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January 6, 2004

John G. Wall, Esquire
Burns, White & Hickton
120 Fifth Avenue, Suite 2400
Pittsburgh, PA 15222-3001

IN RE: City of Latrobe v. Norfolk Southern Railway Company
Docket No. C-20031000
Our File No. 3091/137871

Dear Mr. Wall:

My apologies for taking so long to get back to you. I, like you, have not filed objections to the Secretarial Letter of November 25, 2003, relevant to the above captioned matter. I have submitted a copy of your letter to the appropriate individuals at the City office with instructions to comply with your request regarding the submission of constructions plans. If you have any questions or need anything further at this time, please feel free to contact me.

Very truly yours,

James E. Kelley, Jr.

JEKjr/bam
cc: David Oliver
Richard J. Stadler, City Manager
Ann Powell, Code Officer
Joseph Bush, Superintendent of Public Works

LATROBE
PENNSYLVANIA

CITY OF LATROBE
Planning and
Development
Department

901 Jefferson Street
P.O. Box 829
Latrobe, PA 15650
(724) 537-3580
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February 10, 2004

James J. McNulty
Secretary
PA P.U.C.
P.O. Box 3265
Harrisburg PA 17105-3265

In Re: City of Latrobe vs. Norfolk Southern Corp.
Docket No. C-20031000

Dear Mr. McNulty,

As ordered by the Pennsylvania P.U.C. the City of Latrobe is submitting construction plans and specifications needed to repair the pedestrian lighting located at the Alexandria, Ligonier and Jefferson Street underpasses.

Please review the enclosed documents and forward any questions or concerns to me.

Sincerely,

Ann E. Powell
Director Planning & Development

AEP/kml

Enclosure

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City of Latrobe

Railroad Underpass Lighting Project
Contract 1/2004

February 2004

Prepared by:
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City of Latrobe

Railroad Underpass Lighting Project

Contract 1/2004

SECTION 1: General Requirements

A. GENERAL

1. Work Includes

   a. Contractor

      1) Furnish all labor, materials, equipment, and appurtenances necessary for the electrical system rebuild as shown on the drawings and herein specified. It is the responsibility of the Contractor that the system is balanced, phased-out, tested, adjusted, fully protected and coordinated.

      2) The work shall include but not be limited to the following:

         (a) Concrete Work for Electrical
         (b) Identification
         (c) Raceway
         (d) Underground Duct Banks
         (e) Wire
         (f) Boxes
         (g) Wiring Devices
         (h) Safety Disconnect Switches
         (i) Grounding
         (j) Lighting
         (k) Enclosed Circuit Breakers

      3) Furnish and install all components of the listed systems as specified and indicated on the drawings.

2. Contractor Definition

   a. All references to "CONTRACTOR" throughout these Electrical specifications refers to the *Contractor responsible for the work defined by this Electrical specification Sections and* the associated Electrical Drawings, except where an other Contractor is referred to specifically, for example, General/Mechanical Contractor.

3. Protection

   a. The Contractor shall take necessary precautions to protect his materials and equipment from damage. After completion of his work, the Contractor shall clean all electrical equipment and enclosures inside and out.

   b. All materials delivered to the job site shall be packaged by the manufacturer to prevent damage during shipment, handling and storage prior to installation.

   c. All materials shall be stored in clean dry area. Materials stored on the ground with plastic cover to shed the elements is not acceptable. Conduit may be stored outdoors with appropriate provisions to keep it clean & dry.

   d. Storage or installation of electrical equipment inside the building prior to completion of a watertight roof is not acceptable. Conduit may be installed if all open ends are sealed at the end of each day's work.

4. Submittals

   a. The Contractor shall prepare and submit shop drawings for the work under this Section.

   b. Shop drawings shall consist of manufacturer's data, catalog sheets, fabrication drawings, etc. as required to completely describe the equipment or material.

   c. Manufacturer's data shall include ratings, dimensions, model numbers, options, etc., to allow for a review to determine conformance with the contract documents.

   d. Submit shop drawings for all electrical equipment and materials furnished, including basic items such as wire, conduit, boxes, etc.

   e. Prior to forwarding submittals for review, the Contractor shall verify that the equipment proposed interfaces properly with all associated devices such as disconnects, circuit protection, metering, lighting, electric power source, etc.

5. Quality Assurance

   a. All material shall be new and shall conform to the standards of the Underwriter's Laboratories, Inc., in any case where such a standard has been established. In case of assemblies, the components shall be Underwriter's Laboratories, Inc. listed for use as an integral part. In addition all materials shall conform to applicable NEMA, ANSI, and Federal Specifications requirements.

   b. The entire installation shall be made in conformance with the requirements of the latest publications of:

      1) National Fire Protection Association (NFPA)

      2) National Electrical Code (NEC)

      3) National Electrical Safety Code (NESC)

4) National Electric Manufacturers Association (NEMA)

5) Institute of Electrical and Electronic Engineers (IEEE)

6) Occupational Safety and Health Administration (OSHA)

7) Applicable state and local codes and ordinances.

c. The Contractor shall coordinate with the local inspection authority, throughout the course of the construction, to make sure that all installation methods and materials meet the inspector's requirements.

d. After completion of all work, the Contractor shall have the installation inspected and certified by the local inspection authority. Any rework necessary to obtain approval shall be at the expense of the Contractor.

e. The Contractor shall pay all charges and fees associated with inspection and certification of the electrical work.

6. Sleeve openings, cutting and patching

a. The Contractor shall provide all sleeve holes and other openings through any part of the various pavements, sidewalks, and structures.

b. The Contractor shall be responsible for all cutting and patching required to accommodate his work.

c. Structural members and street surfaces shall not be cut without consent from the Engineer. Patching shall match the original conditions.

