

ECMS Highway Construction

Contract: 37064

Trumbull Corporation XX-XXXXXXX

Pittsburgh

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Prime Business Partner

LancasterCounty

SR 4062, Section 001

Eby Chiques RR Bridge over Amtrak & Newcomer Road

Location

PEND-ING-9999

Federal Project

P-09634207BRG-0870-371-1

P-09803007RRX-0870-371-1

WBS Element

September 13, 2012

Bid Opening

TABLE OF CONTENTS

Contract.....	5
Addenda.....	9
Addendum: 1.....	9
Addendum: 2.....	11
Bid Items.....	12
Special Provisions.....	15
00 - a000001 CONSTRUCTION RESTRICTIONS FOR RAILROAD.....	15
00 - a000002 USAGE OF SUPPLEMENTAL DRAWINGS.....	15
00 - a000001 FRA FLOW DOWN PROVISIONS.....	15
00 - a000002 AMTRAK - IMPLEMENTATION OF THE AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009.....	15
00 - a000003 AMTRAK - CONSTRUCTION REQUIREMENTS.....	16
00 - a000004 AMTRAK - INDEMNITY FROM CONTRACTORS PERFORMING DESIGN OR ENGINEERING FUNCTIONS - EBY CHIQUES.....	16
00 - a000006 AMTRAK - PROOF OF INSURANCE.....	17
G2201A - a000007 AMTRAK - RAILROAD COMPANY CONTACT PERSONS.....	17
00 - a000008 AMTRAK - SOURCE OF SUPPLY FOR ET PLAN MATERIALS AND CATENARY SYSTEM.....	18
00 - a000009 AMTRAK - TEMPORARY PERMIT TO ENTER RAILROAD PROPERTY AND INSURANCE REQUIREMENTS.....	18
G2A - a00010 PUBLIC BID OPENING LOCATION.....	19
G101B - a00101 GOVERNING SPECIFICATIONS AND APPLICABLE DESIGNATED SPECIAL PROVISIONS.....	19
G113B - a00113 CONTRACT PROVISIONS - RIGHT-TO-KNOW LAW.....	20
G114C - a00114 REQUIRED REPORTING FOR THE AMERICAN RECOVERY AND REINVESTMENT ACT.....	21
G115A - a00115 ARRA SECTIONS 902 and 1515(a).....	22
G116B - a00116 IMPLEMENTATION OF THE AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009.....	22
G401A - a00401 ADVANCE NOTICE OF TRAFFIC RESTRICTIONS.....	24
G901B - a00901 ALTERNATE EROSION AND SEDIMENT POLLUTION CONTROL PLAN.....	24
G1101B - a01101 CONSTRUCTION PROCEDURES - EROSION AND SEDIMENT POLLUTION CONTROL.....	25
G1601A - a01601 E.E.O. COVERED AREA.....	26
00 - a01701 ENVIRONMENTAL MITIGATION MEASURES & ECMTS REVIEW AND SIGN-OFF.....	26
00 - a01702 REQUIREMENT TO EXTEND NPDES PERMIT AND LICENSED PROFESSIONAL CERTIFICATION.....	27
G2102A - a02102 INSURANCE--INVOLVING R OF W OF NATIONAL RR-ADDITIONAL COVERAGE LIMITS.....	27
G2301A - a02301 MAINTENANCE AND PROTECTION OF RAILROAD TRAFFIC.....	30
G2401A - a02401 RAILROAD PROTECTIVE SERVICES COSTS - GENERAL.....	31
G60B - a02501 NIGHT SHIFT.....	31

G4301D - a04301 UTILITIES--THE REQUIREMENT TO LIST INFORMATION	31
G4802A - a04802 INDEX PRICE FOR DIESEL FUEL	33
G4901A - a04901 PRICE INDEX FOR ASPHALT CEMENT	34
G4902C - a04902 PRICE ADJUSTMENT FOR STEEL COST FLUCTUATIONS	34
G110B - a05101 START OF WORK	39
G7022A - a07022 CHANGES TO SPECIFICATION: SECTION 107	39
G7037D - a07037 CHANGES TO SPECIFICATIONS: SECTIONS 106, 108, 514, 515, 516, 676, AND 1107	40
G7038B - a07038 CHANGES TO SPECIFICATIONS: SECTIONS 101, 103, 110, 419, 695, 930, 931, 932, 934, 935, 938,	46
N10401B - a10401 BRIDGE PARAPET	54
N10601A - a10601 DRIVE ADJUSTMENTS	54
G50D - a10701 GUIDE RAIL MOUNTED DELINEATORS	54
N11701D - a11701 MECHANICALLY STABILIZED RETAINING WALL SYSTEMS	55
00 - a12201 POST MOUNTED & STRUCTURE MOUNTED SIGNS	62
N12501A - a12501 PRECAST MODULAR RETAINING WALL SYSTEMS	62
00 - a12601 SHOP DRAWING REVIEW	66
00 - a12801 WIRELESS AIR CARD	67
00 - a12901 PRELOAD EMBANKMENT	67
S2011C - b02011 SECTION 201.3	68
S4091C - b04091 SECTION 409.3	68
S6081C - b06081 SECTION 608 - MOBILIZATION	69
S6092A - b06092 SECTION 609.2(g) MISCELLANEOUS MATERIALS	70
00 - b06301 SECTION 630 - PLAIN CEMENT CONCRETE CURB	70
S9311B - b09311 SECTION 931.2	71
00 - b09711 SECTION 971.3	71
S10011B - b10011 SECTION 1001.3(k)5	71
S10301A - b10301 SECTION 1030 - BENCH MARKS (SU)	72
I6091F - c06091 ITEM 0609-0009 - EQUIPMENT PACKAGE	72
00 - c06781 ITEM 4678-0110 - PERMANENT BARRICADE MODIFIED	73
I8041A - c08041 ITEMS 4804-0011/0013/0014 - SEEDING AND SOIL SUPPLEMENTS - FORMULAS B, D, & E (MODIFIED)	73
00 - c09011 ITEM 0901-0001 - MAINTENANCE AND PROTECTION OF TRAFFIC DURING CONSTRUCTION	74
00 - c10011 ITEM 5001-0020 - CLASS C CEMENT CONCRETE MODIFIED	76
00 - c10061 ITEMS 5006-0209/0308/0349 - 48" & 42" DIA. DRILLED CAISSONS, SHAFT SEC. & ROCK SOCKET MOD.	77
I19992A - c19992 ITEM 1999-9999 - TRAINEES	77
I30041D - c80041 ITEMS 8030-0001/8000-0001/8100-0001 - BRIDGE STRUCTURE, AS DESIGNED & ALTERNATES, S-29760	79
00 - c80042 PART B - SPECIAL DRAWINGS AND SPECIAL DESIGN REQUIREMENTS S-29760	85
I30141B - c85101 ITEMS 8510/8520-0001 - PRECAST RC BOX CULVERT, AS DESIGNED & ALTERNATE, S-31698	86

00 - c85102 PART B - SPECIAL DRAWINGS AND SPECIAL DESIGN REQUIREMENTS, S-31698	88
I30121B - c86101 ITEMS 8610-0001/0002/0003/0004 & 8622-0001/0002/0003/0004 - ALTERNATE WALLS	89
I30101B - c86211 ITEMS 8621-0001/0002/0003/0004 - MECHANICALLY STABILIZED RETAINING WALLS, AS-DESIGNED & ALTS.	91
00 - c86212 PART B - SPECIAL DRAWINGS AND SPECIAL DESIGN REQUIREMENTS S-29761 / 29762 / 29759 / 29763	94
00 - c87001 ITEM 8700-1000 - BRIDGE GROUNDING AND BONDING	95
00 - c88001 ITEM 8800-0001 - FABRICATION AND ERECTION OF CATENARY STRUCTURES ..	95
00 - c88002 ITEM 8800-0002 - FURNISH AND INSTALL ELECTRIC TRACTION CABLING AND HARDWARE.....	96
00 - c90001 ITEM 9000-0001 - CONFIRMATORY BORINGS FOR CAISSON LOCATIONS CATENARY STRUCTURES	97
00 - c90002 ITEM 9000-0002 - REMOVE AND SALVAGE ALL REDUNDANT CATENARY ASSEMBLIES AND CATENARY STRUCTURES	98
00 - c90003 ITEM 9000-0003 - REMOVE REDUNDANT CATENARY STRUCTURE FOUNDATIONS	98
00 - c90004 ITEMS 9000-0100/0300 - SETTLEMENT PLATFORMS	98
00 - c90005 ITEMS 9000-0200/0400 - MONITORING SETTLEMENT PLATFORMS	100
00 - c92011 ITEM 9201-0001 - CLEARING AND GRUBBING (NEWCOMER ROAD).....	101
I2032C - c92031 ITEM 9203-0101 - TEMPORARY EXCAVATION SUPPORT AND PROTECTION SYSTEM.....	101
00 - c96081 ITEM 9608-0001 - MOBILIZATION (NEWCOMER ROAD)	103
00 - c96101 ITEM 9610-7002 - PERFORATED INFLOW PIPE.....	104
00 - c96241 ITEM 9624-0002 - REMOVE AND RESET EXISTING CHAIN LINK FENCE	104
00 - c96861 ITEM 9686-0040 - CONSTRUCTION SURVEYING, TYPE C (NEWCOMER ROAD)..	104
00 - c98591 ITEM 9859-0004 - CLEANOUT STAKE	105
00 - c99011 ITEM 9901-0001 - MAINTENANCE AND PROTECTION OF TRAFFIC DURING CONSTRUCTION (NEWCOMER ROAD).....	105
00 - c99991 ITEM 9999-0001 - AMTRAK TRACK MONITORING	107
00 - c99992 ITEM 9999-0002 - AMTRAK PERMIT TO ENTER.....	108
Performance Bonds.....	109
Payment Bonds	113
Insurance.....	117
DBE Commitments	118
Plans	121
Attachments	122

Contract

Addendum issued subsequent to the printed proposal have been incorporated into the text of this contract and the modified portions are annotated in the contract - e.g., A1, A2 etc.

