2 Montgomery Street, 3rd Floor, Jersey City, NJ 07302
PORT AUTHORITY TRANS-HUDSON CORPORATION

Date 01/12/2015

REQUEST FOR QUOTATION

Collective# / **0000041079 Bid Due Date** / 01/28/2015
Bids must be received no later than 11:00 AM on the above Bid Due Date.

Deliver Goods/Services To:
PATH
Consolidated Maintenance Facility
Academy Street
Jersey City NJ 07302

Contact person/Telephone Rene Munoz
201-395-7366
Email: ReMunoz@panynj.gov

Quantity	Description	Unit Price	Total
	Supply and Deliver 39 foot contact rail, end approaches and aluminum splice bars. Delivery Lead Time_____ARO Deliver to: Consolidated Maintenance Facility, 120 Academy Street, Jersey City, New Jersey 07302. Delivery must be made between the hours of 8:00 AM and 2:00 PM weekdays. Contact Mr. Nabil Asaad 24 hours prior to delivery at (201) 232-7926. Invoices for payment must be sent to: Port Authority Trans-Hudson Corporation 120 Academy Street Jersey City, NJ 07302 Attention: Nabil Asaad A price preference of 10 % is available for NY/NJ Minority and Women Business Enterprises (M/WBE) or 5% for NY/NJ Small Business Enterprises (SBE) certified by the Port Authority (PA) by the day before bid opening for awards not exceeding $1,000,000. My firm was certified as a _____on_____.		
	PLEASE QUOTE FULLY DELIVERED PRICES	**PAYMENT TERMS**	**Total Delivered Price**

This Quotation is subject to the terms and conditions set forth on the back page hereof. Bidder is advised to read these before signing.

We have read the instructions and, if favored with an order, we agree to furnish the items enumerated herein at the prices and under the conditions indicated.

Signed _____
Firm Name _____
Telephone number_____Date_____
Fax Number_____
Federal Taxpayer ID _____

Bidder Must Sign In Two Places

NOTICE TO BIDDERS: Unless the following term of assurance that the above offer is irrevocable is signed, the offer submitted herein shall not be deemed to be complete.

The foregoing offer shall be irrevocable for 90 days after the date on which The PORT AUTHORITY TRANS-HUDSON CORPORATION opens this proposal.

Signed_____Date_____
Firm Name_____

2 Montgomery Street, 3rd Floor, Jersey City, NJ 07302
PORT AUTHORITY TRANS-HUDSON CORPORATION

REQUEST FOR QUOTATION

Collective Number / Bid Due Date
0000041079 / 01/28/2015

Quantity	Description	Unit Price	Total
	This is a Formal Bid Invitation Mail Sealed Bids to: The Port Authority of NY & NJ Attn: Bid Custodian Procurement Department 2 Montgomery Street, 3rd Floor Jersey City, NJ 07302 by the date and time listed above, where it will be publicly opened and read. Bids are only accepted Monday through Friday, excluding Port Authority holidays,between the hours of 8 A.M. & 5 P.M., via regular mail,express delivery service or hand delivery. If you do not use or have an envelope provided, you must clearly mark the outside envelope/package with 'BID ENCLOSED' and show the company name, address, as well as Bid number and Due date as stated on this bid document. A valid photo id is required to gain access into the building, to attend the bid opening or hand deliver a bid.		
	PLEASE QUOTE FULLY DELIVERED PRICES **PAYMENT TERMS**	**Total Delivered Price**	

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Federal Taxpayer ID _____

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Signed_____Date_____
Firm Name_____

2 Montgomery Street, 3rd Floor, Jersey City, NJ 07302
PORT AUTHORITY TRANS-HUDSON CORPORATION

Date 01/12/2015

REQUEST FOR QUOTATION

Collective Number / Bid Due Date
0000041079 / 01/28/2015

Quantity	Description	Unit Price	Total
130 EA	39'-0" long Contact Rail of 84C Section conforming to Specification Section CO5653 "BI-METALLIC COMPOSITE CONTACT RAIL AND END APPROACHES" Revision Dated November 1, 2006 and PORT AUTHORITY TRANS-HUDSON CORPORATION Drawing No. C920 dated 09-16-08.		
12 EA	7'-6" Bi-Metallic End Approaches As per attached Specification and Drawing.		
65 PAA	Aluminum Splice Bars, 22" long For use with 84C composite rail section as per attached Specification and Drawing.		
	PLEASE QUOTE FULLY DELIVERED PRICES **PAYMENT TERMS**	**Total Delivered Price**	

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We have read the instructions and, if favored with an order, we agree to furnish the items enumerated herein at the prices and under the conditions indicated.