7. Sealing Openings

a. All sleeve holes or other openings shall be sealed to prevent any water seepage through these openings.

b. Where sleeve openings enter spaces through structures at a location below grade, the space between the conduit and the structure shall be sealed.

8. Record Documents

a. At the completion of the project, all operating and maiintenance instructions, parts lists, shop drawings and maintenance instructions for material and equipment furnished by the Contractor shall be indexed and neatly bound into a set of record documents.

b. Initially, a single set of record documents shall be submitted to the Engineer for review and approval. After the review set has been returned to the Contractor with comments, three (3) complete revised sets of record documents shall be turned over to the Owner.

9. Guarantee

   a. The Contractor shall guarantee all equipment and material furnished under this specification for a period of two (2) years after the date of final acceptance. Equipment manufacturer's warranties shall be passed on to the Owner. Should any defects appear within this period, the Contractor shall repair or replace said defects or any damage to building or contents caused by defective workmanship or equipment, and shall make immediate adjustments at no cost to the Owner, Architect or Engineer.

   b. The Contractor shall furnish maintenance and call-back service for the equipment provided by him for a period of one (1) year after the project is substantially complete. This service shall include regular examinations of the installation by competent and trained employees of the Contractor, and shall include all necessary adjustments, cleaning, supplies and parts to keep the equipment in good operation, except parts made necessary by misuse or accidents not caused by the Contractor.

10. Equipment Locations

   a. All equipment specifically designed for surface mounting shall have surface conduit.

   b. Equipment locations shown on the drawings may change due to interference problems, equipment design, etc. The Contractor shall verify the locations of devices and equipment installed by other contractors prior to final rough-in. Adjust conduit layouts as required to compensate for changes.

11. Access To Equipment

   a. All devices and equipment shall be located to allow easy access for maintenance and repair.

   b. The equipment locations shall be reviewed with the work of other trades and contractors to verify that adequate working space will remain after all equipment is installed. All electrical equipment shall have NEC required access space.

   c. Where equipment locations shown on the drawings deny adequate access, the Contractor shall notify the Engineer to allow for review and adjustment of the location.

12. Testing

   a. When electrical service conductors and branch feeders are installed, the voltage relationships shall be verified prior to energizing loads.

13. Demonstration

   a. The Contractor shall demonstrate to the Owner, or his representative, the proper use, operation and maintenance of all equipment furnished and installed under any of the Electrical Sections.

   b. The demonstration shall include written materials, diagrams, hands-on instruction and other aids.

   c. The demonstration shall pay particular attention to all safety related aspects.

d. See additional requirements in appropriate Sections.

14. Sequence Of Work

a. The Contractor shall review the overall construction requirements and schedule his work to coordinate with the owner.

15. Coordination

a. These specifications and accompanying plans are mutually explanatory and anything required by one but not by the other shall be considered as required by both. Where the requirements differ or are contradictory between different specification sections, between different drawings or between drawings and specifications, the more restrictive (larger size, greater rating, more options, etc.) shall apply.

b. Drawings indicate diagrammatically the desired arrangement and the approximate location of principal conduit, wiring, apparatus and equipment. Certain runs of conduit and locations of equipment are shown distorted on drawings to avoid confusion. Measurements, dimensions, equipment space requirements, etc., shall be verified on the job site by the Contractor. The entire installation shall be made in a manner to avoid obstructions, to preserve headroom, keep openings clear and to overcome local difficulties and interference with structural conditions and with other trades.

16. Equipment Interface Coordination

a. The plans and schematic drawings show the required control connections and interfaces between the power feed and lighting, however, during the construction process some products may be substituted by the Contractor, the manufacturer may change his product, etc.

b. The Contractor shall be responsible for the review of all submittals to verify that they conform to the electrical requirements the devices to which they are connected. Where discrepancies are noted, the Contractor shall:

1) Inform the Owner so that the proper equipment will be supplied,

OR

2) Where the equipment specified will not work properly, inform the Engineer prior to final shop drawing review to allow changes to make the devices compatible,

OR

3) Provide necessary materials and equipment to interface the incompatible devices. Added materials will require the approval of the Engineer. All costs for added materials and labor shall be by the Contractor.

4) After equipment and materials have arrived on the job site, the Contractor shall be responsible for all materials and work required for proper interface and operation.

17. Excavation And Backfill

a. All excavation and backfill required for installation of the electrical work shall be provided by the Contractor.

b. All ditches (outside of roadways) shall be backfilled with approved material. Ditches in paved or concrete sidewalk areas shall be backfilled with 2A modified stone and compacted with mechanical means.

c. Ditches installed in roadways shall be sawcut and restored with 6" BCBC and 1-1/2" of ID-2 wearing.

18. Concrete Work For Electrical

a. All concrete work required by the electrical drawings including but not limited to:

1) Duct bank encasement for underground feed of Jefferson Street underpass.

19. Identification

a. Each disconnect switch and lighting circuit shall be labeled to indicate the name of the equipment controlled, load served, designation letter, voltage and phase, etc. Final wording to be submitted for review by the Engineer.

b. All equipment shall be appropriately labeled to warn of potential safety hazards.

c. See specific Sections for additional identification requirements.

B. PRODUCTS

1. General

a. See specification Sections 3 through 8 for product information.

C. EXECUTION

1. Installation Standards

a. The installation of all materials and equipment for the electrical work shall comply with the "National Electrical Contractor's Association Standard of Construction". All work shall be completed in a neat, thorough, clean and workmanlike manner.

b. Installation of materials shall comply with the manufacturer's recommendations.

c. The Contractor shall supply all auxiliary equipment, frames, supports, access panels, and other devices required for proper installation and operation of equipment furnished and installed by him.

