

**MTA - NEW YORK CITY TRANSIT  
2 BROADWAY  
NEW YORK, NY 10004**

**DIVISION OF MATERIEL  
[www.mta.info/nyct/procure/nyctproc.htm](http://www.mta.info/nyct/procure/nyctproc.htm)**

**1010316**

**NOTICE  
-OF-  
ADDENDUM**

**ADDENDUM #4**

**CURRENT OPENING/DUE DATE: POSTPONED**



## New York City Transit

August 19, 2011

**ADDENDUM NO. 4**  
**CONTRACT # 10I0316**  
**REMOVE AND RE-INSULATE HAND HELD TRACK TOOLS**  
**REVISED BID OPENING DATE: INDEFINITE**

To Prospective Bidders:

Bidders are advised that the Bid Opening Date for Contract No. 10I0316 is hereby postponed indefinitely. A specific Bid Opening Date will be determined as soon as possible.

**Reminder: Be sure to attach this addendum to your proposal or acknowledge it in the place provided in the Bid. Failure to do so may result in rejection of your bid.**

If you have any questions, please contact Susan Kronenfeld at (646)252-6265.

Sincerely,

A handwritten signature in black ink that reads "Joseph A. Messina".

Joseph A. Messina  
Assistant Chief Procurement Officer

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**1010316**

**NOTICE**

**-OF-**

**ADDENDUM**

**ADDENDUM # 3**

**CURRENT OPENING/DUE DATE: 8/24/11**



July 15 2011

**ADDENDUM NO. 3**  
**CONTRACT # 10I0316**  
**REMOVE AND RE-INSULATE HAND HELD TRACK TOOLS**  
**NEW BID OPENING DATE: AUGUST 24, 2011**

All prospective bidders are advised of the following:

1. **The Bid Opening Date has been rescheduled for August 24, 2011.** The time set for the bid opening is 2:00PM.
2. Page 3 & 5 of the Specific Contract Provisions have been revised. Please discard the original Page 3 & 5 of the Specific Contract Provisions and replace it with the enclosed revised Page 3 & 5 of the Specific Contract Provisions labeled Addendum #3.
3. The Entire Technical Specification has been revised. Please discard the original Technical Specification and replace it with the enclosed revised Technical Specification labeled Addendum #3, with the addition of a Technical Specification for track tool insulation materials and cable boots Section 67 Pages 1-6 and NYCT Technical Specification for General Clauses.
4. Drawing #T-2049 Sheet 7 of 7, Details of Type III Track Construction, has been added to the Contract Attachments as Attachment #2 labeled Addendum #3.

A vertical line has been placed in the right hand margin of the revised page to indicate where the change has been made.

**Reminder: Be sure to attach this addendum to your proposal or acknowledge it in the place provided in the Bid. Failure to do so may result in rejection of your bid.**

If you have any questions, please contact Susan Kronenfeld at (646)252-6265.

Sincerely,

A handwritten signature in black ink that reads 'Pauline Thater for JAM'. The signature is written in a cursive style.

Joseph A. Messina  
Assistant Chief Procurement Officer

38. "Work Days" shall mean Monday through Friday, excluding Authority Observed Holidays, as set forth in Attachment 1.

**ARTICLE 102 SCOPE OF WORK**

- A. The Contractor shall: 1) remove the existing insulation material on hand held tools; the existing insulation may be either heat shrunk or dip molded. 2) insulate hand held tools or wire baskets, including providing any and all necessary or incidental labor, supervision, material and equipment when determined by Project Manager to be required.

The subject hand held tools are used for working on, or in close proximity to, energized electrical apparatus, such as contact rail, or conductors operating at a maximum voltage of 1,000 volts A.C./5,000 V.D.C. The tool insulation shall be in accordance with the technical specification for track tool insulation materials and cable boots Section 67 Pages 1-6 and NYCT Technical Specification for General Clauses.

- B. The Contractor shall pick-up -tools, remove the existing insulation, and/or insulate, and return the tools from and to the following locations, as directed by the Project Manager: 1) Linden Shop, 1500 Linden Blvd., Brooklyn; 2) Other Authority locations within the New York City area.
- C. Hand held tools to be stripped of insulation and/or insulated include, but are not limited to, pinch bars, claw bars, track wrenches, rail and tie tongs, forks, shovels, spades and similar equipment, socket wrenches, nail pullers and similar one-ended tools, and pliers, screwdrivers and chisels. The quantities for each specific tool cannot be determined at this time; estimated quantities by general type are set out in the Price Schedule.
- D. The Contractor shall pick-up wire baskets and apply insulation in accordance with Drawing T-2049 note 6 and return the wire baskets from and to the following locations, as directed by the Project Manager: 1) Linden Shop, 1500 Linden Blvd., Brooklyn; 2) Other Authority locations within the NYC area.

**ARTICLE 103 TERM OF CONTRACT**

The term of the Contract shall be for a period of five years commencing with the date set forth in the Notice of Award.

**ARTICLE 104 TIME FOR COMPLETION AND DELIVERY**

- A. Time is of the essence of this Contract. The Contractor shall pick up tools within three (3) business days of notification by the Project Manager. The Contractor shall remove the existing insulation and/or insulate and return the tools within ten (10) business days of pick-up.
- B. Unless permitted by the Project Manager, no pick-ups or deliveries shall be performed outside of the hours of 8 a.m. to 4 p.m., daily or at any time on Saturdays, Sundays or Authority Observed Holidays.
- C. The Authority reserves the right of temporarily suspending the performance of the whole or any part of the Work, if it shall deem it in its best interest so to do, without compensation to the Contractor for such suspension other than extending the time for completing the Work as much as in the opinion of the Authority the Contractor may have been delayed by such suspension.