Signed _____
Firm Name _____
Telephone number_____Date_____
Fax Number_____
Federal Taxpayer ID _____
Signee Email Address_____

Bidder Must Sign In Two Places

NOTICE TO BIDDERS: Unless the following term of assurance that the above offer is irrevocable is signed, the offer submitted herein shall not be deemed to be complete.

The foregoing offer shall be irrevocable for 90 days after the date on which The PORT AUTHORITY TRANS-HUDSON CORPORATION opens this proposal.

Signed_____Date_____
Firm Name_____

PA280/9-03

TERMS AND CONDITIONS

1. The Port Authority (PA) reserves the right to request information relating to seller's responsiblity, experience and capability to perform the work.
2. Unless otherwise provided, complete shipment of all items must be in one delivery FOB delivery point. Payment will not be made on partial deliveries unless authorized in advance by the party to be charged and the discount, if any, will be taken on the total order.
3. PA payment terms are net 30 days. Cash discounts for prompt payment of invoices may be taken but will not be considered in determining award, except in the case of tie bids.
4. Separate unit and total FOB delivered prices must be shown.
5. Sales to the PA and to PATH are currently exempt from New York and New Jersey State and local taxes and generally from federal taxation. The seller certifies that there are no federal, state, municipal or any other taxes included in the prices shown hereon.
6. The PA shall have the absolute right to reject any or all proposals or to accept any proposal in whole or part and to waive defects in proposals.
7. Unless the phrase "no substitute" is indicated, bidder may offer alternate manufacturer / brands, which shall be subject to Port Authority approval. Please indicate details of product being offered with bid.
8. Acceptance of seller's offer will be only by Purchase Order Form signed by the PA. No change shall be made in the agreement except in writing.
9. If the seller fails to perform in accordance with the terms of this purchase order, the PA may obtain the goods or services from another contractor and charge the seller the difference in price, if any, a reletting cost of $100, plus any other damages to the PA.
10. Upon request, sellers are encouraged to extend the terms and conditions of any terms agreement with the PA to other government and quasi-government entities by separate agreement.
11. By signing this quotation or bid, the seller certifies to all statements on Form PA 3764A regarding non-collusive bidding; compliance with the PA Code of Ethics; and the existence of investigations, indictments, convictions, suspensions, terminations, debarments and other stated occurrences to assist the PA in determining whether there are integrity issues which would prevent award of the contract to the seller. The PA has adopted a policy set forth in full on PA 3764A, that it will honor a determination by an agency of the State of New York or New Jersey that a bidder is not eligible to bid on or be awarded public contracts because the bidder has been determined to have engaged in illegal or dishonest conduct or to have violated prevailing wage legislation. The Terms and Conditions of PA 3764A apply to this order. A copy can be obtained by calling (201) 395-3405 or at http://www.panynj.gov/business-opportunities/become-vendor.html
12. The vendor may subcontract the services or use a supplier for the furnishing of materials required hereunder to such persons or entities as the Manager, Purchasing Services may from time to time expressly approve in writing. All further subcontracting shall also be subject to such approval.
13. The successful bidder (vendor) shall not issue nor permit to be issued any press release, advertisement, or literature of any kind, which refers to the Port Authority or that goods will be, are being or have been provided to it and/or that services will be, are being or have been performed for it in connection with this Agreement, unless the vendor first obtains the written approval of the Port Authority. Such approval may be withheld if for any reason the Port Authority believes that the publication of such information would be harmful to the public interest or is in any way undesirable.
14.Neither the Commissioners of the Port Authority, nor Directors of PATH, nor any of them, nor any officer, agent or employee thereof, shall be charged personally by the Contractor with any liability, or held personally liable to the Contractor under any term or provision of this Agreement, or because of its execution or attempted execution, or because of any breach, or attempted or alleged breach, thereof.

