15,800	UNCLASSIFIED EXCAVATION FOR: _____ _____ Per CY				
P-152-4.4	650	EMBANKMENT IN PLACE FOR: _____ _____ Per CY				
P-152-4.4A	5,266	DISPOSAL OFF-SITE FOR: _____ _____ Per CY				
P-152-4.4B	5,300	EMBANKMENT AT ALTERNATIVE AIRPORT SITE FOR: _____ _____ Per CY				

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			DOLLARS	CENTS	DOLLARS	CENTS
P-152-4.4C	4,907	DISPOSAL OF SOLID WASTE FOR: _____ _____ Per TON				
P-156-5.1	1,700	TEMPORARY SLOPE DRAINS FOR: _____ _____ Per LF				
P-209-5.1	5,300	CRUSHED AGGREGATE BASE COURSE FOR: _____ _____ Per CY				
P-219-5.1	700	RECYCLED CONCRETE AGGREGATE BASE COURSE FOR: _____ _____ Per CY				
P-401B-8.1A	685	BITUMINOUS BASE COURSE FOR: _____ _____ Per TON				

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			DOLLARS	CENTS	DOLLARS	CENTS
P-401S-8.1A	415	BITUMINOUS SURFACE COURSE FOR: _____ _____ Per TON				
P-401T-8.1A	1,700	BITUMINOUS TRUE AND LEVELING COURSE FOR: _____ _____ Per TON				
P-501-2.4	145	PREMOLDED JOINT FILLER FOR: _____ _____ Per LF				
P-501-8.1C	7,600	PORTLAND CEMENT CONCRETE PAVEMENT WITH REINFORCING FOR: _____ _____ Per SY				
P-603-5.1	400	BITUMINOUS TACK COAT FOR: _____ _____ Per GAL				

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			DOLLARS	CENTS	DOLLARS	CENTS
P-605-5.1	5,700	JOINT SEALING FILLER FOR: _____ _____ Per LF				
P-610-5.1	20	STRUCTURAL PORTLAND CEMENT CONCRETE FOR: _____ _____ Per CY				
P-620-5.1	22,300	RUNWAY AND TAXIWAY PAINTING FOR: _____ _____ Per SF				
P-620-5.2	37,500	TEMPORARY RUNWAY AND TAXIWAY PAINTING FOR: _____ _____ Per SF				
P-620-5.3	4,300	BLACK PAINT FOR: _____ _____ Per SF				

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			DOLLARS	CENTS	DOLLARS	CENTS
P-620-5.4	**2,300.0**	**ERADICATING EXISTING PAVEMENT MARKINGS** FOR: _____ _____ Per **SF**				
T-901-5.1	4	SEEDING (FLIGHT TURF) FOR: _____ _____ Per ACRE				
T-905-5.1	2,075.0	TOPSOILING FOR: _____ _____ Per CY				
		SUBTOTAL FOR BID				
S699.04	1	MOBILIZATION (MAXIMUM 3% OF TOTAL) FOR: _____ _____ Per LS				
		PLEASE MAKE SURE A BID IS ENTERED FOR EACH ITEM. **TOTAL BID OR GROSS SUM (WRITTEN IN WORDS ON P-9)**				

SECTION 586 - MISCELLANEOUS STRUCTURAL RECONSTRUCTION

586-1 DESCRIPTION. The work of this section shall consist of the following:
Drilling and Grouting Bolts, or Reinforcing Bars.
Removal of Rivets-Replacement with High Strength Bolts.
Field Drill Holes in Existing Structural Steel.

586-1.01 Drilling and Grouting Bolts, or Reinforcing Bars. For the purposes of this section the terms bolts and reinforcing bars are identical.

586-1.02 Field Drill Holes in Existing Structural Steel. Existing structural steel is that structural steel in service prior to the beginning of construction.

586-2 MATERIALS

586-2.01 Drilling and Grouting Bolts. Grout material shall conform to §701-07; Anchoring Materials - Chemically Curing.

586-2.02 Removal of Rivets - Replacement with High Strength Bolts.
High strength bolts, nuts and washers shall meet the requirements of §715-14. If paint color is not specified, the color selected shall match the existing paint. Paint shall be selected from the Department's Approved List for Structural Steel Paint - Class 2.

586-2.03 Dowels and Tie Bars. Tie bars shall be deformed steel bars and conform to the requirements of ASTM A 615, ASTM A 616, or ASTM A 617, except that rail steel bars, Grade 50 or 60, shall not be used for tie bars that are to be bent or restraightened during construction. Tie bars designated as Grade 40 in ASTM A 615 can be used for construction requiring bent bars.