+ + END OF SECTION + +

City of Latrobe

Railroad Underpass Lighting Project

Contract 1/2004

SECTION 2: Raceway

A. GENERAL

1. Work Includes

   a. Electrical Contractor to provide:

      1) All raceways as shown on the drawings and as required for proper installation of the electrical systems (service feeders, power feeders, branch circuits, and lighting.

2. Raceway Descriptions

   a. Raceways including suitable fittings: Rigid (heavy wall) metal conduit

   b. Rigid PVC coated metal conduit

   c. Liquidtight flexible conduit

B. PRODUCTS

1. Raceways

   a. All rigid steel (RS) conduit shall be heavy walled rigid steel galvanic zinc coated inside and out. The conduit shall conform to Federal Specifications WW-C-581E, ANSI C80.1 and UL 6.

   b. PVC coated rigid steel conduit shall meet the requirements for rigid steel conduit prior to installation of other coatings. The exterior of PVC coated conduit shall have a primer over the galvanize and .040" (minimum) PVC coating overall. The interior of the conduit shall be coated with a .002" urethane finish. The PVC coating shall meet the requirements of NEMA-RN1. The conduit shall be furnished with PVC repair materials for correcting imperfections and coating fittings, threads, etc.

   c. EMT conduit (thin wall) shall not be accepted.

   d. All plastic conduit shall be electrical type (Schedule 40) suitable for direct burial or concrete encasement. PVC conduit shall meet the requirements of Federal Specification WC1094A, NEMA TC2 and UL 651. PVC conduit shall be UL listed and carry a UL label.

   e. Liquidtight (Type LA) conduit shall be UL listed and carry a UL label, shall meet the requirements of NEC 351 and shall have a flexible core formed of hot dipped galvanized steel strip with extruded PVC jacket.

f. Each length of conduit of any type shall be stamped with the manufacturer's name or trademark.

g. Acceptable manufacturer's:

1) Carlon

2) Robintech

3) Robroy

4) Allied

5) Triangle

6) OCAL

7) Wheatland Tube

2. Fittings

a. All fittings for rigid metal conduit shall be hot dipped galvanized, cast of malleable iron with threaded connections. Compression, set screw or crimp type fittings are not acceptable.

b. Fittings for PVC coated conduit shall be PVC coated with appropriate PVC sleeves, gaskets, etc. PVC coatings shall be factory applied and not field applied except for minor touchup.

c. Plastic fittings for PVC conduit shall have solvent welded type connections. Solvent shall be by the manufacturer of the conduit.

d. Fittings for liquidtight flexible conduit shall be designed and approved for the application.

e. Where the fittings are brought into an enclosure with a knock-out, a gasket assembly consisting of an "O" ring and retainer shall be installed on the outside. Fittings shall be insulated throat type,

f. Acceptable manufacturer's:

1) Appleton

2) Steel City

3) Raco

4) Crouse-Hinds

5) OZ/Gedney

6) RobRoy

7) OCAL

3. Supports

a. Conduit support devices and clamps shall be specifically manufactured and designed for applications with specific type of electrical conduit.

b. All support devices shall have a hot dipped galvanized coating or be stainless steel.

c. Supports for PVC coated conduit shall be PVC coated in addition to other protective coatings. All bolts, nuts, washers and other connectors utilized in conjunction with PVC coated conduit shall be PVC coated or stainless steel. PVC coatings shall be factory applied and not field applied except for minor touchup.

d. Acceptable manufacturer's

1) Crouse-Hinds

2) Raco

3) Thomas & Betts

4) Unistrut

5) Beeline

C. EXECUTION

1. Raceway

a. All PVC coated rigid metal conduit shall be installed with PVC coated fittings and PVC coated outlet boxes with PVC sleeves to fill the openings and voids between the straight conduit runs and the various fittings.

b. All conduit installed underground shall be PVC coated rigid steel, except where the conduit is encased in concrete, rigid steel conduit may be used without the PVC coating.

c. EMT (thin wall) conduit shall not be used in any conditions.

d. No conduit shall be smaller than 3/4" trade size, except where shown on the drawings.

e. All exposed conduit runs shall be installed parallel or perpendicular to the building walls.

f. All conduit systems shall be mechanically and electrically continuous from source of current to all outlets and grounded in accordance with the National Electrical Code.

g. All conduits shall have a separate ground conductor installed.

h. Seal each end of all conduit where they enter a junction box, lighting fixture, disconnect switch, control panel, etc. with "duct seal".

i. All conduits shall be blown and swabbed before wires are pulled.

j. Install all conduit with standard radius bends with not more than three (3) bends between terminals. Should a greater number of bends be necessary, install pull boxes or manholes.

k. Install pull boxes in all above grade conduit runs exceeding 100 feet in length.

l. Maintain a minimum separation from fluid (water, sewer, etc.) piping of 6" and do not install electrical conduit below fluid piping.

+ + END OF SECTION +

City of Latrobe

Railroad Underpass Lighting Project

Contract 1/2004

SECTION 3: Underground Duct Bank

A. GENERAL

1. Work Includes

   a. Electrical Contractor to:

      1) Provide all underground duct banks and as required for proper installation of the feeder circuit on Jefferson Street.

      2) Complete all trench and backfill as required for the duct banks.

2. Layout And Coordination

   a. The Contractor shall review the layout shown on the drawings and resolve all conflicts with various underground utilities, grades and piping systems.

   b. The underground duct bank must maintain a minimum of 30" of earth cover over the top of the highest conduit, however increasing the depth is acceptable as a means of resolving conflicts with piping systems.

   c. Stake the locations of the underground duct banks for review and approval of the Engineer.

   d. Maintain a minimum separation from fluid (water, sewer, etc.) piping of 24" and do not install underground duct bank below fluid piping, except where crossing at a sharp angle.