DIVISION 5

SECTION C05653

BI-METALLIC COMPOSITE CONTACT RAIL AND END APPROACHES

C04/08/02
Revised: 1 Nov. 2006.

PART 1 – GENERAL

1.01 DESCRIPTION

A. This Section specifies furnishing all labor, materials, and equipment for the manufacture, fabrication, testing, and delivery of bi-metallic composite contact rail and end approaches for the Port Authority Trans-Hudson Corporation.

B. Bi-metallic composite contact rail and end approaches shall be manufactured from steel base rail of 84C Section clad with equal amounts of aluminum extrusion on each side of the web, as shown in the Drawings and as specified.

1.02 REFERENCES

A. The following is a list of publications referred to in this Section:

1. American National Standards Institute ANSI/ASQC Standard C-1, Specification of General Requirements for a Quality Manual, latest revision.

2. American Society for Testing and Materials (ASTM), latest versions:

a. ASTM B317-00 Standard Specification for Aluminum-Alloy Extruded Bar, Rod, Tube, Pipe, and Structural Profiles for Electrical Purposes (Bus Conductor)

1.03 SUBMITTALS

A. Before the start of manufacturing bi-metallic composite contact rail and end approaches submit to the Engineer for approval Shop Drawings and other data including design calculations and catalogue cuts required by the Specifications or necessary to adequately perform the work.

B. Shop Drawings shall show the general arrangement and such details as are necessary to provide a comprehensive description of the Bi-metallic composite contact rail and end approaches.

C. Catalogue cuts shall describe the bi-metallic composite contact rail interface and butt end coating materials.

D. Furnish Shop Drawings on sheets measuring 22 inches by 34 inches.

E. Furnish design calculations and other required data on standard 8-1/2 by 11-inch sheets printed on one side only.

F. Before the start of manufacturing bi-metallic composite contact rail and end approaches submit to the Engineer for approval not less than two identical samples of the bi-metallic composite contact rail, measuring a minimum of one foot long. Label each sample indicating:

1. Purchase Order number.

2. Name of Vendor.

3. Material or equipment represented.

4. Source.

5. Name of producer and brand.

6. Reference specification section and article numbers.

7. Mill certification for the steel base rail.

8. Foundry certification for the aluminum extrusions.

1.04 QUALITY CONTROL

A. Establish a Quality Control Program regulating methods, procedures, and processes to ensure compliance with standards of quality required by this Specification. The Quality Control Program will be subject to audit for conformance. The program shall be in accordance with the current ANSI/ASQC Standard C-1.

B. Records of all inspection and testing by the manufacturer shall be kept complete and available to the Engineer for review during the performance of the work and for longer periods required by this Specification.

C. If the bi-metallic composite contact rail and end approaches manufacturer does not normally prepare materials in its own plant(s) it is acceptable to have proprietary materials prepared at another non-owned facility. This facility shall be subject to the same Quality Assurance procedures and systems the manufacturer uses in its own facilities and shall be subject to audit by the Engineer.

D. The bi-metallic composite contact rail and end approaches manufacturer will be permitted to conduct testing in-house if the manufacturer's laboratory and testing facility is certified to National Institute of Standards and Technology (NIST) standards.

E. Products and materials incorporated into the bi-metallic composite contact rail and end approaches will be subject to inspection by the Engineer at the Vendor's facilities, the place of manufacture, the shipping point, and at the shipping destination.

F. Give the Engineer a minimum of 14 days notice prior to the start of fabrication of bi-metallic composite contact rail and end approaches to make arrangements for inspections. Notice shall include the name and address of the fabrication facility and the name and telephone number of the individual at the facility to be contacted.

G. Inspection and testing by the Engineer will be performed in such a manner as not to unduly delay the work.

H. Give the Engineer sufficient notice of when any testing is proposed in order to have the option of witnessing the tests. Provide the Engineer free entry at all times to the place of manufacture while work on this Order is being performed.