**ARTICLE 105 LIQUIDATED DAMAGES FOR DELAY - Not Used.**

**ARTICLE 106 WARRANTY**

- A. All workmanship, parts and materials furnished for all the Work shall be unconditionally warranted against failures or defects for a period of one (1) year after the date of acceptance by the Project Manager.
- B. Repairs. In the event that any Work covered by the warranty provisions fails during the warranty period, the Contractor shall repair the work and repair and/or replace any damaged or defective parts or components within 10 days of notice to the Contractor, without additional cost or expense to the Authority.
- C. Exclusions. The warranty will not apply to the extent that failure is caused by user abuse. Several examples of user abuse are as noted: (1) Unit damaged by external fire; (2) Unit cut or burned by torch; or (3) Unit damaged in collision or derailment.
- D. Cover Costs. In case the Contractor shall fail to repair or replace any part or materials or do any work in accordance with the terms of the warranty, the Project Manager shall have the right to cause such repair or replacement to be made or Work to be done at the expense of the Contractor in accordance with the Authority's "Schedule of Rates for Services Rendered to Outside Parties" in effect at the time such repair or replacement is made, or Work done or in accordance with its actual out-of-pocket expense, as applicable.

- c) In the event that the payment request is based upon a “deliverable”, the Contractor's invoice must be accompanied by appropriate documentation that the deliverable has been delivered in accordance with the Contract, and if this Contract requires acceptance thereof as a condition precedent to payment, that the deliverable has been so accepted.
  - d) Invoices must also be accompanied by all affidavits, time records, staffing and other records provided for or required by the contract to establish the amount of payment and/or performance of the Work billed, as well as a statement with sufficient specificity which establishes the basis on which the payment is due according to the Contract. Any documentation generated by the Authority, such as certificate of acceptance, will be issued in accordance with the terms of the Contract.
3. Inspection, Review and Audit: In addition to any other requirements pertaining to the right of the Authority or other entity to perform inspections, reviews or audits with respect to any payment or to the contract as a whole, the Authority reserves the right to inspect, review and/or audit each invoice for payment to verify that the invoice amount is consistent with the materials, labor, goods, and/or services provided and is in accordance with the provisions of the Contract, as well as to determine the resources applied or used by the Contractor in fulfilling the terms of the Contract or otherwise to verify that the Work, goods or services billed for were provided in accordance therewith. The Authority will require ten (10) Authority business days from the Receipt of Invoice Date within which to perform this function.
4. Set-off: The Authority shall have the right to set off against any payment due the Contractor under this Contract any unpaid legally enforceable debt owed by the Contractor to the Authority as outlined in Authority's Prompt Payment Rules adopted by its Board on March 25, 1988.
5. Designated Payment Office: The Designated Payment Office, to which all invoices and supporting documentation are required to be submitted under this Contract, is as follows:  
Original and one (1) copy of all invoices to:  
**Email:** invoice@mtabsc.org  
**Fax:** 212-971-5060  
**Address:** MTA Business Service Center  
Accounts Payable  
333 W. 34<sup>th</sup> Street  
9<sup>th</sup> Floor  
New York, NY 10001-2402

and, in addition, one (1) copy of all invoices to the designated Project Manager for this Contract at his mailing address:

**New York City Transit Authority  
Division of Track  
1500 Linden Blvd. Room #1  
Brooklyn, NY 11212  
Attn: Anthony Storniolo**

- C. Unless otherwise stipulated in writing by the parties, the Authority shall make payment subject to the following conditions, which are, unless waived in whole or in part by the Authority in writing, conditions precedent to payment:
- 1. The Contractor is not, in the Project Manager's and/or Procurement Specialist 's opinion, in breach of any terms or provision of this Contract;
  - 2. The Project Manager has accepted the Work.
- D. The Authority may withhold sums equal to any claims of the Authority against the Contractor, for indemnification or otherwise, pending settlement or other disposition of such claim. The Authority may withhold from any payment otherwise due the Contractor as much as may be necessary to protect the Authority and if it so elects may also withhold any amounts due from the Contractor to any Subcontractors or Suppliers for work performed or material furnished by them. The foregoing provisions shall be construed solely for the benefit of the Authority and will not require the Authority to determine or adjust any claims or disputes between the Contractor and his Subcontractors or Suppliers, or to withhold any moneys for their protection unless the Authority elects to do so. The failure or refusal of the Authority to withhold any moneys from the Contractor shall in no way impair the obligations of any surety or sureties under any bond or bonds furnished under this Contract. The Authority may withhold payment to the Contractor, if the Contractor fails to remedy unsuitable conditions. The Contractor shall be given written notice of any unsuitable conditions.

**TECHNICAL SPECIFICATIONS**

**ARTICLE 1 PROJECT MANAGER**

The Contractor shall coordinate all work with, and direct all notices, correspondence or communications to the Project Manager located at the Linden Shop, 1500 Linden Blvd., Brooklyn, NY.

**ARTICLE 2 GENERAL REQUIREMENTS**

- 2.1 Insulation for tools shall be manufactured and dimensioned in such a way that it does not constitute a danger for the user of the tools if they are properly used.
- 2.2 The mechanical specifications for insulated hand tools shall comply with the corresponding AREMA and/or ANSI standard. The mechanical performance of the working parts shall be maintained even after application of insulating layer(s).
- 2.3 Insulated tools shall be covered with insulating material to prevent exposure of the user to energized equipment or conductors and to avoid short circuits between two parts at different potentials
- 2.4 The insulating material shall be in accordance with the requirements of Section 67 of the MTA-NYCT Standard Specifications for Track, Infrastructure and Power Distribution Materials, latest revision (hereinafter referred to as the "Standard Specifications").
- 2.5 The insulating material shall be flame retardant.
- 2.6 The texture of the insulating material shall be slip resistant in the grip area.
- 2.7 A sealant shall be applied on the inside of the heat shrinkable tubing.
- 2.8 In the case of tools that feature connecting elements that require assembly, insulation shall be applied in such a manner so that if any part becomes detached during use, no conductive part which may still be energized can be inadvertently touched or cause a flashover.