Incorporated Addenda are As follows:

Addendum No. 1, A1, dated 09/10/2012

Addendum No. 2, A2, dated 09/10/2012

THIS AGREEMENT, Made this *11* day of *October* A.D. *2012*, between the Commonwealth of Pennsylvania by the Secretary of Transportation, hereinafter called the Commonwealth and *Trumbull Corporation* his, hers, its or their executors, administrators, successors, or assigns, hereinafter called the Contractor.

W I T N E S S E T H:

1. That the Contractor, for and in consideration of the payment or payments herein specified and agreed to by the Commonwealth, hereby covenants and agrees to furnish and deliver all the materials and to do and perform all the work and labor in the improvement of a certain section of highway at the unit prices bid by said Contractor for the respective estimated quantities aggregating approximately the sum of \$7,861,279.26 and such other items as are mentioned in the Contractor's original proposal, which proposal and prices named, together with Publication 408/2011-2 - Specifications (as specified in the proposal), are made a part of this contract and accepted as such, also the drawings of the project, prepared and/or approved by the Department of Transportation, which drawings are also agreed by each party as being a part hereof.

2. The location and description being situated as follows:

The project is construction of a new bridge over Amtrak on a new state route alignment which will be named SR 4062. SR 4062 intersects SR 0230 just east of Eby Chiques Road (T-347) in Rapho Township. The project work includes: construction of a new bridge over two tracks of Amtrak and one track of Norfolk Southern. The alignment will extend SR 4062 south from the intersection with SR 0230 to the railroad tracks continuing south to the terminus at existing Eby Chiques Road. The project plans include a new catenary and railroad electric traction (ET Plan) system to be constructed by the contractor. Amtrak forces will only perform work necessary to tie-in the existing ET system with the new ET system. Once the new bridge is constructed; the existing at-grade rail-highway crossings on both Eby Chiques Road and Newcomer Road will be closed and cul-de-sacs constructed to permanently close the crossings. The structures consists of one single-span prestressed concrete I-beam bridge and the approaches consist of four mechanically stabilized earth walls (MSE). Other items of work include: subbase (No. 2A), Superpave asphalt paving, guide rail, drainage, signing, pavement markings, and other miscellaneous construction, all as indicated on the approved drawings included in the Bid Package for STATE ROUTE 4062, SECTION 001, in LANCASTER COUNTY, RAPHO TOWNSHIP and MT. JOY BOROUGH.

3. The Contractor further covenants and agrees that all work shall be performed in the best and most workmanlike manner. He also agrees that all materials furnished and labor performed shall be in strict and complete conformity, in every respect, with all parts of this contract and shall be subject to the inspection and

acceptance of authorized representatives of the Department of Transportation. In the event that any portion of work (including materials supplied pursuant thereto) performed by the Contractor is rejected by the Department's authorized representatives as defective, unsuitable, or unacceptable, the Contractor agrees to remove and replace all such rejected portions of work in conformance with this contract and to the satisfaction of and at no expense to the Department. The Contractor further covenants that prompt payment will be made in full for all labor and materials used in the performance of work on this project.

4. The Contractor covenants and agrees that all work (including, but not limited to, all labor performed and all materials supplied) on this project shall be performed and completed to the satisfaction of the Chief Highway Engineer of the Department of Transportation on or before the expiration date of *10/31/2014*. If, for any reason, except as provided in the contract, the Contractor fails to complete all work on this project to the satisfaction of the Chief Highway Engineer within the aforementioned time allowed, the Department shall deduct from any sums due or which may become due the Contractor the amount indicated in the Specifications for each calendar day used in excess of the aforementioned number of days allowed, or, in case a completion date is fixed, for each calendar day elapsing between that completion date and the actual date of completion. If no sums are due the Contractor, the Contractor agrees to remit to the Department the aforementioned sum for each day used in excess of the time allowed for completion of the contract. The amounts deducted or remitted under this paragraph are liquidated damages and not penalties.

5. The Contractor further covenants and warrants that the Contractor has had sufficient time to examine and has examined the site of the contract work to ascertain for itself those conditions such as may be determined by inspection, investigation, and inquiry, including the location, accessibility, and general character of the site.

6. The Contractor further covenants that he has not relied upon any information provided by the Department, including information contained in the Special Provisions, concerning the time within which publicly or privately-owned facilities below, at or above the ground are expected to be installed, removed, repaired, replaced, and/ or relocated; that he has not relied upon any information provided by the Department concerning the location or existence of all such facilities that might be below, at or above the ground; that he has contacted or will contact all owner of such facilities to verify the location and position of all such facilities and the time within which work on such facilities will be performed; and that he is aware delays might be incurred in the performance of work on this project as a result of work being performed or that will be performed on such facilities by their owners. It is understood further that, notwithstanding assistance of any kind and extent that might be provided by the Department, the Contractor, in every instance, bears the ultimate responsibility of resolving all disputes of every kind with the owners of such facilities. The Contractor agrees to save and hold the Department harmless from liability for all delays, interference and interruptions that might arise during the performance of work on this project as a result of work being or that will be performed on such publicly or privately-owned facilities.

7. The Contractor further covenants and warrants that he has read, is completely familiar with and understands thoroughly the General Conditions; the Specifications of the Commonwealth of Pennsylvania, Department of Transportation, currently in effect; the Supplements, Special Provisions and/or Conditions; and any other addenda or requirements, contained in the governing the performance of work under this contract, whether attached hereto and made a part hereof, or incorporated herein by reference.

8. It is distinctly understood and agreed that the Contractor shall not do any work (including, but not limited to, the supply of labor and/or materials) not covered by the specifications and the contract, unless such work has been authorized in writing as provided in the Specifications. In no event shall the Contractor incur any liability by reason of refusing to obey any verbal directions or instructions that he might be given to perform additional or extra work. Likewise, the Department will not be liable for any work performed as additional or extra work, unless such work is required of the Contractor in writing as provided in the Specifications. All such work which might have been performed by the Contractor without such written order first being given shall be at the

Contractor's risk, cost, and expense, and the Contractor hereby covenants and agrees that, without such written order, he shall make no claim for compensation for such unauthorized work.

9. It is further distinctly agreed that the Contractor shall not assign this contract, nor any part thereof, nor any right to any sums to be paid him hereunder, nor shall any part of the work to be done or material furnished under this contract be sublet, without the consent in writing of the Secretary of Transportation.

10. It is also agreed and understood that the acceptance of the final payment by the Contractor shall be considered as a release in full of all claims against the Commonwealth of Pennsylvania arising out of, or by reason of, the work done and materials furnished under this contract.

11. The Contractor shall accept, insofar as the work covered by the contract is concerned, the provisions of the Workmens Compensation Act of 1915, and any supplements or amendments thereto, and shall insure his liability thereunder or file with the Department of Transportation a certificate of exemption from insurance from the Bureau of Workers' Compensation of the Department of Labor and Industry.

12. In order to secure proper and complete compliance with the terms and provisions of this contract, the Contractor shall provide a bond in a sum equal to one hundred percent (100%) of the total contract price of the work to be done. The Contractor shall also secure an additional bond in the same amount for the prompt payment in full for all labor and materials supplied in performing work on this project. Both bonds are attached to and made a part of this contract.

13. Conditioned upon compliance by the Contractor with all pertinent conditions and procedures contained in the contract, claims for damages or extra costs in excess of three hundred dollars (\$300.00) arising out of disputes pertaining to this contract shall be referred to the Board of Claims pursuant to Section 1724(a) of the Commonwealth Procurement Code, 62 Pa. C.S. § 1724(a).

14. If for any reason the Commonwealth Procurement Code is inoperative or the Board of Claims cannot function, such claims shall be referred and decided by a panel consisting of the Secretary of Transportation and the General Counsel or their respective deputy or deputies.

15. The Contractor hereby further agrees to receive and the Commonwealth agrees to pay the prices set forth in the linked bid items as full compensation for furnishing all the materials and labor which may be required in the prosecution and completion of all work to be done under this contract, and in all respects to complete the contract to the satisfaction of the Secretary of Transportation.

16. The Contractor certified in his, her, its or their bid submission (covering federal aid projects only) to the disclosure of lobbying activities and, if applicable, completed the disclosure form and by said certification understands that Public Law 101-121, Section 319, prohibits federal funds from being expended by recipient or any lower tier sub-recipients of a federal contract, grant, loan or cooperative agreement to pay any person for influencing or attempting to influence a federal agency or Congress in connection with the awarding of any federal contract, the making of any federal grant or loan, or the entering into of any cooperative agreement.