B. PRODUCTS

1. Conduit

   a. All underground conduit shall be PVC coated RS (rigid steel).

   b. Underground rigid steel conduit encased in concrete does not have to be PVC coated except where it extends above the grade. Underground rigid steel conduit which is not concrete encased shall be PVC coated rigid steel.

2. Conduit Supports

   a. The conduit supports for holding the conduit in position during concrete encasement shall be plastic interlocking type specifically designed for the purpose. The spacers shall be installed on a maximum spacing of 5'-0". The spacing shall be decreased where required to maintain the conduit in the proper position during the placement of the concrete encasement.

3. Concrete Encasement

   a. Reinforcing shall be new, clean steel bars designed for reinforcing concrete.

   b. Concrete shall be 3000 psi ultimate strength minimum. The aggregate size may be reduced and the water content may be increased to facilitate flow between the conduits.

   c. The concrete may be installed utilizing the sides of the trench as forms where the trench has straight even walls and where the soil conditions will not damage the concrete.

4. Warning Tape

   a. Warning tape shall be a continuous 6" wide strip of red polyethylene and shall have the words CAUTION ELECTRIC LINE BELOW printed on 2'-6" centers.

C. EXECUTION

1. Conduit

   a. All underground conduit runs shall be sealed water tight. Special care shall be taken to make each solvent welded connection water tight and to seal connections to manholes.

   b. All spare conduit runs shall have nylon pull cords installed and tied off at each end.

2. Conduit Support

   a. Anchor wire or rods shall be installed to hold the conduit and to prevent flotation during the concrete installation.

   b. All underground conduit runs consisting of 2 or more conduits shall have plastic spacers installed at 5 foot centers. Plastic spacers shall be specifically designed for use with electrical conduit.

3. Concrete Encasement

   a. No concrete shall be placed until the installation has been reviewed by the on-site inspector. The Contractor shall notify the Engineer 24 hours in advance to allow for examination of the duct bank prior to the concrete pour.

   b. All conduit runs with any individual conduit of 2" trade size and larger shall be encased in concrete.

   c. All conduit runs with more than 2 conduits in the same trench shall be encased in concrete.

d. The concrete encasement shall provide a minimum of 3" of concrete cover on all sides of the duct bank.

e. All concrete duct banks with any dimension exceeding 16" shall have 4 #4 steel reinforcing rods located at the corners of the concrete envelope and parallel to the conduit. Duct banks with no dimension exceeding 16" shall have 2 #4 steel reinforcing rods located top and bottom of the duct bank. The reinforcing bars shall have a minimum of 2" of concrete cover and shall overlap a minimum of 12" and be tied at ends of the rods.

f. The reinforcing rods of the duct bank concrete encasement shall be tied into all building foundations, structures, manholes, etc. which they enter or pass through.

4. Warning Tape

a. Install the continuous marking tape 18" below grade along the centerline of all underground duct banks and conduit runs.

+ + END OF SECTION + +

City of Latrobe

Railroad Underpass Lighting Project

Contract 1/2004

SECTION 4: Wire

A. GENERAL

1. Work Includes

   a. Contractor to provide all wiring and cables as shown on the drawings and as required for proper installation of the various electrical systems (service feeders, lighting fixtures, control, signal, etc.).

2. Testing

   a. All wiring size #8 AWG and larger shall be tested for shorts, grounds, and faulty insulation. The tests shall be performed after the wire is pulled and before devices and equipment are connected to the wire. The wiring shall be tested with a megger type insulation testing device with 1000 volt test voltage or as recommended by the wire manufacturer.

   b. All other wires shall be tested for continuity and ground with a hand held tester.

   c. All wires or cables which fail or show a weakness, indicating damage, shall be replaced.

B. PRODUCTS

1. Wire

   a. All wire and cable shall have copper (98% conductivity) conductors and shall be installed in conduit.

   b. Insulation for power wiring size #10 and smaller diameter shall be THHN rated for 600 volt operation wet or dry at 75 degrees. Insulation for power wiring size #8 and larger diameters shall be XHHW rated for 600 volt operation wet or dry at 75 degrees.

   c. No branch circuit wiring shall be smaller than #12 AWG.

   d. Acceptable manufacturer's:

      1) *American Wire & Cable*

      2) Colonial Wire & Cable

      3) Triangle

4) Cerrowire

5) Belden

6) Rome Wire & Cable

2. Terminations

a. Terminations, taps and splices shall be made with bolted or mechanical compression connectors.

b. Insulated compression type connectors shall be used on 120 volt power wire size #12 AWG. Spring compression type connectors shall not be used on stranded wire.

c. Connectors shall have an insulation covering with a thickness of 1.5 times the conductor insulation thickness. The insulation covering may be part of the assembly or an applied heat shrinkable material.

d. All control wiring shall be terminated in control panels, terminal boxes and at control devices with compression type, PVC or nylon insulated pin type lugs. Pin type lugs shall be suitable for use with box type connectors. Where pin type lugs are not suitable for the terminal strips in panels which are furnished with equipment (FWE), compression type, PVC or nylon insulated fork type lugs shall be utilized.

e. Acceptable manufacturer's:

1) Burndy

2) Thomas & Betts

3) Ideal

4) 3M Company

5) Square D

3. Wire Markers

a. Wire markers for power feeders and branch circuit conductors shall be Brady B-500 adhesive backed vinyl cloth type or equal.

b. Wire markers for control wiring shall be Brady B-321 heat shrinkable polyolefin type or equal.