**ARTICLE 3 INSULATION**

- 3.1 Insulation shall be two color and not less than 1/4 inch in thickness. Red (warning color) shall not be less than 1/16 inch in thickness. Black (over the red color) shall not be less than 3/16 inch in thickness.
  - (a) Environmental boots shall be installed over insulation on all non-working ends of track tools.
  - (b) Environmental collars shall be installed at the working end of the insulation of track tools.
- 3.3 Environmental boots and collars shall include an adhesive system that provides an effective environmental seal that meets or exceeds the requirements of the latest edition of ANSI C-119.1 for 1,000 V rated systems.
- 3.4 The following specifications for the insulation of a tool must be strictly adhered to -
  - 1. Pinch bars shall be insulated to a point not less than 4" nor more than 6" from each end.
  - 2. Claw bars shall be insulated not less than 3" or more than 5" from the heel and not less than 4" nor more than 6" from the other end.
  - 3. Track wrenches shall be insulated at a point not less than 4" nor more than 6" from the top of the open end portion of the wrench.
  - 4. Rail and tie tongs handles shall be completely insulated to a point 2" above the tong joint. Only one layer of insulation shall be applied on the knuckle to 2" above the tong joint.
  - 5. Forks, shovels, spades and similar tools shall be insulated from the lower portion of the wooden handle to the wide frame of the tool.
  - 6. All socket wrenches shall be completely insulated to a point of at least 2" but not more than 4" from the working end.
  - 7. Nail pullers and similar one-ended tools shall be completely insulated from the curve of the claw to the top of the handle.
  - 8. All pliers, screwdrivers and chisels, shall be completely insulated at least 2" from the working end.
  - 9. All other tools and specific tools used near the third rail or high voltage feeders shall be fully insulated so as to afford the user complete protection without hindering the use of the tool.
- 3.5 The following is a size selection chart for environmental boots.

<b>To Insulate a Tool With Two Outside Diameters and the Larger Outside Diameter (Inches)</b>	<b>Expanded Diameter (Inches)</b>	<b>Recovered Diameter (Inches)</b>	<b>Recovered</b>	
			<b>Wall Thickness (Inches)</b>	<b>Nominal Length (Inches)</b>
1/2	0.75	0.37	0.10	3.0
1	1.50	0.70	0.10	3.5
1 1/2	2.50	1.20	0.10	4.0
2 1/2	3.60	2.20	0.14	4.0
2 1/2	4.30	2.20	0.16	6.0

- 3.6 Tolerances  
Tolerances shall be as described in Section 67 of the Standard Specifications.

3.7 Submittals For Transit Authority Approval

Certified test reports from an independent laboratory (approved by the Authority) that the material lot to be supplied is in accordance with Section 67 of the Standard Specifications. All costs for testing shall be deemed included in the bid price.

**ARTICLE 4 TESTING REQUIREMENTS**

The Contractor shall perform all tests. Test results shall be furnished at the request of the Project Manager. If any test fails, the Contractor shall reinsulate the tool.

4.1 Current Leakage Test

A voltage of 10 KV (rms) 60 HzAC or 40 KV DC shall be continuously applied for three minutes. The leakage current shall be measured. This current shall be less than 1 MA for 20mm of coated tool. The test shall be considered successful if no electrical puncture, sparkover, or flashover occurs during the test period, and the limits of the leakage current are not exceeded.

4.2 Flame Retardancy Test

At the start of the test, the tip of the testing flame should impinge upon the insulating material at the lower part of the working head. The testing flame shall act upon the specimen for 10s B.C. After this period, the testing flame shall be withdrawn. It should be ensured that no air draft interferes with the test. The propagation of the flame on the sample shall be observed for 20s B.C. after the withdrawal of the testing flame. The test shall be considered successful if the flame spread on the insulation surface on the sample does not exceed 120 mm during the 20s B.C. of the observation period.

4.3 Mechanical Test

Insulated tools shall comply with all specific mechanical requirements of ANSI and /or AREMA standards corresponding to the different types of tools. The manufacturer shall provide the certificates of these tests at the request of the Project Manager.

**ARTICLE 5 MARKING**

Each tool and/or tool component shall be permanently and legibly marked with the following information: "N.Y.C.T.A." in 1/2 inch high lettering on the exposed outer layer of the tool insulating material.

**ARTICLE 6 INSPECTION**

While the Authority does not expect to inspect all insulated tools furnished under the Contract, it reserves the right to conduct such an inspection, before or after delivery. The Authority will review the summary of the Contractor's quality assurance program and may spot check the manufacturing process of the insulating.

**ARTICLE 7 ELECTRICAL CERTIFICATION**

A certification certificate of electrical testing shall accompany each lot of insulated tools delivered to the Authority. All tools are to be certified for electrical test to 10,000 volts and rated for 1,000 volts live use (a 10 to 1 safety margin).

**ARTICLE 8 INSULATE MATERIAL REMOVAL**

- 8.1 The existing insulate material may consist of either Heat Shrink or Dip Molded and may be removed by cutting and pulling off from tools using pliers.
- 8.2 To hasten process, insulated tools may be immersed in solvents such as turpentine and paint thinner to facilitate removal of insulate material.
- 8.3 Any residual material may be grinded off with sandpaper or wire wheel.

**ARTICLE 9 WASTE REMOVAL**

The Contractor shall be responsible for disposing all waste material. The insulation material is non-hazardous, non-carcinogenic, contains no lead, and does not require any special disposal methods. All waste may be disposed of without filing Land Disposal Receipts.

# **67 – MTA - NEW YORK CITY TRANSIT SPECIFICATION FOR TRACK TOOL INSULATION MATERIALS AND CABLE BOOTS**

## **67.1 General**

### **67.1.1 Scope**

- A. This specification covers MTA – NYCT’s requirements for furnishing track tool insulation materials to be used for insulating track tools and cable boot material to be used for isolating third rail operations power distribution cables.
- B. The general clauses of Section 1 of MTA - NYCT’s Standard Specifications for Track, Infrastructure and Third Rail Operations power distribution materials shall be integral with the provisions of this Section.