I. Whether or not the Engineer inspects or tests any materials, the Vendor will not be relieved from any responsibility regarding defects or other failures to meet the requirements of the specifications, nor will such inspection or testing be considered as a guarantee of acceptance of any material which may be delivered later.

PART 2 – PRODUCTS

2.01 BI-METALLIC OMPOSITE CONTACT RAIL

A. Bi-metallic composite contact rail and end approaches shall consist of 84C section steel base rail with aluminum extrusions fastened on both sides of the web manufactured by Atlantic Track & Turnout Co., 270 Broad Street, Bloomfield, New Jersey 07003, or approved equal.

B. 84C steel base rail and aluminum extrusions shall be fastened together at intervals not to exceed 18 inches

C. The bi-metallic composite contact rail fastening system shall maintain the aluminum extrusions and the steel base rail in intimate, stable electrical contact over a temperature range of –25 degrees F to 220 degrees F. Thermal expansion or contraction within this temperature range shall not exceed yield points of any of the composite rail or fastener components.

D. If the bi-metallic composite contact rail fastening system is to be a tension lock type, it shall be Huck Bolt and Collar, all galvanized, or approved equal.

2.02 STEEL BASE RAIL

A. Steel base rail for bi-metallic composite contact rail and end approaches shall be 84C section manufactured by Steel of West Virginia, Inc., 17th Street and 2nd Avenue, Huntingdon, West Virginia 25703, or approved equal.

B. 84C Section steel base rail shall be new No. 1 rail free of all injurious imperfections.

C. Chemical composition of steel base rail shall be:

1.	Carbon:	0.64 to 0.77 percent
2.	Manganese:	0.60 to 0.90 percent
3.	Phosphorus:	0.04 percent, maximum
4.	Sulphur:	0.05 percent, maximum
5.	Silicon:	0.10 to 0.35 percent
6.	Copper:	0.50 percent, maximum

D. Brinell hardness of steel base rail shall be 220 or higher.

E. Marking and stamping on the web of steel base rail will not be allowed.

F. Control cooling of steel base rail will not be required.

G. Steel base rail shall be free of shatter cracks.

H. Steel base rails shall be 39 feet in length when measured at a temperature of 60 degrees F with a tolerance of plus 1/2-inch.

I. Steel base rail shall have an upsweep limited to 3/4-inch in 39 feet with no down sweep allowed and a deviation form straightness of less than 1/8-inch in 10 feet.

J. All rails after finishing shall be smooth on heads and bases, straight in line and in surface, without twists, kinks or waves.

2.03 ALUMINUM EXTRUSION

A. Aluminum extrusion shall be of uniform dimension and shall be a high mechanical strength/high electrical conductivity 6101-T6 alloy conforming to ASTM B317.

B. Aluminum extrusions shall be so formed as to:

1. Discourage water ingress to the interface between the aluminum extrusion and the steel base rail.

2. Permit intimate contact with web of the steel base rail or with the fillets of the head and the base of the steel base rail and assure a positive electrical connection for current flow between the steel base and aluminum extrusion.

3. Permit standard rail tongs to grasp the head of the composite rail for lifting the composite rail without damage to the aluminum extrusion.

4. Provide adequate cross sectional area to meet the specified electrical requirements.

2.04 ELECTRICAL REQUIREMENTS

A. Composite contact rail shall be a low-resistance conductor with a resistance not greater than 0.002 ohms per 1,000 feet at 20 degrees C. The current distribution between the steel and the aluminum shall be inversely proportional to their respective resistivities.

B. Composite contact rail shall be able to withstand a fault current of 200,000 amps DC for 100 milliseconds with no mechanical or thermal damage.

C. Composite contact rail shall be capable of carrying a minimum of 5,000 amps continuous current without exceeding a temperature rise of 40 degrees C above 40 degrees C ambient in still air.

2.05 END APPROACHES

A. Contact rail end approach shall consist of sections of the steel base rail as shown in the Drawings and as specified, cut and welded to provide a smooth transition for the collector shoe onto the composite contact rail.