17. If federal funds are involved, the Contractor shall not discriminate on the basis of race, color, national origin or sex in the performance of this contract. Contractor shall carry out applicable requirements of 49 C.F.R. Part 26 - DATED OCTOBER 16, 2001 in the award and administration of United States Department of Transportation assisted contracts. Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the Pennsylvania Department of Transportation deems appropriate. Contractor must include this assurance in each subcontract that it signs with a subcontractor.

Fiscal Information:

Recorded Number: 37064
Certified Fund Available Under Activity Program: 371
Symbol: 010-008-10581-12/13/14-1
Amount: \$7,861,279.26

Contract Workflow Status

Status	Name	Disposition	Date/Time
Draft	Becki G Mescher-Vuxta/ PennDOT	Award	09/26/2012 06:03:21 PM
Contractor Review	John Maffeo/PennDOT BP-000030	Sign	09/27/2012 02:27:35 PM
BOD CMD Review	Roland L Rode/PennDOT	Accept	10/01/2012 04:24:23 PM
BOD Director Review	R. Wayne Willey/PennDOT	Sign	10/02/2012 07:12:36 AM
Chief Counsel Preliminary Review	Bradley J Billet/PennDOT	Accept	10/02/2012 09:39:36 AM
Chief Counsel Final Review	Michael H Kline/PennDOT	Accept	10/10/2012 04:28:45 PM
Comptroller Review	Matthew P Eng/PennDOT	Accept	10/11/2012 01:01:40 PM
CMD Execute	Becki G Mescher-Vuxta/ PennDOT	Submit	10/11/2012 04:33:34 PM

Addenda

Addendum: 1

Description:

The project is construction of a new bridge over Amtrak on a new state route alignment which will be named SR 4062. SR 4062 intersects SR 0230 just east of Eby Chiques Road (T-347) in Rapho Township. The project work includes: construction of a new bridge over two tracks of Amtrak and one track of Norfolk Southern. The alignment will extend SR 4062 south from the intersection with SR 0230 to the railroad tracks continuing south to the terminus at existing Eby Chiques Road. The project plans include a new catenary and railroad electric traction (ET Plan) system to be constructed by the contractor. Amtrak forces will only perform work necessary to tie-in the existing ET system with the new ET system. Once the new bridge is constructed; the existing at-grade rail-highway crossings on both Eby Chiques Road and Newcomer Road will be closed and cul-de-sacs constructed to permanently close the crossings. The structures consists of one single-span prestressed concrete I-beam bridge and the approaches consist of four mechanically stabilized earth walls (MSE). Other items of work include: subbase (No. 2A), Superpave asphalt paving, guide rail, drainage, signing, pavement markings, and other miscellaneous construction, all as indicated on the approved drawings included in the Bid Package for STATE ROUTE 4062, SECTION 001, in LANCASTER COUNTY, RAPHO TOWNSHIP and MT. JOY BOROUGH.

Estimated Project: \$8,608,654.70
Federal Project Status: PENNDOT Oversight Non-NHS
DBE: 6.00%
Structure Work: 76.00%
Wage Rates: Yes
Project Type: Standard
State Type of Work: RELOCATION/NEW CONSTRUCTION
Prequalification Required: Yes
Pre-Bid Meeting: None
Scheduled Let: 09/13/2012 11:00:00 AM
New Let:
Let Date Move:
Anticipated NTP: 10/29/2012
Required Completion: 10/31/2014

Additional Information

This project is being funded through a grant from the Federal Rail Administration (FRA). Contractor must comply with the FRA Flow Down Provisions (bid package attachment) to be in compliance with ARRA funding requirements. However, the requirements of "Part II. Section 2. ARRA Funding Announcement." do not apply to this project.

Item and Quantity

REVISE the quantity for Item 9624-0002.

REVISE the quantity for Item 0605-2850.

ADD Item 0605-2854.

Special Provision

REVISE the special provision entitled "REQUIREMENT TO EXTEND NPDES PERMIT AND LICENSED PROFESSIONAL CERTIFICATION".

REVISE the special provision for Item 9999-0002.

Other

The May 18, 2012, edition of BC-788M applies to this project. Please disregard the references to the older version of BC-788M shown on the Roadway Plan and on Structure Plan S-29760.

Revised plan sheets will be provided to the successful bidder at the Pre-Construction Meeting.

Addendum: 2**Description:**

The project is construction of a new bridge over Amtrak on a new state route alignment which will be named SR 4062. SR 4062 intersects SR 0230 just east of Eby Chiques Road (T-347) in Rapho Township. The project work includes: construction of a new bridge over two tracks of Amtrak and one track of Norfolk Southern. The alignment will extend SR 4062 south from the intersection with SR 0230 to the railroad tracks continuing south to the terminus at existing Eby Chiques Road. The project plans include a new catenary and railroad electric traction (ET Plan) system to be constructed by the contractor. Amtrak forces will only perform work necessary to tie-in the existing ET system with the new ET system. Once the new bridge is constructed; the existing at-grade rail-highway crossings on both Eby Chiques Road and Newcomer Road will be closed and cul-de-sacs constructed to permanently close the crossings. The structures consists of one single-span prestressed concrete I-beam bridge and the approaches consist of four mechanically stabilized earth walls (MSE). Other items of work include: subbase (No. 2A), Superpave asphalt paving, guide rail, drainage, signing, pavement markings, and other miscellaneous construction, all as indicated on the approved drawings included in the Bid Package for STATE ROUTE 4062, SECTION 001, in LANCASTER COUNTY, RAPHO TOWNSHIP and MT. JOY BOROUGH.

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Federal Project Status: PENNDOT Oversight Non-NHS
DBE: 6.00%
Structure Work: 76.00%
Wage Rates: Yes
Project Type: Standard
State Type of Work: RELOCATION/NEW CONSTRUCTION
Prequalification Required: Yes
Pre-Bid Meeting: None
Scheduled Let: 09/13/2012 11:00:00 AM
New Let:
Let Date Move:
Anticipated NTP: 10/29/2012
Required Completion: 10/31/2014

Additional Information

This project is being funded through a grant from the Federal Rail Administration (FRA). Contractor must comply with the FRA Flow Down Provisions (bid package attachment) to be in compliance with ARRA funding requirements. However, the requirements of "Part II. Section 2. ARRA Funding Announcement." do not apply to this project.

Item and Quantity**Special Provision**

REVISE the special provision for Item 8700-1000.

Other

ADD the attachment entitled "Amtrak Drawing ET-1447-D".

Bid Items

Item	Description	Quantity	Unit Price	Item Total	Addendum
0201-0001	CLEARING AND GRUBBING	1.000	\$154,000.00	\$154,000.00	
0203-0001	CLASS 1 EXCAVATION	7,724.000	\$12.20	\$94,232.80	
0204-0001	CLASS 2 EXCAVATION	382.000	\$25.00	\$9,550.00	
0204-0150	CLASS 4 EXCAVATION	956.000	\$18.00	\$17,208.00	
0212-0001	GEOTEXTILE, CLASS 1	245.000	\$3.50	\$857.50	
0212-0003	GEOTEXTILE, CLASS 2, TYPE B	688.000	\$2.50	\$1,720.00	
0212-0014	GEOTEXTILE, CLASS 4, TYPE A	341.000	\$4.50	\$1,534.50	
0213-0002	TEMPORARY PROJECT AIR POLLUTION CONTROL	2,000.000	\$1.00	\$2,000.00	
0309-0330	SUPERPAVE ASPHALT MIXTURE DESIGN, HMA BASE COURSE, PG 64-22, < 0.3 MILLION ESALS, 25.0 MM MIX, 8" DEPTH	1,118.000	\$48.00	\$53,664.00	
0309-0424	SUPERPAVE ASPHALT MIXTURE DESIGN, HMA BASE COURSE, PG 64-22, 0.3 TO < 3 MILLION ESALS, 25.0 MM MIX, 5" DEPTH	7,518.000	\$26.10	\$196,219.80	
0316-0326	SUPERPAVE ASPHALT MIXTURE DESIGN, FLEXIBLE BASE REPLACEMENT, PG 64-22, < 0.3 MILLION ESALS, 25.0 MM MIX, 6" DEPTH	500.000	\$88.00	\$44,000.00	
0350-0106	SUBBASE 6" DEPTH (NO. 2A)	9,200.000	\$10.00	\$92,000.00	
0409-0365	SUPERPAVE ASPHALT MIXTURE DESIGN, HMA WEARING COURSE, PG 64-22, < 0.3 MILLION ESALS, 12.5 MM MIX, SRL-L	310.000	\$130.00	\$40,300.00	
0409-0454	SUPERPAVE ASPHALT MIXTURE DESIGN, HMA WEARING COURSE, PG 64-22, 0.3 TO < 3 MILLION ESALS, 12.5 MM MIX, 2" DEPTH, SRL-M	9,081.000	\$11.80	\$107,155.80	
0409-2495	SUPERPAVE ASPHALT MIXTURE DESIGN, HMA WEARING COURSE (SCRATCH), PG 64-22, 0.3 TO < 3 MILLION ESALS, 9.5 MM MIX, SRL-L	17.000	\$200.00	\$3,400.00	
0409-6450	SUPERPAVE ASPHALT MIXTURE DESIGN, HMA BINDER COURSE, PG 64-22, 0.3 TO < 3 MILLION ESALS, 19.0 MM MIX, 2 1/2" DEPTH	7,849.000	\$14.00	\$109,886.00	
0460-0002	BITUMINOUS TACK COAT	1,020.000	\$3.90	\$3,978.00	
0601-0763	18" DUCTILE IRON PIPE	130.000	\$170.00	\$22,100.00	
0601-5431	CLASS C CEMENT CONCRETE FOR MISCELLANEOUS DRAINAGE	1.000	\$1,770.00	\$1,770.00	
0601-7313	18" REINFORCED CONCRETE PIPE, TYPE B, 15' - 1.5' FILL	303.000	\$87.00	\$26,361.00	
0601-7340	30" REINFORCED CONCRETE PIPE, TYPE B, 10' - 2' FILL	679.000	\$120.00	\$81,480.00	
0605-1480	MANHOLE	5.000	\$5,580.00	\$27,900.00	
0605-2620	TYPE D-W ENDWALL	3.000	\$3,470.00	\$10,410.00	
0605-2711	TYPE C CONCRETE TOP UNIT AND BICYCLE SAFE GRATE	4.000	\$1,310.00	\$5,240.00	
0605-2730	TYPE M CONCRETE TOP UNIT AND GRATE	5.000	\$480.00	\$2,400.00	
0605-2731	TYPE M CONCRETE TOP UNIT AND BICYCLE SAFE GRATE	1.000	\$1,140.00	\$1,140.00	
0605-2850	STANDARD INLET BOX, HEIGHT < / = 10'	8.000	\$2,810.00	\$22,480.00	1
0605-2854	TYPE 4 INLET BOX, HEIGHT < / = 10'	2.000	\$3,370.00	\$6,740.00	1
0608-0001	MOBILIZATION	1.000	\$441,000.00	\$441,000.00	
0609-0006	INSPECTOR'S FIELD OFFICE AND INSPECTION FACILITIES, TYPE A	1.000	\$30,400.00	\$30,400.00	
0609-0009	EQUIPMENT PACKAGE	1.000	\$6,300.00	\$6,300.00	
0610-7002	6" PAVEMENT BASE DRAIN	245.000	\$21.30	\$5,218.50	
0616-1202	CONCRETE END SECTIONS FOR 18" PIPE PERMANENT IMPACT ATTENUATING DEVICE, TYPE II, TEST LEVEL 3 (ENERGY ABSORBING TERMINALS FLARED)	1.000	\$1,950.00	\$1,950.00	