### **67.1.2 Type**

- A. The products specified in this section shall be compatible with each other. Each product shall be furnished in sizes and quantities specified and manufactured in accordance with these specifications.
- B. Track tool end cap insulation material and cable boot material shall be heat shrinkable thick wall tubing material.
- C. Sealant and self-amalgamated sealant tape (for track tool insulation only) shall be an adhesive type material supplied for the specified intended use in conjunction with the manufacturer’s insulation product. The sealant and self-amalgamated sealant tape shall be of the manufacturer’s standard type in accordance with Paragraph 67.1.2.A.

## **67.2.0 Technical Requirements**

### **67.2.1 Material**

- A. Track tool insulation materials and cable boot material shall be manufactured to conform to the Drawings, the Bid Documents and as specified herein.
- B. Heat shrinkable tubing shall be a cross-linked blend of modified polyolefin and elastomers. When specified in MTA – NYCT’s Bid Documents, the vendor shall supply a sealant applied on the inside of the heat shrink tubing which bonds the tubing and the tool handle substrate upon installation. This sealant shall remain flexible for the life of the system and provide both environmental sealing and waterproofing. The tubing shall provide a shrink ratio of approximately 3:1.

- C. Self-amalgamating sealant tape shall be a cross-linked butyl based tape that fuses to itself at ambient temperatures. It shall be formulated so that it can be stretch orientated to at least four times its original length, allowing conformance to irregular shapes. The tape shall self-amalgamate without the addition of heat. The tape shall be supplied with a release paper backing, which allows at least a  $1/16$  inch overlap to avoid roll contamination and ease of release.
- D. Cable boots shall be a heat shrinkable cross-linked blend of modified polyolefin and elastomers which provide low moisture permeability, weather resistance and resistance to ozone attack.

### 67.2.2 Properties

- A. The following are the requirements for the heat shrinkable track tool end cap insulation material:

<u>Property</u>	<u>Test Method</u>	<u>Results</u>
<u>Physical Properties</u>		
Tensile Strength	ASTM D-412	1800 psi (Min.)
Ultimate Elongation	ASTM D-412	400% (Min.)
Hardness - Shore "A"	ASTM D-2240	80 (Min.)
Water Absorption	ASTM D-570 Method A-1	0.5 % (Max.)
Specific Gravity	ASTM D-792 Method 6-0	1.52 (Max.)
<u>Chemical Properties</u>		
Corrosivity	ASTM D-2671 Method A	Non-Corrosive 16 hrs @ 120 °C
Fungus Resistance	ASTM G-21	1 or less
Oil Resistance	ASTM D-412	24 hrs @ 25 °C
Hydraulic Fluid (Mil H5606C)	Tensile Strength, psi % Elongation	850 (Min.) 100 (Min.)
<u>Electrical Properties</u>		
Dielectric Strength (125 mils sample)	ASTM D-149	350 V/mil (Min.)
Dielectric Constant (1 kHz)	ASTM D-150	4.5 Nominal
Volume Resistivity	ASTM D-257	$10^{14}$ ohm-cm (Min.)
Dissipation Factor (1 kHz)	ASTM D-150	0.001 (Min.)

B. The following are the requirements for the self-amalgamating sealant tape:

<u>Property</u>	<u>Test Method</u>	<u>Results</u>
<u>Physical Properties</u>		
Water Absorption	ASTM D-570-63 Mod.	0.5 % (Max.)
Specific Gravity	ASTM D-792	1.49 (Max.)
Adhesion:		
Lap Shear XLPE to XLPE	ASTM D-1002 Mod.	8-10 psi (Min.)
Elongation		350-400 %
<u>Electrical Properties</u>		
Dielectric Strength (125 mil sample)	ASTM D-149	250 V/mil (Min.)
(20 mil sample)		430 V/mil (Min.)
Dielectric Constant	ASTM D-150	4.5 (Nominal)
Volume Resistivity	ASTM D-257	10 <sup>14</sup> ohm-cm (Min.)
Dissipation Factor	ASTM D-150	0.06 (Nominal)
<u>Thermal Properties</u>		
Maximum Service Temperature		265 °F
Low Temperature Flexibility		-40 °F
<u>Chemical Properties</u>		
Corrosivity	ASTM D-2671	Non-Corrosive @150 °C
Resistance	<u>Resistant to:</u> Alcohol, ketones, acids, alkalis, naphtha	<u>Non Resistant to:</u> Mineral spirits, hydrocarbons
Fungus Resistance	ASTM G-21	1 or less

C. The following are the requirements for the heat shrinkable cable boot material:

<u>Property</u>	<u>Test Method</u>	<u>Results</u>
<u>Physical Properties</u>		
Tensile Strength	ASTM D-412	1800 psi (Min.)
Ultimate Elongation	ASTM D-412	400 % (Min.)
Water Absorption	ASTM D-570 Method A-1	0.5 % (Max.)
Specific Gravity	ASTM D-792 Method 6-0	1.50 (Max.)

Electrical Properties

Dielectric Strength (125 mils sample)	ASTM D-149	350 V/mil (Min.)
Volume Resistivity	ASTM D-257	10 <sup>14</sup> ohm-cm (Min.)

D. All test methods shall conform to the latest revision of the ASTM designations specified.

**67.2.3 Sizes**

- A. Heat shrinkable tubing sizes: the size, length and quantity manufactured shall be as specified in the MTA – NYCT’s Bid Documents.
1. Tubing **without** sealant shall be supplied in 25-foot continuous spools. Self-amalgamated sealant tape should be ordered at the same time in conjunction with heat shrinkable tubing when sealant is not required.
  2. Tubing **with** sealant shall be supplied separately in straight lengths no longer than six (6) feet, in boxes or cartons.
  3. Tools to be insulated with heat shrink tubing are to use the largest size tubing possible that will fully recover down on to the tool handle substrate.
  4. Cable boot dimensions shall be as indicated on the Drawing as specified in MTA – NYCT’s Bid Documents.
- B. Self-amalgamated sealant tape. The size, length and quantity manufactured shall be as specified in MTA – NYCT’s Bid Documents.