B. End approaches shall be supplied in 7-foot 6-inch lengths, or to length shown on the Drawings.

C. The mating end of each end approach shall be drilled as shown in the Drawings.

D. The mating end of each end approach shall be provided with sufficient lengths of aluminum extrusion fastened to the web to allow the attachment of a splice joint assembly.

2.06 RUST INHIBITING COATINGS

A. Bi-metallic composite contact rail interface coating shall be NO-OX-ID Type A-Special manufactured by Sanchem, Inc., 1600 S. Canal Street, Chicago, Illinois 60616, or approved equal.

B. Bi-metallic composite contact rail butt end butt coating shall be NO-OX-ID Type A manufactured by Sanchem, Inc., 1600 S. Canal Street, Chicago, Illinois 60616, or approved equal.

PART 3 – EXECUTION

3.01 STEEL BASE RAIL

A. Steel base rail shall be sandblasted its entire length on both sides prior to application of aluminum extrusions. The surfaces of the steel base rail that mate with the aluminum extrusion shall be cleaned to a bright finish, free of all rust and scale. This operation must be performed no more than 12 hours prior to assembly.

B. All steel base rail interface surfaces shall be liberally coated with NO-OX-ID Type A-Special oxide inhibiting compound.

3.02 PUNCHING AND DRILLING

A. Bi-metallic composite contact rail and end approaches shall be drilled and punched as shown in the Drawings and as specified.

B. Punching of fastener holes in the steel base rail and aluminum extrusions, except for the splice plate holes at each end of each composite contact rail length, will be permitted under the following conditions:

1. The manufacturer shall demonstrate that the punching operation will have no detrimental effect on aluminum extrusion to steel base rail contact resistance.

2. The manufacturer shall demonstrate that the punching operation will cause no detrimental deformation of the aluminum extrusion at the interface with the steel base rail that will interfere with proper functioning of any part of the fastening system or encourage ingress of water.

C. Splice plate holes at the end of each composite contact rail length shall be drilled after assembly of the aluminum extrusions to the base rail to assure exact alignment of the holes.

D. The manufacturer shall prove exact alignment of the splice plate holes by pushing through each hole a mandrill of diameter no more than 0.005 inches smaller than the hole diameter and certify that this test was successful on all rail lengths shipped.

E. Punching or drilling of the composite rail sections after assembly of the aluminum extrusion to the base rail will not be permitted.

3.03 BUTT END COATING

A. After completion of drilling the splice plate holes, completely fill holes and coat the bi-metallic composite contact rail butt ends with NO-OX-ID Type A oxide inhibiting compound.

3.04 TESTING

A. Prior to shipment of any bi-metallic composite contact rail test two pieces of fully assembled contact rail, each piece not less than 4 feet in length, to demonstrate adequacy and stability of electrical contact between the aluminum extrusions and the steel base rail.

B. The test procedure on each test piece of bi-metallic composite contact rail shall be as follows:

1. At a constant ambient temperature accurately measure the electrical resistance of the full length of the test piece.

2. Lower the rail temperature to –25 degrees F for 30 minutes and measure the electrical resistance of the test piece.

3. Raise the rail temperature to 220 degrees F for 30 minutes and measure the electrical resistance of the test piece.

4. Separate chambers shall be used for the extreme temperature conditions. The air temperature of the two chambers shall be held at each of the extreme temperatures by means of circulation and sufficient hot or cold-chamber thermal capacity so that the ambient temperature shall reach the specified temperature within 2 minutes after specimens have been transferred to the appropriate chamber.

5. This procedure shall be repeated for a minimum of 10 cycles.

C. If any measurement of electrical resistance on either of the two test pieces does not conform to the specified electrical requirements adjusted for temperature the Vendor shall provide two additional test pieces and perform the full test procedure on each of them.

D. If a second measurement of electrical resistance on any test piece does not conform to the specified electrical requirements adjusted for temperature the entire lot of manufactured bi-metallic composite contact rail will be rejected.

E. Submit to the Engineer for approval a written proposal for modifying the design or manufacturing process to meet the specified requirements.

F. Prior to shipment of any modified bi-metallic composite contact rail test two pieces of fully assembled contact rail, each piece not less than 4 feet in length, in accordance with the above test procedure

G. Three certified copies of all tests, including original data calculations and interpretation of results, shall be furnished to the Engineer.