0619-0470	PERMANENT IMPACT ATTENUATING DEVICE, TYPE II, TEST LEVEL 3 (ENERGY ABSORBING TERMINALS, TANGENT)	2.000	\$1,900.00	\$3,800.00
0620-0010	TYPICAL AND ALTERNATE CONCRETE BRIDGE BARRIER TRANSITION WITHOUT INLET PLACEMENT	3.000	\$1,600.00	\$4,800.00
0620-0011	TYPICAL AND ALTERNATE CONCRETE BRIDGE BARRIER TRANSITION WITH INLET PLACEMENT	1.000	\$1,600.00	\$1,600.00
0620-0400	TERMINAL SECTION, SINGLE	5.000	\$60.00	\$300.00
0620-1075	TYPE 2-S GUIDE RAIL	401.000	\$19.00	\$7,619.00
0620-1100	TYPE 2-SC GUIDE RAIL	110.000	\$24.00	\$2,640.00
0630-0001	PLAIN CEMENT CONCRETE CURB	407.000	\$40.00	\$16,280.00
4678-0110	PERMANENT BARRICADE (MODIFIED)	120.000	\$70.00	\$8,400.00
0686-0050	CONSTRUCTION SURVEYING, TYPE D	1.000	\$25,000.00	\$25,000.00
0689-0003	CPM SCHEDULE	1.000	\$4,400.00	\$4,400.00
0703-0020	NO. 1 COARSE AGGREGATE	77.000	\$51.00	\$3,927.00
0703-0025	NO. 57 COARSE AGGREGATE	163.000	\$100.00	\$16,300.00
0803-0001	PLACING STOCKPILED TOPSOIL	174.000	\$50.00	\$8,700.00
4804-0011	SEEDING AND SOIL SUPPLEMENTS - FORMULA B (MODIFIED)	10.000	\$30.00	\$300.00
4804-0013	SEEDING AND SOIL SUPPLEMENTS - FORMULA D (MODIFIED)	58.300	\$22.00	\$1,282.60
4804-0014	SEEDING - FORMULA E (MODIFIED)	20.000	\$39.00	\$780.00
0806-0051	EROSION CONTROL MULCH BLANKET	1,900.000	\$1.55	\$2,945.00
0851-0003	ROCK APRON	43.000	\$100.00	\$4,300.00
0855-0003	PUMPED WATER FILTER BAG	2.000	\$1,140.00	\$2,280.00
0860-0000	INLET FILTER BAG FOR TYPE M INLET	5.000	\$840.00	\$4,200.00
0860-0002	INLET FILTER BAG FOR TYPE C INLET	5.000	\$960.00	\$4,800.00
0867-0012	COMPOST FILTER SOCK, 12" DIAMETER	1,026.000	\$3.75	\$3,847.50
0867-0018	COMPOST FILTER SOCK, 18" DIAMETER	1,083.000	\$5.25	\$5,685.75
0901-0001	MAINTENANCE AND PROTECTION OF TRAFFIC DURING CONSTRUCTION	1.000	\$28,700.00	\$28,700.00
0901-0320	4" STANDARD PAVEMENT MARKINGS, PAINT & BEADS, YELLOW	1,721.000	\$0.32	\$550.72
0901-0330	4" STANDARD PAVEMENT MARKINGS, PAINT & BEADS, WHITE	1,315.000	\$0.32	\$420.80
0931-0001	POST MOUNTED SIGNS, TYPE B	147.000	\$36.00	\$5,292.00
0933-0001	POST MOUNTED SIGNS, TYPE D	5.000	\$220.00	\$1,100.00
0935-0001	POST MOUNTED SIGNS, TYPE F	20.000	\$26.00	\$520.00
0956-0101	LOOP SENSOR	120.000	\$15.00	\$1,800.00
0960-0021	24" WHITE HOT THERMOPLASTIC PAVEMENT MARKINGS	51.000	\$14.00	\$714.00
0962-1000	4" WHITE WATERBORNE PAVEMENT MARKINGS	2,632.000	\$0.32	\$842.24
0962-1005	4" YELLOW WATERBORNE PAVEMENT MARKINGS	4,441.000	\$0.32	\$1,421.12
0971-0001	REMOVE POST MOUNTED SIGNS, TYPE B	2.000	\$65.00	\$130.00
5001-0020	CLASS C CEMENT CONCRETE (MODIFIED)	39.000	\$225.00	\$8,775.00
1002-0053	REINFORCEMENT BARS, EPOXY COATED	122,200.000	\$1.80	\$219,960.00
1002-0190	REINFORCEMENT BARS, EPOXY COATED	1,493.000	\$1.80	\$2,687.40
5006-0209	48" DIAMETER DRILLED CAISSONS, SHAFT SECTION (MODIFIED)	110.000	\$2,000.00	\$220,000.00
5006-0308	42" DIAMETER DRILLED CAISSONS, ROCK SOCKET (MODIFIED)	35.000	\$2,600.00	\$91,000.00
5006-0349	48" DIAMETER DRILLED CAISSONS, ROCK SOCKET (MODIFIED)	195.000	\$2,700.00	\$526,500.00
1019-0050	PROTECTIVE COATING FOR REINFORCED CONCRETE SURFACES (PENETRATING SEALERS, BRIDGE SUPERSTRUCTURE)	723.000	\$0.01	\$7.23
1091-0331	EPOXY INJECTION CRACK SEAL	100.000	\$15.00	\$1,500.00
1999-9999	TRAINEES	1,000.000	\$1.00	\$1,000.00
8030-0001	BRIDGE STRUCTURE, AS DESIGNED S-29760	1.000	\$926,000.00	\$926,000.00
8510-0001	PRECAST REINFORCED CONCRETE BOX CULVERT, AS DESIGNED, S-31698	1.000	\$94,000.00	\$94,000.00