The following is a size selection chart for self-amalgamating sealant tape:

<u>Width (Inches)</u>	<u>Length (Feet)</u>	<u>Thickness (Inches)</u>
1	25	1/16 (Min.)
3 3/4	10	1/8 (Min.)

**67.2.4 Tolerances**

Tolerances shall be as indicated under the applicable test method indicated in Properties, Article 67.2.2 of this Section.

### 67.3. Inspection and Testing

#### 67.3.1 Inspection

The manufacturer shall at his own expense provide adequate facilities for the inspection of each product by MTA – NYCT’s inspector during the course of manufacturing.

#### 67.3.2 Testing and Acceptance

Prior to acceptance of track tool insulation material and cable boot materials, the manufacturer or vendor, prior to delivery, shall submit for approval data sheets or test reports showing that the material lot to be supplied is in accordance with these specifications. The manufacturer shall incur the cost for the testing and any incidental costs required thereof. Compliance, under this section, will be cause for acceptance and payment.

### 67.4.0 Shipment and Acceptance

#### 67.4.1 Shipment

- A. All shipments of track tool insulation materials and cable boot material shall be made to locations indicated in the Bid Documents.
- B. Track tool insulation materials and cable boot material shall be packaged and boxed as indicated in the MTA - NYCT Bid Documents. Unless otherwise indicated in the MTA - NYCT Bid Documents:
  - 1. Heat shrink tubing with sealant shall be packaged in cardboard boxes.
  - 2. Spools of heat shrink tubing without sealant shall be packaged in cardboard cartons.
  - 3. Self-amalgamated sealant tape rolls shall be unit packed in polyethylene bags.

Note: When ordered concurrently, cartons of heat shrink tubing and bags of self-amalgamated sealant tape shall be packaged in cardboard boxes and shipped within one shipment.

- 4. Environmental cable boots shall be packed in polyethylene bags. Bags of environmental cable boots shall be packaged in cardboard cartons.

- C. Boxes, bags and cartons shall be identified with the name of the manufacturer, the description of the material, the MTA - NYCT Commodity Number, MTA – NYCT’s Bid Document number and the date of manufacture.
- D. When required by the MTA - NYCT Bid Documents or by the size and/or quantity of the order the cartons shall be grouped and banded to wood pallets with non-metallic bands to permit ease of handling and storage.

#### **67.4.2 Acceptance**

- A. Final acceptance of track tool insulation materials and cable boot material will be subject to verification of count and inspection.
- B. Track tool insulation materials and cable boot material which do not comply with the MTA - NYCT’s requirements or which, notwithstanding tests, inspection or acceptance at any previous time or location are found to contain deficiencies, will be rejected.
- C. The vendor (contractor) manufacturer shall incur the costs of handling and transporting rejected material, regardless of when and where the rejection was made.

# 1 – MTA – NEW YORK CITY TRANSIT SPECIFICATION FOR GENERAL CLAUSES

## 1.1 General

### 1.1.1 Scope

This specification covers general clauses for MTA - NYCT Standard Specifications for Track, Infrastructure and Power Distribution Materials, and is a requirement of every Section of these Specifications.

## 1.2 Technical Requirements

### 1.2.1 Material

- A. Track, Infrastructure and Power Distribution Materials shall conform to the Drawings, the Bid Documents, and as specified herein.
- B. Anything indicated on the Drawings and not mentioned in the Specifications or anything mentioned in the Specifications and not indicated on the Drawings shall be considered of having the same effect as if indicated or mentioned in both the Drawings and Specifications. In the event of conflict between the Drawings and Specifications, the Drawings shall govern.
- C. All issue or revision dates of the Drawings and or Specifications shall be construed as that date issued or revised. Where no issue or revision date exists, the date of Bid shall be used.
- D. All issue or revision dates of nationally recognized associations shall be construed as that date issued or revised. Where no issue or revision date exists, the date of Bid shall be used.
- E. Where no specific requirements are given for materials, the same shall conform with the latest applicable standards of nationally recognized associations, subject to prior MTA – NYCT’s approval.
- F. Examples of nationally recognized associations shall include, but not be limited to, the following:

AALA American Association for Laboratory Accreditation  
AAR Association of American Railroads  
AASHTO American Association of State Highway and Transportation  
Officials  
AATCC American Association of Textile Chemists and Colorists  
ACGIH American Conference of Governmental Industrial Hygienists

ACI	American Concrete Institute
ACIL	American Council of Independent Laboratories, Inc.
AIHA	American Industrial Hygiene Association
AIIM	Association for Information and Image Management
AISI	American Iron and Steel Institute
AISC	American Institute of Steel Construction
ANSI	American National Standards Institute
ARA	American Railway Association
AREMA	American Railway Engineering and Maintenance-of-Way Association
ASCE	American Society of Civil Engineers
ASME	American Society of Mechanical Engineers
ASNT	American Society for Nondestructive Testing, Inc.
ASQC	American Society for Quality Control
ASSE	American Society of Safety Engineers
ASTM	American Society for Testing and Materials
AWPA	American Wood Preservers Association
AWS	American Welding Society
CFR	Code of Federal Register
EPA	Environmental Protection Agency
IACS	International Annealed Copper Standard
FIPS	Federal Information Processing Standards
FM	Factory Mutual
IEEE	Institute of Electrical and Electronic Engineers
IFI	Industrial Fastener Institute
ISO	International Organization for Standardization
MIL	Military Standard Specification
MHA	Material Handling Association
NACE	National Association of Corrosion Engineers
NALSB	North American Lumber Standards Bureau
NCSA	National Crushed Stone Association
NEMA	National Electrical Manufacturers Association
NFPA	National Fire Protection Association
NIOSH	National Institute of Occupational Safety and Health
NIST	National Institute for Standards and Technology
NLGI	National Lubricating Grease Institute
NMA	National Micrographics Association
NPCA	National Paint and Coatings Association
NSC	National Safety Council
OSHA	Occupational Safety and Health Administration
RMA	Rubber Manufacturers Association
SAE	Society of Automotive Engineers
SPIB	Southern Pine Lumber Inspection Bureau
SSPC	Steel Structures Painting Council
UL	Underwriters Laboratories, Inc.