Dowel bars shall be plain steel bars conforming to ASTM A 615, ASTM A 616 or ASTM A 617 and shall be free from burring or other deformation restricting slippage in the concrete. High strength dowel bars shall conform to ASTM A 714, Class 2, Type S, Grade I, II or III, Bare Finish. Before delivery to the construction site each dowel bar shall be painted on all surfaces with one coat of paint meeting Federal Specification TT-P-664. If plastic or epoxy-coated steel dowels are used no paint coating is required, except when specified for a particular situation on the contract plans. Coated dowels shall conform to the requirements of AASHTO M 254.

The sleeves for dowel bars used in expansion joints shall be metal or other type of an approved design to cover 2 to 3 inches of the dowel, with a closed end and with a suitable stop to hold the end of the bar at least 1 inch from the closed end of the sleeve. Sleeves shall be of such design that they will not collapse during construction.

586-3 CONSTRUCTION DETAILS

586-3.01 Equipment - General. All equipment proposed for use shall be approved by the Engineer prior to actually performing the work.

586-3.02 Drilling and Grouting Bolts

A. All holes shall be drilled by means of a rotary impact drill. If reinforcing steel is encountered, the reinforcing steel shall be cut and removed by means of a core drill. The remainder of the drilling shall be done with the rotary impact drill.

B. Drilling with a lubricant will not be permitted. Water is not considered a lubricant. Drilling methods shall not cause spalling, or other damage to concrete. Concrete spalled, or otherwise damaged by the Contractor's operations shall be repaired in a manner satisfactory to the Engineer. Such repair shall be done at the expense of the Contractor.
C. Holes shall be surface dry and shall have had all foreign and loose material removed immediately prior to grout placement.
D. Grout shall be mixed and placed in strict accordance with the manufacturer's instructions, unless modified here, or elsewhere, in the contract documents. No grout shall be placed at a temperature below that recommended by the grout manufacturer.
E. Prior to bolt placement in the grouted hole, all material which might interfere with bond between the bolt and the grout shall have been removed. This includes, but is not limited to: moisture, grease, dirt, mill scale and rust. Rust which cannot be removed even by vigorous scrubbing with a wire brush is considered firmly bonded and may remain. The hole diameter shall be in accordance with the grout manufacturer's recommendation. The bolts shall be inserted full depth into the hole and shall be manipulated to ensure complete coverage by the grout. After insertion of the bolt, all excess grout shall be struck-off flush with the concrete face. Should the grout fail to fill the hole after bolt insertion, additional grout shall be added to the hole to allow a flush strike-off.
F. If the bolt is inserted in a hole with an axis predominantly horizontal to the ground surface, care shall be taken to prevent grout from running down the face of the concrete. These precautions shall be done in a manner satisfactory to the Engineer.

586-3.03 Removal of Rivets-Replacement with High Strength Bolts

A. Paint Removal. If the steel is painted, then prior to the beginning of any other work operations, the paint shall be removed for a minimum distance of 4 inches on each side of the centerline of work location. The paint removal work shall be done in accordance with the requirements of Section 574 *Structural Steel Painting: Localized.* In cases where the contractor can clearly demonstrate through exposure monitoring that other work practices and engineering controls, under the oversight of a certified industrial hygienist, can effectively maintain actual worker exposure below the permissible

B. Unless otherwise noted in the contract documents, all bolts shall be the same diameter as the rivets they replace.

C. Rivets shall be removed by one of the following methods:

1 Shear rivet head using a pneumatic rivet breaker (helldog), and drive out rivet shank with a pneumatic punch.

2 Flame cut rivet head 1/16 inch above the base metal using a rivet scarfing tip, and drive out shank using a pneumatic punch.

If, in the Engineer's opinion, punching will damage the base metal, the shank shall be removed by drilling.

D. High strength bolts shall be installed after the nicks, burrs and foreign substances that might interfere with seating of the bolt head and nut washers are removed. Light grinding may be ordered by the Engineer.

E. Installation and inspection of high strength bolts shall be done in accordance with the New York State Steel Construction Manual requirements.

F. If it becomes necessary to disconnect, or adjust, steel remaining as part of the structure to complete the work the Contractor shall obtain the Engineer's approval prior to performing disconnections or adjustments.

G. If the bolt will not fit the rivet hole, the hole may be reamed sufficiently to accommodate the bolt.

H. If the contract does not include an item(s) for cleaning, priming and painting of structural steel, cleaning and painting of the bolt and immediate surrounding area shall be done as part of this work.

Cleaning and painting shall be done in accordance with the requirements of Section 574 *Structural Steel Painting: Localized.* All steel exposed by the cleaning operations shall be painted. However, at least 2 inches in every direction, measured from the washer's edge, shall be painted.