C. EXECUTION

1. Wire

   a. All wiring shall be installed in conduit.

   b. All feeder and branch circuit wires shall be color coded as follows:

Wire	120/230V, 1PH-3W
Leg 1	Black
Leg 2	Black
Neutral	White
Ground	Green

   c. Wire sizes #8 AWG. and larger may be identified by tags or labels on each end instead of insulation color. Tags or labels to have the same color coding.

   d. Pulling lubricant shall be a type recommended by the wire or cable manufacturer.

   e. No conductors shall be pulled until conduits are free from moisture and contaminates.

2. Wire And Cable Markers

   a. All power feeders and branch circuit wires shall be tagged in cabinets, junction boxes, panel boards, etc. with permanent labels attached to the wire within 6 inches of the termination point. Labels shall be legible and shall not be removed, cut-off, etc.

   b. All cables shall be identified in all pull boxes, terminal boxes, manholes, control cabinets, control panels, etc. with permanent labels attached to the cable.

+ + END OF SECTION + +

City of Latrobe

Railroad Underpass Lighting Project

Contract 1/2004

SECTION 5: Boxes

A. GENERAL

1. Work Includes

   a. Contractor:

      1) Provide all boxes as required for proper installation of the various electrical systems.

B. PRODUCTS

1. Boxes

   a. All exposed outlet boxes installed shall be "FD" cast iron alloy (Feraloy) with cast device plates or cast blank covers.

   b. All boxes shall be of ample size to allow the conductors to be installed without bending them, either before or after installation, to a radius less than that recommended by the conductor manufacturer, in addition, the boxes shall meet NEC size requirements.

C. EXECUTION

1. Boxes

   a. The Contractor shall furnish and install junction boxes where required for the proper installation of the systems.

   b. All junction boxes for lighting fixtures installed on the underpass surfaces shall be done so in a neat and organized manner.

   c. All junction boxes shall be installed so that they are accessible.

   d. Locations of all junction boxes shall be verified on the job site and coordinated with the Engineer.

+ + END OF SECTION + +

City of Latrobe

Railroad Underpass Lighting Project

Contract 1/2004

SECTION 6: ***Grounding***

A. GENERAL

1. Work Includes

   a. Contractor shall provide:

      1) All grounding for the system neutrals, equipment, conduit system, control wiring, etc.

B. EXECUTION

1. Installation

   a. Grounding for equipment, system neutral and derived systems shall be separate and independent except at the service entrance where they shall be bonded together in accordance with the NEC

      1) Equipment Ground - All frames, apparatus enclosures, and non-electrical structures such as panelboards, cabinets, lighting fixtures, boxes, conduit and fittings, etc. shall be grounded by means of the conduit system or a separate ground conductor. The equipment ground conductor shall be connected to a ground rod at each service entrance.

      2) Install a separate ground conductor in all conduits.

      3) All grounding shall be in strict accordance with the National Electrical Code.

+ + END OF SECTION + +

City of Latrobe

Railroad Underpass Lighting Project

Contract 1/2004

SECTION 7: ***Utility Services***

A. GENERAL

1. Work Includes

   a. Contractor shall provide three (3) separate 120/240VAC electric service entrances for the purpose of lighting feeders to be installed at the City of Latrobe railroad underpasses of:

      1) Alexandria Street

      2) Ligonier Street

      3) Jefferson Street

   b. The three (3) electric service entrances shall include the following:

      1) Alexandria Street

         (a) Utilize the existing underground feed, disconnect, and meter socket (Allegheny Power meter #67595839). This utility service is owned by the City of Latrobe. Add two 20A branch lighting circuits as shown on the drawings.

      2) Ligonier Street

         (a) Provide through coordination with the utility company and the Engineer, the addition of a second meter socket and disconnect on the existing pole opposite the existing meter (Allegheny Power meter #54741435), this utility service and pole is owned by Norfolk Southern Railroad.

      3) Jefferson Street

         (a) Provide an underground utility service from the northern side of the Jefferson Street underpass existing pole to the exterior surface of the underpass.

         (b) A flat amount of $300.00 shall be provided with this Contract for charges required by the Utility Co. The Contract amount will be adjusted up or down as required to equal the utility company charges. The allowance shall be used only for the portion of the work completed by the electric utility company and shall not include any work beyond the utility company transformer secondary. The allowance shall not pay for the underground duct bank from the utility company riser pole to the service switch.

2. Utility Contacts

a. The electric utility company contact for the service entrance is as follows:

1) ALLEGHENY POWER SYSTEMS
Latrobe Service Center
James M. Piper 724-830-2937

jpiper@alleghenypower.com

3. Service Characteristics

a. *The electrical service entrances shall have the following voltage and current ratings and* characteristics:

Location	Voltage	Amps
Alexandria, Ligonier, Jefferson Streets	120/240 VAC, Single Phase	100A

B. PRODUCTS

1. Main Disconnect & Meter base

a. The main disconnect and circuit protection shall be furnished and installed by the Contractor as required by the electric utility company. Meters furnished and installed by the utility company.

C. EXECUTION

1. Electrical Service Installation

a. Arrange, coordinate and pay for the installation of the electrical service entrance for the Ligonier and Jefferson Street underpasses. The Owner will sign service agreements presented by the utility company and begin paying normal monthly usage costs at *substantial completion. The Contractor shall pay all usage and demand charges until* substantial completion. The electrical service shall consist of the following as a minimum:

1) Utility changes and extensions to existing primary overhead lines as required to serve the facilities.

2) *Riser pole with utility company transformers.*

3) Underground secondary conduit and wire from the riser pole to the main disconnecting means.

4) Ground as required by the utility company and as shown on the drawings.

b. All work shall be completed in accordance with the utility company standards, *requirements and recommendations.*

c. All grounding shall be in strict accordance with the National Electrical Code and electric utility company requirements.