G. Physical properties of materials shall be suitable for their intended end use.

- H. Chemical composition of materials may include, in addition to that or of those specified, other elements or compounds necessary to achieve the particular performance requirements, except that the composition shall not contain known or suspected human or animal carcinogens, mutagens or reproductive toxins. Prior written MTA – NYCT’s approval will be mandatory for any material, element or compound classified as a toxic and/or hazardous substance listed in the NIOSH Registry of Toxic Chemicals and which may cause injury or illness during or as a direct result of any customary or foreseeable handling and use.
- I. Flammable materials, or materials that emit toxic or corrosive gases when burned, shall not be permitted without prior written approval of MTA - NYCT.
- J. Materials that contain asbestos, lead, polyvinyl chloride (PVC) and polychlorinated biphenyl (PCB) shall not be used without prior written approval of MTA - NYCT.

### 1.2.2 Specifications

All requirements appearing in the Specifications shall be considered as part of the Specifications.

### 1.2.3 Definitions

The following words and expressions shall, except where by the context it is clear that another meaning is intended, be construed to mean:

1. "Submittal": is any written document furnished by the manufacturer sent to and subject for MTA – NYCT’s approval, such as, but not limited to, shop drawings, record drawings, recorded magnetic tapes, microfilm, maintenance manuals and replacement parts lists, chemical analysis reports, material certification sheets and safety documentation. The quantity of submittals required shall be as indicated in the Bid Documents.
2. "Shop drawings": are collectively all working diagrams, plans and graphic representations documented by the manufacturer for fabrication and assembly.
3. "Record drawings": are original MTA – NYCT’s approved shop drawings documenting in full all aspects of the shop drawings, including the layout of any existing work adjacent to or incorporated therein to the extent indicated on the Drawings.
4. "Standard nomenclature": are all symbols, conventions and designation means indicated on the Drawings and the current AREMA Portfolio of Trackwork Plans when indicated by MTA - NYCT.

5. "Critical dimensions": are all dimensions required for proper geometry, fit and performance to the satisfaction of MTA - NYCT.
6. "General plan": is the shop drawing of a particular special trackwork layout and/or arrangement indicating rail lengths, gauge, flangeway, tie dimensions, tie spacing, rail fastener plate or tie plate locations, critical dimensions, joint locations and switch machine locations, together with all other tabulated data and cross references required by MTA - NYCT.

#### 1.2.4 Drawings

- A. All symbols and other representations appearing on the Drawings shall be considered as part of the Drawings.
- B. In the event of a discrepancy between scaled dimensions on any Drawing and the figures written thereon, the figures shall govern over the scale dimensions.
- C. In case of differences between small and large scale Drawings, the large scale Drawings shall govern.
- D. In the event of any ambiguity between the Drawings and the Specifications, the vendor shall notify MTA - NYCT in writing and request the Engineer's determination before manufacturing any materials.

#### 1.2.5 Shop Drawings

- A. Shop drawings shall be scale or full size drawings made to the third angle projection system and shall indicate in detail all dimensions, descriptions and quantities of materials, specifications and notes with such information as is usual and customary for fabrication and manufacture.
- B. All welds shall be detailed on the shop drawings.
- C. Shop drawing dimensions shall include units of measure customary to the United States of America. All notes and legends on the drawings shall include the English language. All terminology and nomenclature shall be representative of Track, Infrastructure and Power Distribution Materials and conventional to current AREMA and ANSI standard practices.
- D. The scale of shop drawings for Track, Infrastructure and Power Distribution Materials shall be sufficiently large such that the represented materials may be properly dimensioned to indicate all details prominently and to facilitate the incorporation of as much information as will reasonably fit thereon. The drawings shall be clear and legible throughout such that the resolution of the smallest detail may easily be read.
- E. Except where otherwise indicated, the scale of shop drawings for trackwork shall be as follows:

1. A scale of  $\frac{1}{4}$  inch to 1 foot, or larger, for general plans of special work portions.
  2. A scale of one inch to 1 foot, or larger, for special work portion parts such as switches.
  3. A scale of 1 inch to 1 foot or  $1\frac{1}{2}$  inches to 1 foot, or larger, for special work portion pieces such as frogs.
- F.** Shop drawing title block information shall include the following information:
1. The drawing title and complete description.
  2. MTA – NYCT’s route location (if any).
  3. MTA – NYCT’s route section and structure survey stationing locations (if any).
  4. Drawing reference (if any).
  5. Specification reference (if any).
  6. The manufacturer's name.
  7. The date of origination.
  8. The rail section (if any).
  9. The drawing scale (if none designate "not to scale").
  10. The manufacturer's shop order number (if any).
  11. The manufacturer's shop drawing number (if any).
  12. The manufacturer's revision designation (if any).
  13. The names of suppliers and other vendors (if any), where the main subject material(s) represented originate from a source other than the manufacturer’s own production facilities. The names may be indicated adjacent to the title block or submitted separately at the option of the manufacturer.
  14. Cross-references (if any).
- G.** Shop drawings shall be produced on computer aided design drafting (CADD) equipment.
- H.** White print reproductions of shop drawings shall be submitted to MTA - NYCT for approval. The drawings shall be examined, and, if necessary, may be returned to the manufacturer for correction. After the corrections have been made, the manufacturer shall promptly resubmit as many copies thereof as required for MTA – NYCT’s approval.
- I.** If the shop drawings deviate from the Drawings or are intended to deviate from the Drawings, the manufacturer shall notify MTA - NYCT in writing, stating the difference between the Drawings and that denoted by the shop drawings.
- J.** The manufacturer shall not proceed with fabrication and or manufacture until approval of the shop drawings has been received. The manufacturer shall

notify MTA - NYCT of any apparent discrepancies on the approved shop drawings and shall obtain approval of any modifications or corrections required prior to fabrication and or manufacture.