3.05 MARKING

A. Each length of composite contact rail and each end approach shall have the manufacturer identification and date of manufacture (month and year) permanently die stamped on the outer face of the aluminum extrusion outside of the splice joint area.

3.06 DELIVERY, HANDLING AND STORAGE

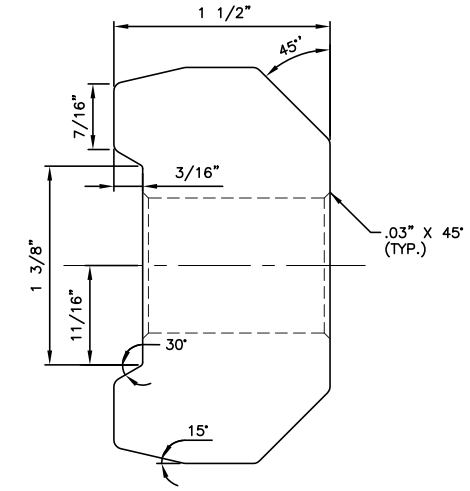
A. Composite contact rails shall be loaded with heads up with all Huck collars facing the same direction and with a minimum of five 2-inch x 6-inch common stock wood separators placed between tiers. The wood separators shall be placed 5 feet from the each end, at the center, and the equidistant between the center and end separators of each composite contact rail length.

B. Composite contact rail shall arrive at destination in the same condition as when loaded at the manufacturer's plant.

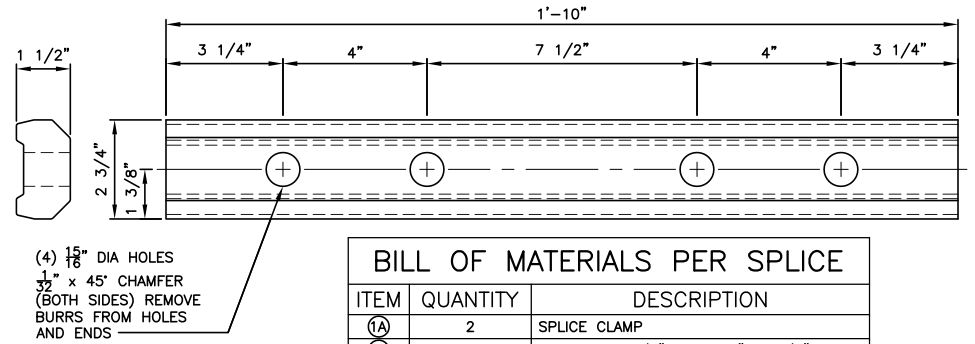
C. End approaches shall be banded with 1-inch steel banding on wooden pallets with separators between tiers. Pallets shall have only two tiers.

D. End approaches shall arrive at destination in the same condition as when loaded at the manufacturer's plant.

END OF SECTION C05653

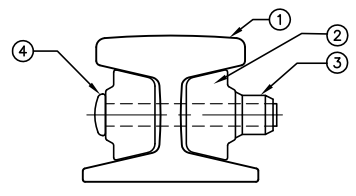


SPLICE JOINT BAR – END VIEW
N.T.S.