+ + END OF SECTION + +

City of Latrobe

Railroad Underpass Lighting Project

Contract 1/2004

SECTION 8: ***Lighting***

A. GENERAL

1. Work Includes

   a. Contractor to:

      1) Provide all lighting fixtures and lamps as shown on the drawings for the purpose of lighting the three (3) underpasses.

2. Substitutions

   a. Where the Contractor proposes to utilize lighting fixtures other than those specified on the drawings, he shall provide all of the following:

      1) An item by item check off of the physical construction features of the substitute versus the specified unit as follows:

         (a) Material type and thickness.

         (b) Dimensions (depth of troffers, depth of downlights, etc.)

         (c) Reflectance

         (d) Finish (interior and exterior)

         (e) Lens material, thickness and pattern

         (f) Ballast

      2) An item by item comparison of the photo metrics of the substitute versus the specified unit as follows:

         (a) Total efficiency

         (b) Coefficient of utilization at RCR 1 through 5 and reflectance of C-50%, W-50%, F-20%.

         (c) Space to mounting height ratio.

      3) Substitute fixtures submitted for approval without the above noted information will be returned without review and marked resubmit.

4) Where substitute fixtures have significant deficiencies in any area, they will be rejected.

B. PRODUCTS

1. Lighting Fixtures

   a. Lighting fixtures shall be as shown on the drawings and as detailed in the various "Lighting Fixture Schedules".

   b. High Pressure Sodium lamps shall be:

      1) 150W 120VAC

      2) Die cast housing for outdoor application.

      3) Durable bronze Lektorcote finish or equal housing.

      4) Vandal resistant polycarbonate refractor.

      5) Fully gasketed with weatherproof, bugproof feature.

      6) Lamp included.

   c. Lamp unit packs shall be UL listed for 55 degrees C ambient operation, with a –40 degrees F minimum starting temperature.

   d. Hubbell part ***# NRG-414S1-P*** or equal as approved by the engineer

   e. A 3 year warranty on all components except lamps and fuses.

2. Lamps

   a. Lamps shall be as shown on the drawings and as detailed in the "Lighting Fixture Schedule

   b. Lamps shall be manufactured by Hubbell, Philips or Sylvania.

C. EXECUTION

1. Removal

   a. Remove all existing conduit, fittings, lighting fixtures, and service feeders at each of the three underpasses.

      1) A service utility pole located on the north side of the Ligonier Street underpass is supplying existing lighting power for each of the three underpasses. Lighting at the Jefferson and Alexandria Street underpasses is subsequently fed via utility poles located along the Norfolk Southern Railroad. These poles are the property of Norfolk Southern Railroad and will no longer be utilized by this installation.

2) Proper termination of the existing feed circuits will be the responsibility of the Contractor.

3) Upon removal of the existing lights, cover the cavity with a weather resistant metal plate to facilitate the installation of the new fixtures.

4) The Contractor will not be responsible for any electrical service on the railroad's poles.

2. Installation

a. Provide all ballasts, sockets, brackets, channels and other devices as required for proper installation, operation and support of all fixtures. Fixtures shall be installed and supported in accordance with manufacturer's recommendations.

b. Provide proper circuit protection for each lighting system at each underpass in a locked and secure enclosure.

c. Provide a dusk-to-dawn photo eye control for the activation of the lighting at each underpass.

d. Position new lighting in a fashion similar to the existing lighting as indicated in the drawings.

e. Verify locations of pipe routing within the various underpasses prior to fixture conduit rough-in to verify that interference does not occur. Where the light fixture locations either interfere with structures where they will block the light from the fixture, review with the Engineer and adjust the locations as directed.

f. All fixture enclosures shall be grounded.

g. Provide access to all fixtures for proper maintenance, repair and operation.

h. All fixtures shall have lamps installed. Lamps which fail prior to final acceptance by the Owner shall be replaced with new lamps.

++ END OF SECTION ++

City of Latrobe

Railroad Underpass Lighting Project

Contract 1/2004

SECTION 9: SECTION: SPECIAL CONDITIONS

A. GENERAL

1. Location

The project work area covered by these Specifications is located in the City of Latrobe, Westmoreland County, Pennsylvania. The contract work areas are depicted on the contract plans, a part of these contract documents

2. Scope

The project consists of the Contractor furnishing all labor, materials, and equipment necessary to install lights, meters, wiring, conduits, etc., to three (3) railroad underpasses in the City of Latrobe.

The Contractor must be thoroughly experienced in this type of work, must be reputable, and must recognize the fact that this project will require utmost care in the execution of the work.

All work shall conform, during its progress or on its completion, truly to the lines, levels and grades, and shall be built in a thoroughly substantial and workmanlike manner, in accordance with the plans and directions given from time to time by the Engineer, subject to such modifications and additions as shall be deemed necessary by the Engineer during its execution, and in no case shall any work in excess of the plan requirements and Specifications be paid for unless ordered in writing by the Owner or the Engineer.

B. MATERIALS

1. General

All materials shall conform to the requirements of the Standard Specifications, and the Pennsylvania Department of Transportation (PennDOT Form 408-83 or its latest revision. In cases where a discrepancy may exist between the Standard Specifications and Form 408 or its latest revision, the most stringent shall apply. The Engineer reserves the right to enforce, waive, or modify any requirements where such action is necessary to insure successful completion of the project. Compaction tests on random core samples will be performed on concrete and bituminous.

C. INSTALLATION

1. Utilities

The Contractor shall determine the exact location of all utilities affected by this work and shall protect the utilities during the course of the work. The Contractor shall, at the discretion of the utility involved, repair or have repaired all damage to the utilities resulting due to the work at no cost to the Owner. These utilities may interfere with the installation of the new lines or appurtenances and the Contractor must allow for such interference in his bid. The Contractor will be required to comply with all provisions of Act 287 of the Commonwealth of Pennsylvania, effective April 9, 1975.