- K. The manufacturer shall be responsible to obtain proper fit and assembly of all work performed, supplied or otherwise furnished and shall make certain that proper fit is obtained with any existing work.
- L. Shop drawings will not be required where no submittal requirements are indicated, however the manufacturer shall assume complete responsibility that the Drawings (if any) represent the full extent of detail necessary for fabrication and or manufacture.

### **1.2.6 Record Drawings**

Record drawing submittals shall be provided on CD-ROM or 3 ½ in. floppy disk, in Bentley Microstation V8 format.

### **1.2.7 Fabrication**

- A. Fabrication shall be performed in accordance with the best available technology and current manufacturing practices.
- B. Welding workmanship, technique, qualification of welders, welding procedures and inspection of welds shall be in accordance with AREMA, AWS, AISC and ASME codes, specifications and requirements.
- C. Mill or commercial tolerances shall apply to all raw or unfinished materials unless otherwise indicated.
- D. If, during the course of fabrication any matter or detail requires explanation, or additional information as necessary for a clear understanding, or should any error become apparent, the manufacturer shall notify MTA - NYCT in writing and shall not proceed until instructed to do so.

### **1.2.8 Bid Documents**

All requirements appearing in the Bid Documents shall be considered as part of the Bid Documents.

### **1.2.9 Media for Approved Shop Drawings**

Final approved shop drawings shall be provided on CD-ROM or 3 ½ in. floppy disk, in Bentley Microstation V8 format.

### **1.2.10 Maintenance Manuals and Replacement Parts Lists**

- A. Maintenance manual and replacement parts list submittals shall describe and list in sufficient detail the complete description, operation and maintenance instructions of the indicated track and/or structure material.
- B. Replacement parts lists shall contain the complete breakdown of all parts and or components including the part or component description, the manufacturer's name and the manufacturer's part number.
- C. Maintenance manuals and replacement parts lists shall be documented and shall be printed, bounded and identified in a suitable manner.
- D. Sample maintenance manuals and replacement parts lists shall be submitted for MTA – NYCT's approval. The approved sample maintenance manual and replacement parts list submittal and the submitted maintenance manuals and replacement parts lists shall be identical.

### **1.2.11 Chemical Analysis Reports**

- A. Chemical analysis report submittals shall be notarized documents of the material chemical analysis or chemical test results.
- B. Chemical analysis reports shall originate from the manufacturer's raw material source or mill supplier.
- C. MTA - NYCT reserves the right to verify the chemical analysis report of any material.

### **1.2.12 Material Certification Sheets**

- A. Material certification sheet submittals shall be notarized documents of material origin, certified by the original manufacturer. Supplier names that are not customarily indicated on shop drawings (as specified in Article 1.2.5.F.13 of this Section) shall be submitted as part of the Material Certification Sheet requirements.
- B. The format of material certification sheets shall be suitable to indicate all applicable information. The sheet format shall include blank spaces as required.
- C. Material certification sheets shall be standard 8 1/2 inches by 11 inches white paper sheets and shall contain the following information:
  - 1. The material description.
  - 2. MTA – NYCT's Drawing reference (if any).
  - 3. MTA – NYCT's Specification reference (if any).

4. MTA – NYCT’s commodity number (if any).
5. MTA – NYCT’s purchase order number (if any).
6. The material list or bill number (if any).
7. The material subassembly designation (if any).
8. The material identification marking (if any).
9. Cross reference designation (if any).
10. The name of the manufacturer.
11. The names of suppliers and other vendors (if any).
12. The manufacturer’s part number(s) (if any).
13. Date of manufacture or fabrication.
14. Chemical analysis report designation (if any).
15. Quality plan designation (if any).

### **1.2.13 Safety Documentation**

- A. Material shall be subject to the approval of the MTA – NYCT’s Office of System Safety.
- B. Material safety data sheets shall document chemical, physical and safety characteristics of materials.
- C. Material safety data sheets shall be provided in accordance with all relevant requirements of the current CFR title 29, Part 1910, Section 1200, Hazard Communication and the current Federal Standard FED-STD-313, Material Safety Data, Transportation Data and Disposal Data for Hazardous Materials Furnished to Government Activities.
- D. Material safety data sheet forms shall be approved by the U.S. Department of Labor-OSHA and shall contain all relevant information for the material in accordance with all relevant requirements of the Public Employee Safety and Health Act and the New York State Toxic Substance Law.
- E. Material safety data sheets shall provide the nominal chemical composition of the material listing the specific chemical components by their Chemical Abstract series (CAS) designations.
- F. MTA - NYCT reserves the right to request Material Safety Data Sheets for any material at any time.

## **1.3 Quality Assurance**

### **1.3.1 Quality Program**

The manufacturer shall establish and maintain a Quality Assurance Program that meets or exceeds, but not limited by, the requirements of the International Standards for Quality Management Systems (ISO 9000 Series), or the technical equivalent National ANSI/ASQC Q90 Series of Quality Standards.

### 1.3.2 Inspection

- A. MTA - NYCT's inspector shall be admitted at any time summarily and without delay to any relevant part of the manufacturer's plant and shall be permitted to inspect materials at any place or stage of their manufacture, preparation, shipment or delivery when such activities are taking place.
- B. MTA - NYCT's inspector shall be permitted to inspect the manufacturer's records and documents for any material. The manufacturer shall provide MTA - NYCT's inspector with material samples in sufficient quantities upon request.
- C. The manufacturer shall supply all labor necessary for handling and rehandling of material to permit a proper inspection.