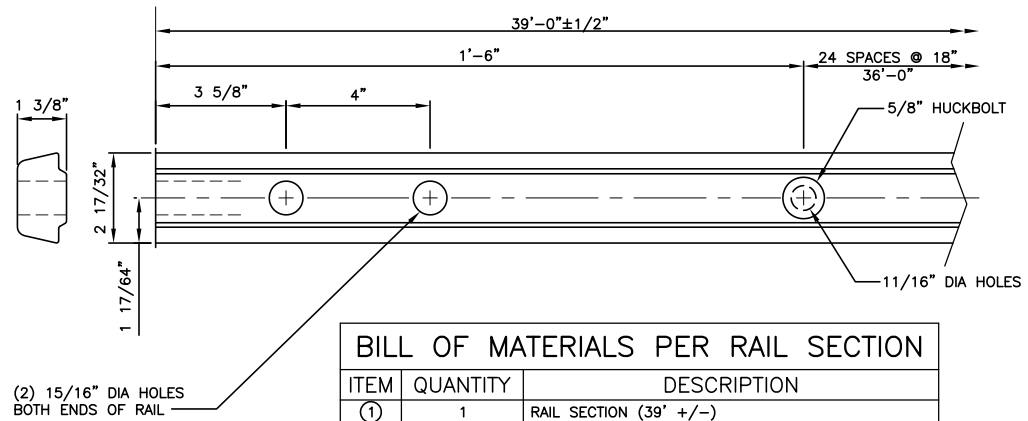


BILL OF MATERIALS PER SPLICE		
ITEM	QUANTITY	DESCRIPTION
1A	2	SPLICE CLAMP
2A	4	LOCK BOLT 7/8" DIA. X 6"–6 1/4" GRIP
3A	4	FLANGED COLLAR

SPLICE CLAMP FOR 84C TRANSDUCER
N.T.S.

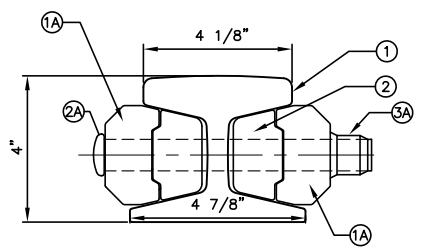


84C STEEL SECTION ASSEMBLY
N.T.S.

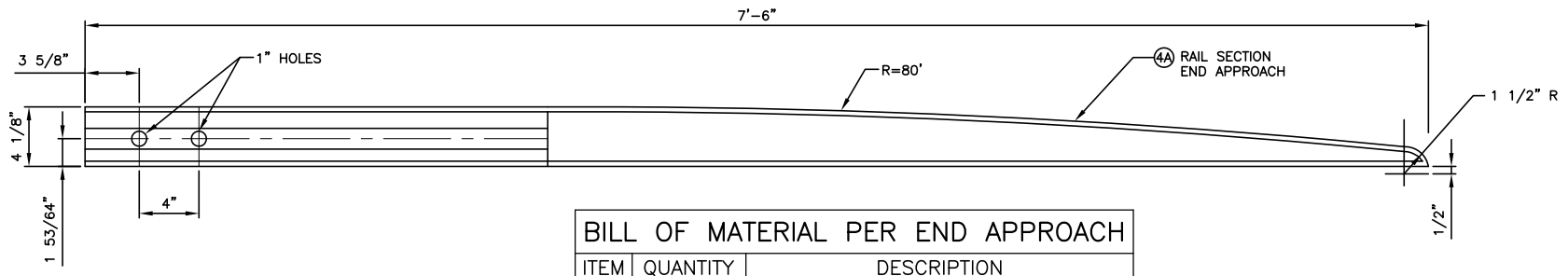


BILL OF MATERIALS PER RAIL SECTION		
ITEM	QUANTITY	DESCRIPTION
1	1	RAIL SECTION (39' +/–)
2	2	ALUMINUM TRANSDUCER
3	25	5/8 HUCKBOLT COLLAR
4	25	5/8 HUCKBOLT

84C TRANSDUCER
N.T.S.



84C STEEL SECTION WITH TRANSDUCER
SPLICE EXTRUSION (JOINT BAR)
N.T.S.



BILL OF MATERIAL PER END APPROACH		
ITEM	QUANTITY	DESCRIPTION
1A	2	SPLICE CLAMP
2A	4	LOCK BOLT 7/8" DIA X 6"–6 1/4" GRIP
3A	4	FLANGED COLLAR
4A	1	RAIL SECTION END APPROACH

84C CONTACT RAIL END APPROACH
N.T.S.

Sheet of

PORT AUTHORITY
TRANS-HUDSON CORPORATION

No.	Date	Revision	Approved

ENGINEERING DEPARTMENT

PATH

CIVIL

Title

PATH STANDARD DETAILS

84C CONTACT RAIL

L. CHAN	L. CHAN	K. POLLARD
Designed by	Drawn by	Checked by

Date **SEPTEMBER 16, 2008**

Contract Number

Drawing Number **C920**