586-3.04 Field Drill Holes in Existing Structural Steel

A. The requirements of §586-3.03A shall apply.
B. The required hole diameter will be indicated on the plans.
C. No flame cutting, or flame drilling will be permitted.
D. All damage to existing steel, as determined by the Engineer, shall be repaired by the Contractor, at no cost to the State. All repair shall be done in a manner satisfactory to the Engineer.

586-4 METHOD OF MEASUREMENT

586-4.01 Drilling and Grouting Bolts. Measurement will be taken as the number of **feet** of holes into which grout and bolts have been inserted. Measurement will be taken to the nearest **tenth of a foot**.

586-4.02 Removal of Rivets - Replacement with High Strength Bolts. Measurement will be taken as the number of high strength bolts installed.

586-4.03 Field Drill Holes in Existing Structural Steel. Measurement will be taken as each hole drilled. No allowances will be made for holes drilled through different thicknesses of steel, or different numbers of plates.

586-5 BASIS OF PAYMENT

586-5.01 Drilling and Grouting Bolts

A. The unit price bid per **feet** shall include the cost of all labor, materials, and equipment necessary to complete the work.
B. Payment will not be made for holes which do not contain both grout and bolts.
C. The cost of the bolts will be paid for under a separate, appropriate item.

586-5.02 Removal of Rivets - Replacement with High Strength Bolts

A. The unit price bid for each installed bolt shall include the cost of all labor, material and equipment necessary to complete the work including paint removal and when appropriate painting.

B. Payment will be made for each installed bolt regardless of whether or not, a rivet had been removed from the location in question.

586-5.03 Field Drill Holes in Existing Steel

A. The unit price bid for each hole drilled shall include the cost of all labor, equipment and materials necessary to complete the work, including paint removal when required.

B. No extra compensation will be paid for holes drilled through different thicknesses, or through different numbers of plates.

Payment will be made under:

Item No.	**Item**	**Pay Unit**
586.01	Drilling and Grouting Bolts, or Reinforcing Bars	**per Linear foot**

reduce the bond between the paint and the pavement. The area to be painted shall be cleaned by sweeping and blowing or by other methods as required to remove all dirt, laitance, and loose materials.

620-3.4 LAYOUT OF MARKINGS. The proposed markings shall be laid out in advance of the paint application. **All permanent white, red or yellow markings** shown on the plans shall receive glass beads. **All Numbers for the Surface Painted Runway Identifiers shall be constructed with 12 foot tall plastic templates constructed in accordance with the contract drawings. The templates will be used to paint the numbers will be provided by the airport.**

620-3.5 APPLICATION. Paint shall be applied at the locations and to the dimensions and spacing shown on the plans. Paint shall not be applied until the layout and condition of the surface have been approved by the Engineer. The edges of the markings shall not vary from a straight line more than 1/2 inch (12 mm) in 50 feet (15 m) and marking dimensions and spacings shall be within the following tolerances:

Dimension and Spacing	Tolerance
36 inches (910 mm) or less	+/- 1/2 inch (12 mm)
greater than 36 inches to 6 feet (910 mm to 1.85 m)	+/- 1 inch (25 mm)
greater than 6 feet to 60 feet (1.85 m to 18.3 m)	+/- 2 inches (51 mm)
greater than 60 feet (18.3 m)	+/- 3 inches (76 mm)

The paint shall be mixed in accordance with the manufacturer's instructions and applied to the pavement with a marking machine at the rate(s) shown in Table 1.

When White or Yellow Temporary markings are no longer required shall be eradicated by High pressure Hydro blasting only as shown on the plans. Water blasting limit shall be no more than 1 inch past the edge of the existing marking. Any pavement outside the water blasting limit discolored by the process shall sealed by an approved asphalt sealer at no additional cost to the owner. The paint shall be mixed in accordance with the manufacturer's instructions and applied to the pavement with a marking machine at the rate(s) shown in Table 1. The addition of thinner will not be permitted. A period of **24 hours** shall elapse between placement of a bituminous surface course or seal coat and application of the paint. **All markings that conflict with temporary or permanent marking to be installed shall be eradicated by High pressure Hydro blast only. Water blasting limit shall be no more than 1 inch past the edge of the existing marking. Any pavement outside the water blasting limit discolored by the process shall sealed by an approved asphalt sealer at no additional cost to the owner.**

TABLE 1. APPLICATION RATES FOR PAINT, GLASS BEADS, AND SILICA SAND

Paint Type	Paint Square feet per gallon, ft^2/gal	Glass Beads, Type I, Gradation A Pounds per gallon of paint--lb./gal. (Kilograms per liter of paint--kg/l)
Waterborne	115 ft^2/gal. Maximum (2.8 m^2/l)	7 lb./gal. minimum (0.85 kg/l)
Solvent Base	115 ft^2/gal. Maximum (2.8 m^2/l)	7 lb./gal. minimum (0.85 kg/l)
Temporary	220 ft^2/gal. Maximum (2.2 m^2/l)	N/A

The Contractor should contact the paint manufacturer to determine the wait period.