ECMS Highway Construction Contract 37064

8621-0001	MECHANICALLY STABILIZED RETAINING WALL A, AS DESIGNED S-29761	1.000	\$301,000.00	\$301,000.00	
8621-0002	MECHANICALLY STABILIZED RETAINING WALL B, AS DESIGNED S-29762	1.000	\$261,000.00	\$261,000.00	
8621-0003	MECHANICALLY STABILIZED RETAINING WALL C, AS DESIGNED S-29759	1.000	\$682,000.00	\$682,000.00	
8621-0004	MECHANICALLY STABILIZED RETAINING WALL D, AS DESIGNED S-29763	1.000	\$762,000.00	\$762,000.00	
8700-1000	BRIDGE GROUNDING AND BONDING	1.000	\$41,000.00	\$41,000.00	
8800-0001	FABRICATION AND ERECTION OF CATENARY STRUCTURES	1.000	\$1,226,000.00	\$1,226,000.00	
8800-0002	FURNISH AND INSTALL ELECTRIC TRACTION CABLING AND HARDWARE	1.000	\$239,000.00	\$239,000.00	
9000-0001	CONFIRMATORY BORINGS FOR CAISSON LOCATIONS OF CATENARY STRUCTURES P1154a AND 1159b	160.000	\$150.00	\$24,000.00	
9000-0002	REMOVE AND SALVAGE ALL REDUNDANT CATENARY ASSEMBLIES AND CATENARY STRUCTURES	1.000	\$320,000.00	\$320,000.00	
9000-0003	REMOVE REDUNDANT CATENARY STRUCTURE FOUNDATIONS	1.000	\$25,300.00	\$25,300.00	
9000-0100	SETTLEMENT PLATFORMS	2.000	\$1,940.00	\$3,880.00	
9000-0200	MONITORING SETTLEMENT PLATFORMS	40.000	\$100.00	\$4,000.00	
9000-0300	SETTLEMENT PLATFORMS	1.000	\$1,930.00	\$1,930.00	
9000-0400	MONITORING SETTLEMENT PLATFORMS	20.000	\$100.00	\$2,000.00	
9201-0001	CLEARING AND GRUBBING (NEWCOMER ROAD)	1.000	\$3,680.00	\$3,680.00	
9203-0101	TEMPORARY EXCAVATION SUPPORT AND PROTECTION SYSTEM	1.000	\$23,400.00	\$23,400.00	
9608-0001	MOBILIZATION (NEWCOMER ROAD)	1.000	\$1,000.00	\$1,000.00	
9610-7002	PERFORATED INFLOW PIPE	28.000	\$73.00	\$2,044.00	
9624-0002	REMOVE AND RESET EXISTING CHAIN LINK FENCE	250.000	\$10.00	\$2,500.00	1
9686-0040	CONSTRUCTION SURVEYING, TYPE C (NEWCOMER ROAD)	1.000	\$1,000.00	\$1,000.00	
9859-0004	CLEANOUT STAKE	2.000	\$46.00	\$92.00	
9901-0001	MAINTENANCE AND PROTECTION OF TRAFFIC DURING CONSTRUCTION (NEWCOMER ROAD)	1.000	\$4,050.00	\$4,050.00	
9999-0001	AMTRAK TRACK MONITORING	1.000	\$12,000.00	\$12,000.00	
9999-0002	AMTRAK PERMIT TO ENTER	25,000.000	\$1.00	\$25,000.00	

Contract Total: \$7,861,279.26

Bid Total: \$7,861,279.26

Special Provisions

00 - a000001 CONSTRUCTION RESTRICTIONS FOR RAILROAD

Addendum:

Associated Item(s):

Header:

CONSTRUCTION RESTRICTIONS FOR RAILROAD

Provision Body:

No work (including surveying) may take place within the existing railroad right-of-way until first obtaining all AMTRAK Insurances, Permit To Enter, and Railroad Flaggers.

00 - a000002 USAGE OF SUPPLEMENTAL DRAWINGS

Addendum:

Associated Item(s):

Header:

USAGE OF SUPPLEMENTAL DRAWINGS

Provision Body:

Parapet dimensions shown in BC-739M dated July 11, 2001 and BC-799M dated December 29, 2000 are utilized in this project. All other details associated with the October 26, 2010, version of these two bridge construction standards apply.

00 - a000001 FRA FLOW DOWN PROVISIONS

Addendum:

Associated Item(s):

Header:

FRA FLOW DOWN PROVISIONS

Provision Body:

See attachment named "FRA Flow Down Provisions".

Contractor must comply with the Federal Rail Administration (FRA) Flow Down Provisions to be in compliance with ARRA funding requirements.

00 - a000002 AMTRAK - IMPLEMENTATION OF THE AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009

Addendum:

Associated Item(s):

Header:

AMTRAK - IMPLEMENTATION OF THE AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009

Provision Body:

See attached document named "AMTRAK - IMPLEMENTATION OF THE AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009".

Contractor must comply with the details outlined in this document.

00 - a00003 AMTRAK - CONSTRUCTION REQUIREMENTS

Addendum:

Associated Item(s):

Header:

AMTRAK - CONSTRUCTION REQUIREMENTS

Provision Body:

Comply with Amtrak Specifications included in the bid package for ALL construction operations:

- Section 02261A - Requirements for Temporary Sheeting and Shoring to Support Amtrak Tracks.
- Section 01520A - Requirements for Temporary Protection Shields for Demolition and Construction of Overhead Bridges and other Structures.
- Section 01142A - Submission Documentation Required for Amtrak Review and Approval of Plans for Bridge Erection, Demolition and other Crane/Hoisting Operations over Railroad Right-of-Way.

00 - a00004 AMTRAK - INDEMNITY FROM CONTRACTORS PERFORMING DESIGN OR ENGINEERING FUNCTIONS - EBY CHIQUES

Addendum:

Associated Item(s):

Header:

AMTRAK - INDEMNITY FROM CONTRACTORS PERFORMING DESIGN OR ENGINEERING FUNCTIONS - EBY CHIQUES

Provision Body:

See attachment document named "Amtrak - Indemnity From Contractors Performing Design Or Engineering Functions - Eby Chiques".

Contractor must execute sign and comply with the details outlined in this document.

Mail to:

A. F. Concha, PMP

Director – Capital Construction

Amtrak - 30th Street Station, Mail Box #64

2955 Market Street
Philadelphia, PA 19104
(215) 349-4879

Send copy to Assistant District Construction Engineer.

00 - a00006 AMTRAK - PROOF OF INSURANCE

Addendum:

Associated Item(s):

Header:

AMTRAK - PROOF OF INSURANCE

Provision Body:

See attached requirements.

Contractor's Insurance documentation must be addressed to:

Director Project Initiation & Development
National Railroad Passenger Corporation
30th Street Station, Mail Box 64
Philadelphia, PA 19104
Phone: (215) 349-4971

G2201A - a00007 AMTRAK - RAILROAD COMPANY CONTACT PERSONS

Addendum:

Associated Item(s):

Header:

RAILROAD COMPANY CONTACT PERSON

Provision Body:

Contractor must coordinate construction work on or adjacent to Amtrak railroad ROW and in accordance with applicable Amtrak Specifications.

For protective services required by the special provision entitled "Maintenance and Protection of Railroad Traffic" contact:

Barry Bond, Amtrak Project Manager
I&C Mid Atlantic Division
(215) 349-3706

For interpretation of Amtrak specifications contact:

A. F. Concha, PMP

Director – Capital Construction

Amtrak - 30th Street Station, Mail Box #64

2955 Market Street

Philadelphia, PA 19104

(215) 349-4879

00 - a00008 AMTRAK - SOURCE OF SUPPLY FOR ET PLAN MATERIALS AND CATENARY SYSTEM

Addendum:

Associated Item(s):

Header:

AMTRAK - SOURCE OF SUPPLY FOR ET PLAN MATERIALS AND CATENARY SYSTEM

Provision Body:

All material and hardware associated with the construction of the Amtrak ET Plan and catenary system must come from an Amtrak approved Source of Supply.

Manufacturer's must fabricate hardware in accordance with the following Amtrak specifications in the bid package:

- Specification P-117. Bronze Castings Used in Catenary Construction
- Specification P-116. Malleable Iron Castings Used in Catenary Construction
- Specification CE565-A. Non-ferrous Rods, Bolts, Tubes, Bars, and Forgings

00 - a00009 AMTRAK - TEMPORARY PERMIT TO ENTER RAILROAD PROPERTY AND INSURANCE REQUIREMENTS

Addendum:

Associated Item(s):

Header:

AMTRAK - TEMPORARY PERMIT TO ENTER RAILROAD PROPERTY AND INSURANCE REQUIREMENTS

Provision Body:

See attached:

National Railroad Passenger Corporation, Temporary Permit to Enter Upon Property, Specification CE-17 (Revised 12/1/06)

Amtrak Contractor Safety & Security Awareness Training Request

Includes:

ATTACHMENT A

Temporary Permit to Enter Upon Property

SPECIFICATIONS REGARDING SAFETY AND PROTECTION OF RAILROAD TRAFFIC AND PROPERTY (Revised 2/3/06)

ATTACHMENT B

Temporary Permit to Enter Upon Property

INSURANCE REQUIREMENTS

NATIONAL RAILROAD PASSENGER CORPORATION (AMTRAK)

CHICAGO UNION STATION COMPANY (CUSCO)

WASHINGTON TERMINAL COMPANY (WTC)

Revised as of December 3, 2009

This permit is subject to review by Amtrak's Law and Risk Management Departments.

Proof of Insurance: Contractor's Insurance documentation must be addressed to:

Director Project Initiation & Development

National Railroad Passenger Corporation

30th Street Station, Mail Box 64

Philadelphia, PA 19104

Phone: (215) 349-4971

G2A - a00010 PUBLIC BID OPENING LOCATION

Addendum:

Associated Item(s):

Header:

PUBLIC BID OPENING LOCATION

Provision Body:

The location of the public bid opening is the Commonwealth Keystone Building, 7th Floor, Contract Awards Room, 400 North Street, Harrisburg. Allow sufficient time before the bid opening to obtain a visitor pass on the 5th Floor and to be escorted to the 7th Floor Contract Awards Room.

G101B - a00101 GOVERNING SPECIFICATIONS AND APPLICABLE DESIGNATED SPECIAL PROVISIONS

Addendum:

Associated Item(s):

Header:

GOVERNING SPECIFICATIONS AND APPLICABLE DESIGNATED SPECIAL PROVISIONS

Provision Body:

I. GOVERNING SPECIFICATIONS. This bid proposal is made under, subject to, and governed by:

Specifications 408/2011, **Change No. 2, effective April 6, 2012**, of the Pennsylvania Department of Transportation. Within these Specifications where dual measurement and tabular options are presented, **English** standards apply.