### 1.3.3 Testing

- A. All tests necessary to demonstrate compliance of the material with these Specifications shall be performed by the manufacturer at its own expense, or, as required, by the recognized independent testing laboratory approved by MTA - NYCT. Testing shall include as applicable: verification of dimension, weight, density, specific gravity; physical properties such as tensile strength, elongation, hardness, abrasion resistance, dielectric strength, resistivity, flammability, toxicity and smoke density; radiographic testing; ultrasonic testing; dye penetration testing; and any other test necessary to demonstrate that the material supplied complies with these Specifications. MTA - NYCT reserves the right to witness all tests and to request additional testing as required.
- B. All welding shall be subjected to nondestructive testing procedures in accordance with AREMA, AWS, ASNT, ASTM and ASME codes and specifications.
- C. Test data shall be arranged in the order of the tests indicated, such that the data are capable of being correlated to the respective test requirements.

## 1.4 Shipment and Acceptance

### 1.4.1 Shipment

- A. Materials shall be securely and properly packed for shipment, storage and stocking in non-returnable shipping containers and in accordance with the current ASTM Designation D3951, Standard Practice for Commercial Packaging. All packing shall be performed so as to prevent damage or loss.

- B. Wood packaging materials, where feasible, shall be fire retardant lumber conforming to the current AWPA Standard C20, Structural Lumber-Fire-Retardant Treatment by Pressure Processes. Plastic packaging materials, where feasible, shall not contain chlorofluorocarbons or other substances harmful to the environment.
- C. Material bills of lading shall be provided for each shipment and shall accompany shipments to their delivery destinations.
- D. Material shipments shall be grouped in standard units of measure to facilitate efficient storage and convenience of handling at their delivery destinations.
- E. Material shipments shall be identified with MTA - NYCT's commodity number, MTA - NYCT's purchase order number, MTA - NYCT's storeroom delivery destination, the material description, the quantity contained therein, the weight (gross weight, net weight and tare weight) and the name of the manufacturer. Shipments of chemical commodities shall be further identified in accordance with the current MTA - NYCT's labeling specification CCSS-001, Labeling Requirements for Chemical Commodities.

#### **1.4.2 Acceptance**

- A. Final acceptance of all materials will be subject to verification of count and inspection after delivery at the locations indicated in the Bid Documents.
- B. Notwithstanding tests, inspection or acceptance at any previous time or location, materials that do not comply with MTA - NYCT's requirements and which are found to contain any defects, will be rejected. Material rejection, if any, shall require the removal, disposal and replacement of the rejected materials by the manufacturer.
- C. The vendor (contractor) shall bear the cost of handling and transporting all rejected materials, regardless of when and where the rejection was made.

## **CONTRACT ATTACHMENTS**

**The following Contract Attachment is hereby incorporated by reference:**

1. Authority Observed Holidays
2. Drawing: #T-2049 Sheet 7 of 7, Details of Type III Track Construction

ATTACHMENT #1  
NYCT Observed Holidays

**New Year's Day**  
**Dr. Martin Luther King, Jr. Day**  
**President's Day**  
**Memorial Day**  
**Independence Day**  
**Labor Day**  
**Veteran's Day**  
**Thanksgiving Day**  
**Day after Thanksgiving**  
**Christmas Day**



**MTA - NEW YORK CITY TRANSIT  
2 BROADWAY  
NEW YORK, NY 10004**

**DIVISION OF MATERIEL  
[www.mta.info/nyct/procure/nyctproc.htm](http://www.mta.info/nyct/procure/nyctproc.htm)**

**1010316**

**NOTICE  
-OF-  
ADDENDUM**

**ADDENDUM # 2**

**CURRENT OPENING/DUE DATE: Postponed  
Indefinitely**



## New York City Transit

January 4, 2011

**ADDENDUM NO. 2**  
**CONTRACT # 10I0316**  
**REMOVE AND RE-INSULATE HAND HELD TRACK TOOLS**  
**REVISED BID OPENING DATE: INDEFINITE**

To Prospective Bidders:

Bidders are advised that the Bid Opening Date for Contract No. 10I0316 is hereby postponed indefinitely. A specific Bid Opening Date will be determined as soon as possible.

**Reminder: Be sure to attach this addendum to your proposal or acknowledge it in the place provided in the Bid. Failure to do so may result in rejection of your bid.**

If you have any questions, please contact Susan Kronenfeld at (646)252-6265.

Sincerely,

A handwritten signature in black ink, appearing to read "Alain Chirot".

Alain Chirot  
Senior Director, Procurement

**MTA - NEW YORK CITY TRANSIT  
2 BROADWAY  
NEW YORK, NY 10004**

**DIVISION OF MATERIEL  
[www.mta.info/nyct/procure/nyctproc.htm](http://www.mta.info/nyct/procure/nyctproc.htm)**

**1010316**

**NOTICE  
-OF-  
ADDENDUM**

**ADDENDUM # 1**

**CURRENT OPENING/DUE DATE: 1/6/11**



## New York City Transit

December 20, 2010

**ADDENDUM NO. 1**  
**CONTRACT # 10I0316**  
**REMOVE AND RE-INSULATE HAND HELD TRACK TOOLS**  
**NEW BID OPENING DATE: JANUARY 6, 2011**

All prospective bidders are advised of the following:

1. **The Bid Opening Date has been rescheduled for January 6, 2011.** The time set for the bid opening is 2:00PM.

**Reminder: Be sure to attach this addendum to your proposal or acknowledge it in the place provided in the Bid. Failure to do so may result in rejection of your bid.**

If you have any questions, please contact Susan Kronenfeld at (646)252-6265.

Sincerely,

A handwritten signature in black ink, appearing to read "Alain Chirot".

Alain Chirot  
Senior Director, Procurement