The edges of the markings shall not vary from a straight line more than ½ inch (12 mm) in 50 feet (15 m) and the dimensions shall be within a tolerance of plus or minus 5 percent.

All emptied containers shall be returned to the paint storage area for checking by the Engineer. The containers shall not be removed from the airport or destroyed until authorized by the Engineer.

620-3.6 APPLICATION--PREFORMED AIRPORT PAVEMENT MARKINGS.

a. Asphalt and Portland cement To ensure minimum single-pass application time and optimum bond in the marking/substrate interface, the materials must be applied using a variable speed self-propelled mobile heater with an effective heating width of no less than 16 feet (4.88 m) and a free span between supporting wheels of no less than 18 feet (5.49 m). The heater must emit thermal radiation to the marking material in such a manner that the difference in temperature of 2 inch (5.08 cm) wide linear segments in the direction of heater travel must be within 5 percent of the overall average temperature of the heated thermoplastic material as it exits the heater. The material must be able to be applied at ambient and pavement temperatures down to 35ºF (2°C) without any preheating of the pavement to a specific temperature. The material must be able to be applied without the use of a thermometer. The pavement shall be clean, dry, and free of debris. A non-VOC sealer with a maximum applied viscosity of 250 centi-Poise (ASTM D 2393) must be applied to the pavement shortly before the markings are applied. The supplier must enclose application instructions with each box/package.

620-3.7 PROTECTION. After application of the paint, all markings shall be protected from damage until the paint is dry. All surfaces shall be protected from disfiguration by spatter, splashes, spillage, or drippings of paint.

METHOD OF MEASUREMENT

620-4.1 The quantity of runway and taxiway markings to be paid for shall be **the number of square feet of painting** performed in accordance with the specifications and accepted by the Engineer. **The measurement of glass beads shall not be done separately.**

BASIS OF PAYMENT

620-5.1 Payment shall be made at the respective contract **price per square foot** for runway and taxiway painting This price shall be full compensation for furnishing all materials **including glass beads** and for all labor, equipment, tools, and incidentals necessary to complete the item.

Payment will be made under:

Item No.	**Item**	**Pay Unit**
Item P-620-5.1	Pavement Markings (Runway and Taxiway Painting)	Per Square Foot
Item P-620-5.2	Temporary Runway and Taxiway Painting	Per Square foot
Item P-620-5.3	Black Paint	Per Square foot
Item P-620-5.4	**Eradicating Existing Pavement Markings**	Per Square foot

TESTING REQUIREMENTS

ASTM C 146	Chemical Analysis of Glass Sand
ASTM C 371	Wire-Cloth Sieve Analysis of Nonplastic Ceramic Powders
ASTM D 92	Test Method for Flash and Fire Points by Cleveland Open Cup
ASTM D 711	No-Pick-Up Time of Traffic Paint
ASTM D 968	Standard Test Methods for Abrasion Resistance of Organic Coatings by Falling Abrasive
ASTM D 1652	Test Method for Epoxy Content of Epoxy Resins
ASTM D 2074	Test Method for Total Primary, Secondary, and Tertiary Amine Values of Fatty Amines by Alternative Indicator Method
ASTM D 2240	Test Method for Rubber Products-Durometer Hardness

ASTM G 53	Operating Light and Water-Exposure Apparatus (Florescent UV-Condensation Type) for Exposure of Nonmetallic Materials.
Federal Test Method Standard No. 141	Paint, Varnish, Lacquer and Related Materials; Methods of Inspection, Sampling and Testing

MATERIAL REQUIREMENTS

ASTM D 476	Specifications for Titanium Dioxide Pigments
Code of Federal Regulations	40 CFR Part 60, Appendix A 29 CFR Part 1910.1200
Fed.Spec. TT-B-1325 Commercial Item	Beads (Glass Spheres) Retroreflective
Description (CID) A-A-2886A	Paint, Traffic, and Airfield Marking, Solvent Base
Fed.Spec. TT-P-110	Paint, Traffic Black (Nonreflectorized)
Fed.Spec. TT-P-1952	Paint, Traffic and Airfield Marking, Waterborne
Federal Standard 595	Colors used in Government Procurement

END OF ITEM P-620