II. APPLICABLE DESIGNATED SPECIAL PROVISIONS. The following Designated Special Provisions are found in Appendix C to the above Governing Specifications. Those that apply to this bid proposal are preceded with a check (i.e., "X"). Goals, minimum levels of participation, or other project specific requirements associated with these documents are also established where applicable:

DSP1. Offset Provision for Commonwealth Contracts.

DSP2. Contractor Responsibility Provisions.

DSP3. Provisions for Commonwealth Contracts Concerning the Americans with Disabilities Act.

DSP4. Minority Business and Women Business Enterprise Participation Requirements. This is used on 100% State projects requiring Prequalification. The minimum levels of participation for this project are:

MBE WBE

(*fill in*)% (*fill in*)%

DSP5. Minority Business and Women Business Enterprise Program. This is used only on 100% State projects over \$100,000 requiring Prequalification and where DSP4 does not apply.

DSP6. Minority Business and Women Business Enterprise Utilization Requirements. This is used on State projects without Prequalification requirements. Minimum participation levels of 5% for MBE and 3% for WBE of the dollar amount of the bid have been established for this project.

DSP7. Disadvantaged Business Enterprise Requirements. This is used on Federal - aid projects only. In conjunction with this contract a goal of 6% of the original contract amount has been established.

DSP9. Special Supplement - Anti-Pollution Measures - August 26, 1999.

DSP10. Nondiscrimination/Sexual Harassment Clause.

DSP11. Contractor Integrity Provisions.

DSP12. Executive Order 11246, with Appendix A and B.

G113B - a00113 CONTRACT PROVISIONS - RIGHT-TO-KNOW LAW

Addendum:

Associated Item(s):

Header:

CONTRACT PROVISIONS - RIGHT TO KNOW LAW

Provision Body:

I. Contract Provisions – Right to Know Law 8-K-1532

a. The Pennsylvania Right-to-Know Law (RTKL), 65 P.S. §§ 67.101-3104, applies to this Contract.

b. If the Department needs assistance in any matter arising out of the RTKL related to this Contract, the Department will notify the Contractor using the legal contact information provided in this Contract. The Contractor, at any time, may designate a different contact for such purpose upon reasonable prior written notice to the Department.

c. Upon written notification from the Department that it requires assistance in responding to a request under the RTKL for information related to this Contract that may be in the Contractor's possession, constituting, or alleged to constitute, a public record in accordance with the RTKL ("Requested Information"), the Contractor will:

1. Provide the Department, within 10 calendar days after receipt of written notification, access to, and copies of, any document or information in the Contractor's possession arising out of this Contract that the Department reasonably believes is Requested Information and may be a public record under the RTKL; and

2. Provide such other assistance as the Department may reasonably request, in order to comply with the RTKL with respect to this Contract.

d. If the Contractor considers the Requested Information to include a request for a Trade Secret or Confidential Proprietary Information, as those terms are defined by the RTKL, or other information that the Contractor considers exempt from production under the RTKL, notify the Department and provide, within 7 calendar days of receiving the written notification, a written statement signed by a representative of the Contractor explaining why the requested material is exempt from public disclosure under the RTKL.

e. The Department will rely upon the written statement from the Contractor in denying a RTKL request for the Requested Information unless the Department determines that the Requested Information is clearly not protected from disclosure under the RTKL. Should the Department determine that the Requested Information is clearly not exempt from disclosure, provide the Requested Information within 7 calendar days of receipt of written notification of the Department's determination.

f. Failing to provide the Requested Information within the time period required by these provisions, indemnify and hold the Department harmless for any damages, penalties, costs, detriment or harm that the Department may incur as a result of this failure, including any statutory damages assessed against the Department.

g. The Department will reimburse the Contractor for any costs associated with complying with these provisions only to the extent allowed under the fee schedule established by the Office of Open Records or as otherwise provided by the RTKL if the fee schedule is inapplicable.

h. The Contractor may file a legal challenge to any Department decision to release a record to the public with the Office of Open Records, or in the Pennsylvania Courts, however, indemnify the Department for any legal expenses incurred by the Department as a result of such a challenge and hold the Department harmless for any damages, penalties, costs, detriment or harm that the Department may incur as a result of the failure, including any statutory damages assessed against the Department, regardless of the outcome of such legal challenge. As between the parties, agree to waive all rights or remedies that may be available as a result of the Department's disclosure of Requested information pursuant to the RTKL.

i. The Contractor's duties relating to the RTKL are continuing duties that survive the expiration of this Contract and continue as long as the Requested Information remains in the Contractor's possession.

G114C - a00114 REQUIRED REPORTING FOR THE AMERICAN RECOVERY AND REINVESTMENT ACT

Addendum:

Associated Item(s):

Header:

Required Reporting for the American Recovery and Reinvestment Act (ARRA)

Provision Body:

REQUIRED REPORTING FOR THE AMERICAN RECOVERY AND REINVESTMENT ACT

Submit the form entitled, "Monthly Employment Report American Recovery and Reinvestment Act" to the Inspector-In-Charge within 5 calendar days of the end of the reporting month. If this form is not submitted to the Inspector-In-Charge within 5 calendar days of the end of the reporting month any further estimate payments will be withheld until it is received by the Inspector-In-Charge. An electronic version can be found on ECMS's File Cabinet by selecting ECMS References, and then selecting File Cabinet. The file is in the CTR - Contractor folder and is named **ARRA MONTHLY EMPLOYMENT REPORT**.

Additional instructions for submission of the form will be provided at the pre-construction conference.

G115A - a00115 ARRA SECTIONS 902 and 1515(a)

Addendum:

Associated Item(s):

Header:

ARRA SECTIONS 902 and 1515(a)

Provision Body:

Contract Provision to Implement ARRA Section 902:

Section 902 of the American Recovery and Reinvestment Act (ARRA) of 2009 requires that each contract awarded using ARRA funds must include a provision that provides the U.S. Comptroller General and his representatives with the authority to:

“(1) to examine any records of the contractor or any of its subcontractors, or any State or local agency administering such contract, that directly pertain to, and involve transactions relating to, the contract or subcontract; and

(2) to interview any officer or employee of the contractor or any of its subcontractors, or of any State or local government agency administering the contract, regarding such transactions.”

Accordingly, the Comptroller General and his representatives shall have the authority and rights as provided under Section 902 of the ARRA with respect to this contract, which is funded with funds made available under the ARRA. Section 902 further states that nothing in this section shall be interpreted to limit or restrict in any way any existing authority of the Comptroller General.

Notification of the Authority of the Inspector General

Section 1515(a) of the ARRA provides authority for any representatives of the Inspector General to examine any records or interview any employee or officers working on this contract. The contractor is advised that representatives of the inspector general have the authority to examine any record and interview any employee or officer of the contractor, its subcontractors or other firms working on this contract. Section 1515(b) further provides that nothing in this section shall be interpreted to limit or restrict in any way any existing authority of an inspector general.

G116B - a00116 IMPLEMENTATION OF THE AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009

Addendum:

Associated Item(s):

Header:

IMPLEMENTATION OF THE AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009

Provision Body:

Preamble

The American Recovery and Reinvestment Act of 2009, Pub. L. 111-5, (“ARRA”) was enacted to preserve and create jobs and promote economic recovery, assist those most impacted by the recession, provide investments needed to increase economic efficiency by spurring technological advances in science and health, invest in transportation, environmental protection, and other infrastructure that will provide long-term economic benefits, stabilize State and local government budgets, in order to minimize and avoid reductions in essential services and counterproductive State and local tax increases.

This specification addresses additional requirements applicable to ARRA funds, not otherwise covered in this contract. Subject to further guidance by the applicable Federal awarding agency, the following terms and conditions are consistent with the mandatory requirements for agreements funded by ARRA.

Be advised that ARRA funds can be used in conjunction with other funding as necessary to complete projects, but tracking and reporting must be separate to meet the reporting requirements of ARRA and related guidance. For projects funded by other sources in addition to ARRA funds, Contractors must keep separate records for ARRA funds and must ensure those records comply with the requirements of the ARRA.

The federal Government has not fully developed the implementing instructions of ARRA, particularly concerning specific procedural requirements for the new reporting requirements. The Contractor will be provided these details as they become available. The Contractor must comply with all requirements of ARRA. In the event there is any inconsistency between these ARRA requirements and current award terms and conditions, the ARRA requirements will take precedence.

Contractor agrees that in consideration of receipt of Federal ARRA Funds, it will comply with all of the terms, conditions, requirements and limitations set forth below:

Definitions

A. “ARRA funds” means funds expended or obligated from appropriations under the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5.

B. “Contractor” is defined as any person, including, but not limited to, a bidder, offeror, loan recipient, grantee, or subgrantee, who has furnished or seeks to furnish goods, supplies, services, or leased space, or who has performed or seeks to perform construction activity under contract, subcontract, grant, or subgrant with the Commonwealth, or with a person under contract, subcontract, grant, or subgrant with the Commonwealth or its state-affiliated entities, and state-related institutions. The term contractor may include a permittee, licensee, or any agency, political subdivision, instrumentality, public authority, or other entity of the Commonwealth.

ARRA Terms & Conditions

1. Revisions to Requirements. Contractor acknowledges that this specification may be revised pursuant to ongoing guidance from the relevant Federal or Commonwealth agency regarding requirements for ARRA funds. Contractor agrees to abide by any such revisions upon receipt of written notification from the Commonwealth of the revisions, which will automatically become a material part of this specification, without the necessity of either party executing any further instrument.