The cost of utility locations shall be included in the Contractor's bid on the Proposal Form.

2. Safety of the General Public

The Contractor shall be responsible for the safety of the general public in or about the project site at all times. Excavated areas shall be backfilled daily or roped off with lighted barricading. Entrances to driveways and adjoining residences shall have sound steel plating or wood planking of uniform thickness, with handrails and adequate lighting across excavated areas to provide for a safe travelway to each residence. Notification to adjoining residents is to be given by the Contractor within a reasonable time to facilitate their arrival or departure from the residence. Signs and barricades shall be placed as necessary

3. Vehicle Removal and Barricades

Removal of vehicles, barricading, and all other operations necessary for the completion of the required work is the responsibility of the Contractor. Notification to the City is to be given by the Contractor three (3) days prior to starting in order to facilitate vehicle removal.

4. Designated Representative

The Contractor shall provide at least one responsible worker to answer emergency calls and perform emergency service during non-working hours for any condition resulting from the Contractor's construction activities which represents a hazard to the project or to the public. This workers shall make himself available at any time of the day or night and any day of the week for this emergency work. This worker shall also be provided with a proper vehicle, supplies, and materials, and be given sufficient authority to adequately perform this extended assignment.

D. COMPARISON OF BIDS

The bid proposals shall be compared on the basis of the lump sum bid as shown and stated in the proposal form. For a bid to be acceptable, the sum of the unit prices for additions or deductions must agree with the total lump sum price.

E. TIME FOR COMPLETION AND LIQUIDATED DAMAGES

For Time for completion and Liquidated Damages, refer to the Standard Contract Provisions.

The entire work must be completed, approved, and accepted by the Owner within sixty (60) calendar days following date specified in the Notice to Proceed as permitted by weather. If the work is not completed within this time, liquidated damages totaling $100.00 per calendar day will be assessed against the Contractor if responsible for any failure to complete the work within the time specified.

F. CONTRACT DRAWINGS

The plan copies or drawings of this project, prepared by Gibson-Thomas Engineering Co., Inc., *are include in these contract documents and are hereby made an integral part of these contract* documents and Specifications.

Date_____

PROPOSAL
FOR

City of Latrobe

Railroad Underpass Lighting Project

Contract 1/2004

_____
CONTRACTOR

_____
Address

_____

Gentlemen:

Pursuant to and in compliance with your request inviting Proposals for th execution of the above project, and subject to all the terms and conditions of the Contract Documents relating thereto and on file in the office of GIBSON-THOMAS ENGINEERING CO., INC., 1004 Ligonier Street, P.O. Box 853, Latrobe, PA 15650, the undersigned proposes to perform all work, to provide and furnish all labor, all necessary tools and equipment, all utility and transportation services, and materials (both expendable and permanent, all as required for the performance of said project, in complete accordance with the Plans, Specifications, and other Contract Documents, including Addenda Numbers _____issued thereon, for the following price:

For the performance of all work set forth in the contract documents, and shown on the Contract Drawing(s), for the total price of

_____ Dollars

($_____)

The following unit price schedule was used to compute the bid total. Should the amount of construction items be increased or decreased, the undersigned agrees that the following unit prices will be used for any adjustments. The sum of the unit prices should equal the total shown on the first page of this Proposal.

City of Latrobe
Railroad Underpass Lighting Project
Contract 1/2004

Item	Description	Quantity	Unit Price	Total
*1.	Alexandria Street Underpass	Lump Sum	N/A	$
*2.	Ligonier Street Underpass	Lump Sum	N/A	$
*3.	Jefferson Street Underpass	Lump Sum	N/A	$
			TOTAL	

*Complete in Place

RAILROA

OVER SIZED DOCUMENTS

DOCUMENT

DOCKETED
MAY 12 2004

RECEIVED
04 FEB 23 AM 9:45
PA P.U.C.
SECRETARY'S BUREAU

C-20031000

STOP – CALL BEFORE YOU DIG
PENNSYLVANIA LAW REQUIRES
THREE WORKING DAYS NOTICE
PENNSYLVANIA ONE CALL SYSTEM, INC.
1-800-242-1776

Notice regarding underground utilities. No warranty is made that this plan shows all existing underground utilities or that the locations of existing utilities shown hereon are the correct locations. The depiction of utilities herein does not relieve the contractor(s) who will be performing excavations from complying with Pennsylvania law regarding excavations, said requirements can be satisfied, in part, by contacting the POCS at 1-800-242-1776.

PENNSYLVANIA ONE CALL SERIAL NUMBER: 0485817, 0485821, 0485812

RAILROAD UNDERPASS LIGHT

CONTRACT 1/200

FOR THE

CITY OF LATROB

BURNS, WHITE & HICKTON
A LIMITED LIABILITY COMPANY
ATTORNEYS AT LAW

John G. Wall
Attorney at Law

(412) 359-7386
(412) 359-7378 - fax
jgwall@bwhllc.com

120 FIFTH AVENUE
SUITE 2400
PITTSBURGH, PA 15222-3001
(412) 394-2500 • FAX (412) 281-1352
www.bwhllc.com

THE MAXWELL CENTRE
SUITE 200
32-20TH STREET
WHEELING, WEST VIRGINIA 26003
(304) 233-9500 • FAX (304) 233-1363

February 24, 2004

Ms. Ann E. Powell
City of Latrobe
301 Jefferson Street
Latrobe, PA 15650

Re: City of Latrobe v. Norfolk Southern Railway Company
Docket No. C-20031000
Our File No. 3091/137871

Dear Ms. Powell:

Thank you for receipt of your construction plans and specifications relevant to the within matter. Kindly be advised that your cover letter accompanying these materials is dated February 10, 2004. Nevertheless, these materials were not received by the undersigned until February 20, 2004.