2. Required Job Posting. To ensure Pennsylvanians have the utmost opportunity to be hired for jobs created through the receipt of ARRA funding, all Contractors shall post jobs they create or seek to fill as a result of receiving ARRA funding to the PA CareerLink® system at www.pacareerlink.state.pa.us. Contractors can locate their local PA CareerLink® office through the same website or by calling 1-866-858-2753. Staff at local PA CareerLinks® can assist Contractors with posting positions and explain how to retrieve resumes or applications within the system.

3. Whistleblower Provision.

(a) An employee of any non-Federal employer receiving covered funds may not be discharged, demoted, or otherwise discriminated against as a reprisal for disclosing, including a disclosure made in the ordinary course of an employee’s duties, to an inspector general, the Comptroller General, a member of Congress, a State or Federal regulatory or law enforcement agency, a person with supervisory authority over the employee (or such other person

working for the employer who has the authority to investigate, discover, or terminate misconduct), a court or grand jury, the head of a Federal agency, or their representatives, information that the employee reasonably believes is evidence of:

1. gross mismanagement of an agency contract or grant relating to covered funds;
2. a gross waste of covered funds;
3. a substantial and specific danger to public health or safety related to the implementation or use of covered funds;
4. an abuse of authority related to the implementation or use of covered funds; or
5. a violation of law, rule, or regulation related to an agency contract (including the competition for or negotiation of a contract) or grant, awarded or issued relating to covered funds.

(b) A person who believes that the person has been subjected to a reprisal prohibited by subsection (a) may submit a complaint regarding the reprisal to the appropriate U.S. Office of the Inspector General.

(c) Any employer receiving covered funds under ARRA, shall post notice of the rights and remedies as required by Section 1553 of ARRA. See www.recovery.gov.

G401A - a00401 ADVANCE NOTICE OF TRAFFIC RESTRICTIONS

Addendum:

Associated Item(s):

Header:

ADVANCE NOTICE OF TRAFFIC RESTRICTIONS

Provision Body:

Notify the Engineer at least 4 calendar days in advance of the start of any operation which will affect the flow of traffic and provide the Engineer with details of the work to be done. After notification, the District Office will advise the public of these traffic restrictions and possible delays.

G901B - a00901 ALTERNATE EROSION AND SEDIMENT POLLUTION CONTROL PLAN

Addendum:

Associated Item(s):

Header:

ALTERNATE EROSION AND SEDIMENT POLLUTION CONTROL PLAN

Provision Body:

Comply with these requirements when submitting an alternate plan for accomplishing equal or better temporary and permanent erosion and sediment pollution control. Do not start work until the alternate erosion and sediment pollution control plan, schedules, and operation methods have been approved by the Department and the Department of Environmental Protection, or by the Department and the County Conservation District, as applicable.

Apply for any earth disturbance permits or permit amendments not included in the proposal documents that are required because of the nature of the contemplated construction procedures.

Prepare and furnish, with the applications, plans and documents that are required by the Department of Environmental Protection or the County Conservation District.

Provide simultaneously to the District Executive a copy of all plans and documents that affect the construction requirements.

Provide immediately to the District Executive any modifications that are made to the plans and documents that are required by the Department of Environmental Protection or the County Conservation District.

Obtain the approval of the Department and the permit from the Department of Environmental Protection prior to beginning any work when a permit is required, and the approval of the Department and the County Conservation District when a permit is not required.

Acquire areas outside of the right-of-way that are necessary for erosion and sediment pollution control. Proceed with the agreement procedure described in Section 105.14 (Borrow Areas and Waste Areas).

G1101B - a01101 CONSTRUCTION PROCEDURES - EROSION AND SEDIMENT POLLUTION CONTROL

Addendum:

Associated Item(s):

Header:

CONSTRUCTION PROCEDURES - EROSION AND SEDIMENT POLLUTION CONTROL

Provision Body:

I. Observe the applicable following procedures during the entire period of construction as directed:

(a) Conduct all operations as specified in the erosion and sediment pollution control plan and in such a manner to minimize turbidity in streams. Do not discharge water containing sediments or pollutants into the streams.

(b) Direct flowing water away from project construction areas.

(c) Limit movement of equipment through the streambed in accordance with the approved plan so as to prevent unnecessary siltation or disturbance. Permit equipment to cross flowing channels only on rock roadways and/or bridges to prevent constant turbulency and siltation.

Construct rock crossings, causeways or cofferdams with rock having a minimum size of 75 mm (3 inches) or larger as directed; also, the surface may be choked with stone aggregate having a minimum size of 9.5 mm (3/8-inch). Do not use earth or other materials which may cause sedimentation, for any crossings, causeways or cofferdams.

(d) Seed and/or stabilize all stream banks immediately upon completion of grading.

(e) Seed all cut and fill slopes when they have reached a vertical height of 4.5 m (15 feet). On areas where permanent seeding will not be performed within a period of 20 days after the excavation or embankment operations have been completed place temporary seeding (annual Ryegrass) and mulching on all soil areas.

(f) Control the entire grading area at all times during construction by placing the erosion and sediment pollution control devices that can be installed prior to disturbing the earth and the stabilization devices as soon as the required earthwork has been performed.

(g) For any excavation material stockpiled more than 20 days, take interim stabilization measures to minimize erosion of the stockpile slopes.

(h) Clean the sedimentation structures during construction as specified in Section 861. Dispose of silt fencing and sediment removed from the project, as directed.

(i) Separate all water originating outside of the project from that originating within.

- (j) During the life of the contract, be responsible for the maintenance of all erosion and sediment pollution control devices.
- (k) Seed all borrow and waste areas in accordance with the approved plans and with item (e) above.

G1601A - a01601 E.E.O. COVERED AREA

Addendum:

Associated Item(s):

Header:

E.E.O. COVERED AREA

Provision Body:

For the purpose set forth in the Executive Order 11246

the covered area for this contract is Lancaster County,

which is within the Economic Area of Harrisburg-Lancaster-York, Pennsylvania,

as listed in Appendix B of Designated Special Provision 12 (DSP12) entitled "Executive Order 11246 (with Appendix A and B)" in Appendix C of Pub 408.

00 - a01701 ENVIRONMENTAL MITIGATION MEASURES & ECMTS REVIEW AND SIGN-OFF

Addendum:

Associated Item(s):

Header:

ENVIRONMENTAL MITIGATION MEASURES & ECMTS REVIEW AND SIGN-OFF

Provision Body:

Environmental Mitigation Measures -

Mitigation commitments are summarized in the attached "Environmental Commitment and Mitigation Tracking System (ECMTS) Report – SR 4062-001".

Environmental Commitment and Mitigation Tracking System (ECMTS) Report Review and Sign-off -

DESCRIPTION – This work is the review, tracking, and documented evidence of implementation of the environmental commitments identified in the project Environmental Commitments and Mitigation Tracking System (ECMTS) report (attached).

Designate a responsible individual (Project Manager or Site Superintendent) to maintain the ECMTS report during construction. Include additional names if responsible individuals change during the construction of the project.

Upon receiving Notice to Proceed, and a minimum of 14 days prior to the start of work, the Contractor's designated individual will review each Mitigation Category and associated mitigation effort with the PennDOT Construction Project Manager and Inspector-In-Charge. As each mitigation requirement is completed, the Contractor's designated individual will sign and date the appropriate item. By signing and dating the item, the designated individual confirms that he/she has reviewed the mitigation commitment, understands the commitment, and has incorporated the mitigation commitment in the construction of the project, as appropriate.

Ensure that the mitigation commitments are completed in a timely manner. Review the ECMTS Report with the PennDOT Construction Project Manager and Inspector-In-Charge at each status meeting. The PennDOT Construction Project Manager will verify, date, and sign each mitigation commitment as it is completed.

Questions or any problems regarding the implementation of mitigation commitments are to be directed to the Inspector-In-Charge. Submit changes to mitigation commitments to the PennDOT Inspector-in-charge, who will coordinate the review/approval with the District Environmental Manager. No changes may occur prior to the Environmental Manager's approval.

Maintain one (1) copy of the ECMTS Report at the Contractor's project field office and provide one (1) copy to the Inspector-In-Charge after each update.

Two weeks prior to the final inspection, submit for approval one (1) copy of the final signed Construction ECMTS Report to the PennDOT Construction Project Manager, and one (1) copy to the District Environmental Manager. Attach any supporting documentation as needed to demonstrate compliance with the mitigation measures. Retain original copy for files.

MEASUREMENT AND PAYMENT – This work includes the review and sign off of the ECMTS Report only and payment is considered incidental to Item 0608-0001 – Mobilization. Any work associated with the mitigation commitments will be paid for under separate contract pay items or considered incidental to construction.

00 - a01702 REQUIREMENT TO EXTEND NPDES PERMIT AND LICENSED PROFESSIONAL CERTIFICATION

Addendum: 1

Associated Item(s):

Header:
REQUIREMENT TO EXTEND NPDES PERMIT AND LICENSED PROFESSIONAL CERTIFICATION

Provision Body:

If required, apply for extension of the General NPDES permit ninety (90) days prior to coverage expiration date of August 12, 2014.

Ensure that a licensed professional has oversight responsibilities for the design and proper installation of BMPs identified in the Post- Construction Stormwater Management Plan prior to the submission of the Notice of Termination (NOT) for the General NPDES permit. The licensed professional shall certify that the BMPs identified in the plan have been installed in accordance with the approved plan.