I have undertaken efforts to secure review of the enclosed plans and specifications by engineering personnel at Norfolk Southern Railway Company and shall advise as to their position regarding same.

In the interim, should you have any questions or comments concerning this matter, please do not hesitate to contact me.

Very truly yours,

John G. Wall

JGW:pc
c: Andrew S. Gordon, Esquire
Gina M. D'Alfonso, Esquire
Gary C. Fawver
Jennifer Kemerer
R. Mark Gesalman, Esquire
Glenn Fullen
David Oliver

C 200 31000

RECEIVED
2004 MAR -5 PM 10: 16
PA PUC
SECRETARY'S BUREAU

LATROBE
PENNSYLVANIA

CITY OF LATROBE
Planning and
Development
Department

901 Jefferson Street
P.O. Box 829
Latrobe, PA 15650
(724) 537-3580
(724) 537-4802 fax

March 2, 2004

DOCKETED
MAR 2 3 2004

DOCUMENT
FOLDER

David Oliver
PUC
400 North Street
Harrisburg PA 17120

Dear Mr. Oliver,

Enclosed please find two (2) copies of the Railroad Underpass Lighting Project Specs you requested.

If you have any questions or need additional info please contact me.

Sincerely,

Ann E. Powell

Ann E. Powell
Director Planning & Development

AEP/kml

Enclosures

RECEIVED
2004 MAR 11 AM 10: 07
PA PUC
SECRETARY'S BUREAU

RECEIVED
2004 MAR -8 P 1: 12
BUREAU OF TRANSPORTATION & SAFETY
RAIL SAFETY DIVISION
RJP

PA PUBLIC UTILITY COMMISSION

MAR 0 4 2004

BUREAU OF TRANSPORTATION & SAFETY
RAIL SAFETY DIVISION

OVER SIZED DOCUMENTS

PROJECT

DOCKETED
APR 27 2004

C-20031000

DOCUMENT

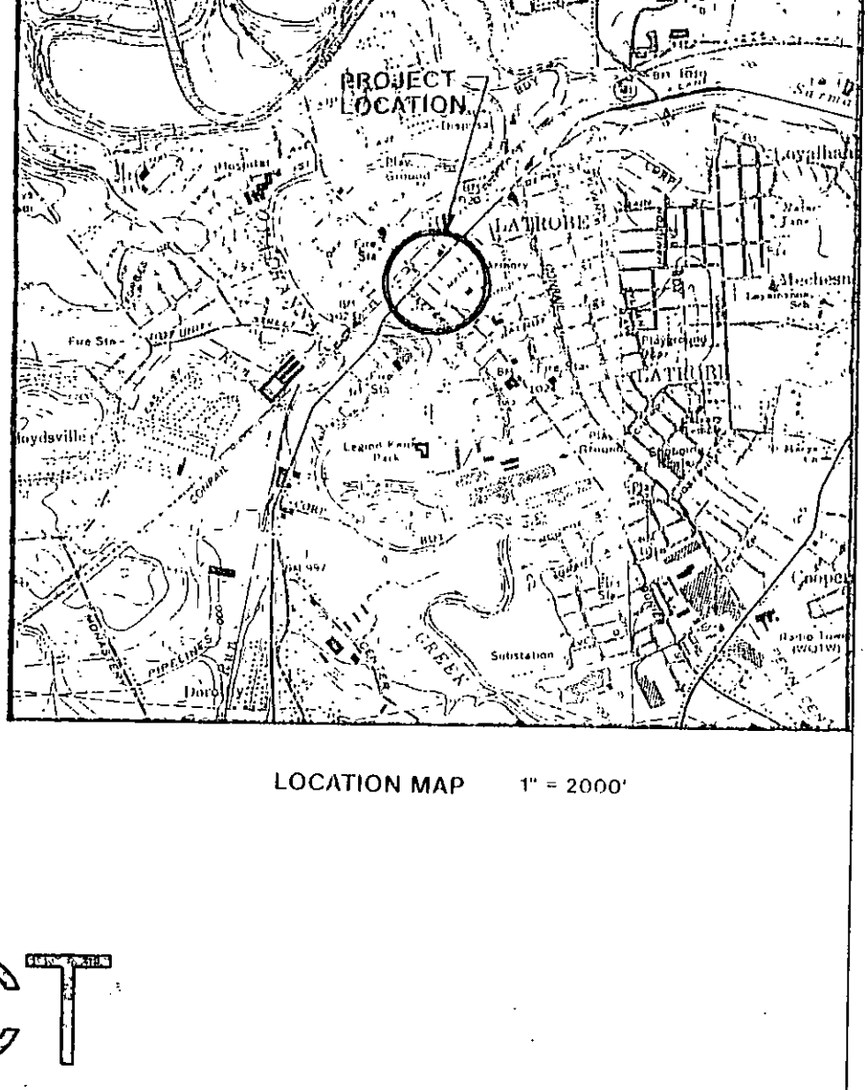
CERTIFIED CORRECT PLANS
Engineer
Approved by Bureau of Transportation & Safety
PENNA. PUBLIC UTILITY COMMISSION
ATTEST
Secretary

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
MARK JOHN GERA
ENGINEER
No 20718-E

PA PUBLIC UTILITY COMMISSION
MAR 0 4 2004
BUREAU OF TRANSPORTATION & SAFETY
RAIL SAFETY DIVISION

OMAS ENGINEERING CO., INC.
LATROBE, PA

GT - 1020



LOCATION MAP 1" = 2000'

PROJECT

C-20031000