Consider the costs associated with securing the licensed professional and extending the permit to be incidental to Items 0608-0001/9608-0001.

G2102A - a02102 INSURANCE--INVOLVING R OF W OF NATIONAL RR-ADDITIONAL COVERAGE LIMITS

Addendum:

Associated Item(s):

Header:
INSURANCE--INVOLVING R OF W OF NATIONAL RR-ADDITIONAL COVERAGE LIMITS

Provision Body:

I. GENERAL - In addition to any other forms of insurance or bonds required under the terms of the contract and specifications, carry insurance of the kinds and in the minimum limits specified herein. Submit a properly executed insurance certificate(s), evidencing the required additional coverage, with the executed contract as specified in Sections 103.06 and 107.14.

(a) Require all subcontractors to carry insurance of the kinds and in the minimum limits specified herein. The Contractor may provide the specified coverage for any or all subcontractors. In this case, ensure that the evidence of insurance submitted so stipulates.

(b) When used in this specification or on the plans or contract documents, the words "Company", "Railroad", or "Amtrak" mean the National Railroad Passenger Corporation.

(c) Do not begin work until all insurance and insurers, as specified, have been obtained and approved by the Amtrak Assistant Chief Engineer.

(d) Prior to beginning work, provide Amtrak with Certificates of Insurance evidencing the required coverage.

(e) Have all insurance policies contain the following clause:

"Thirty (30) days written notice of any significant change (ie: a material reduction in coverage), cancellation, or nonrenewal of this policy, to be effective upon receipt thereof, is to be sent to the National Railroad Passenger Corporation by Certified Mail before any such change, cancellation or nonrenewal of this policy will be effected."

(f) If the insurance coverage provided is not in compliance with the requirements specified herein, Amtrak maintains the right to stop the work until proper evidence is provided. Maintain the insurance described herein until all work is satisfactorily completed, all Contractor personnel and equipment have been removed from railroad property, and an Acceptance Certificate has been issued. Have all insurance written by an insurance company licensed and/or authorized to do business in Pennsylvania. Have all insurance policies and certificates signed by a Pennsylvania resident agent or resident broker of the issuing company.

II. BODILY INJURY LIABILITY AND PROPERTY DAMAGE LIABILITY INSURANCE - Provide, pay for, and maintain during the life of the contract Bodily Injury Liability and Property Damage Liability Insurance to protect against any legal liability that may be incurred as a result of all work performed or all obligations assumed by the Contractor or the Contractor's employees.

(a) Furnish the following types of Bodily Injury Liability and Property Damage Liability Insurance in the minimum limits of liability specified:

1. Commercial General Liability Insurance. Furnish Commercial General Liability Insurance including Products/Completed Operations, Blanket Contractual Liability - All Written and Oral Contracts, and Independent Contractors coverage and deleting all railroad exclusions. Provide such coverage, naming the National Railroad Passenger Corporation as an additional insured party and containing a waiver of subrogation against Amtrak and its employees or agents, in limits of liability of not less than \$ 2,000,000 Combined Single Limit per occurrence for Bodily Injury (including disease or death), Personal Injury, and Property Damage (including loss of use).

2. Comprehensive Automobile Liability Insurance. Provide Comprehensive Automobile Liability Insurance covering all owned, hired, rented, leased, and nonowned vehicles not covered under Commercial General Liability Insurance; naming the National Railroad Passenger Corporation as an additional insured party; and containing a waiver of subrogation against Amtrak and its employees or agents (excluding worker's compensation benefits in compliance with Section 1720 of the Pennsylvania Motor Vehicle Responsibility Law), in limits of liability of not less than \$ 1,000,000 Combined Single Limit per occurrence for Bodily Injury and Property Damage.

3. Railroad Protective Liability Insurance. Provide, with respect to operations to be performed by the Contractor or any subcontractors within 50 feet vertically or horizontally of the Railroad's tracks, a Railroad Protective Liability Insurance policy, AAR-AASHTO (ISO/RIMA) Form, in the name of the National Railroad Passenger Corporation and in the following limits of liability:

- \$ 5,000,000 Combined Single Limit per occurrence, for Coverages A and B, for Bodily Injury (including disease or death) and Property Damage (including loss of use), and
- \$ 10,000,000 in the Aggregate per year.

(b) If this coverage is provided on the London claims-made form, the following provisions apply:

1. Provide limits of liability not less than \$ 3,000,000 Combined Single Limit per occurrence and \$ 9,000,000 in the Aggregate per year. However, if the project is funded in whole or in part by the Federal Highway Administration's Federal-Aid Highway Program,

pursuant to the provisions of 23 CFR, Part 646, provide limits of liability of not less than \$ 2,000,000 Combined Single Limit per occurrence and \$ 6,000,000 annual Aggregate.

2. Ensure that Declarations Item 6, Extended Claims-Made Date, allows for an Extended Claims-Made Period no shorter than the original policy period plus 1 year.

3. If equivalent, or better, wording is not contained in the policy, include the following endorsement:

It is agreed that "Physical Damage to Property" means direct and accidental loss of or damage to rolling stock and contents, mechanical construction equipment, motive power equipment, railroad tracks, roadbed, catenaries, signals, bridges, or buildings.

III. CLAIMS-MADE INSURANCE - If any of the specified insurance is provided on a claims-made basis, then, in addition to the above coverage provisions, ensure that all such policies include the following:

- A policy retroactive date which coincides with or precedes the start of work, including subsequent policies purchased as renewals or replacements.
- A provision requiring the Contractor to make every effort to maintain similar insurance for at least 2 years following project completion and include Amtrak as an additional insured party.
- An agreement for the purchase of an extended reporting provision of at least 2 years, if insurance is terminated for any reason, for reporting claims which may arise from work performed in connection with this project.
- A provision which allows for reporting the circumstances of incidents that might give rise to future claims.

IV. PROOF OF INSURANCE - Furnish Amtrak with the original signed policy for Railroad Protective Liability Insurance, and a Certificate of Insurance for all other coverages, 15 days prior to commencing work. The 15-day advance notice of coverage may be waived in situations where such a waiver will benefit Amtrak, but do not begin work, under any circumstances, without providing evidence of insurance.

(a) Submit such evidence of insurance to:

Mr. John E. Youngdahl
Project Development Officer
Amtrak-Project Initiation and Development
30th Street Station, Mail Box 64, cube 4S-033
Philadelphia, PA 19104

Phone: (215) 349-4971

Fax#: (215) 349-4166

(b) Do not begin work on Amtrak property until all insurance requirements have been met, to the satisfaction of the Amtrak Assistant Chief Engineer M of W and Structures or the Assistant Chief Engineer's duly authorized representative.

(c) The Contractor may request that Amtrak waive the requirement to provide the Railroad Protective Liability Insurance specified herein for the following types of activities:

- Core borings;
- Field surveys and appraisals;
- Routine bridge inspections;
- Minor bridge inspections;
- Bridge painting;
- Erection or removal of billboard signs;
- Replacement or removal of billboard advertisement;

- Installation or removal of pipe and wire; and
- Minor station maintenance, repair, or construction.

(d) If Amtrak consents to such a request, as a condition of such a waiver, pay Amtrak the agreed upon sum in addition to any consideration owed to Amtrak for the preparation of a permit to enter upon Amtrak's property.

G2301A - a02301 MAINTENANCE AND PROTECTION OF RAILROAD TRAFFIC

Addendum:

Associated Item(s):

Header:

MAINTENANCE AND PROTECTION OF RAILROAD TRAFFIC

Provision Body:

I. Make the safety and operation continuity of the railroad company traffic of the first importance. At all times protect and safeguard such traffic and arrange project work accordingly. Whenever the work may affect the safety and movement of trains, submit the method of doing such work to the chief engineer of the railroad company or duly authorized representative for approval. Do not begin or prosecute work without such approval. However, the approval of the railroad company's chief engineer or duly authorized representative will not be considered as a release from responsibility for any damage to the railroad company by the acts of the Contractor or those of his/her employees. Prepare and submit plans for approval to the railroad company's chief engineer for all work, including, but not limited to, tunneling under tracks, sheeting, shoring, and erection in the vicinity of and over tracks.

II. During the construction period, the railroad company and the Department will co-operate with each other in the protection of their respective traffic and in the construction as indicated. Give the chief engineer of any involved railroad fourteen (14) days written notice before any work is started on railroad property, in order that the necessary arrangements may be made to properly protect railroad traffic.

III. The railroad company will provide all watchmen, operators, flagmen, clearance men, and similar protective services, considered by the railroad company's chief engineer or his duly authorized representative as necessary to insure the safety of trains contingent upon the project's operations, at the sole expense of the Department. It is agreed, however, that providing of such watchmen, and other precautions, will not relieve liability of payment for damage caused by project operations. The Department will not be responsible for such damage.

IV. It is expressly understood that this contract includes no work for which the railroad company is to be billed. Therefore, do not bill the railroad company for any work which may be performed unless the railroad company gives a written request that such work be performed at its expense.

V. The raising or surfacing of tracks due to any settlement, caused by the project operations will be performed by the railroad, but the cost will be borne entirely by Contractor.

VI. During construction a minimum overhead clearance of 6.7m(7m for electrical tracks) (22 feet (23 feet for electrical tracks)) above the top of rail and a minimum horizontal clearance of 12 feet from centerline of tangent track will be permitted. If the clearances indicated are less than those stated above, then the lesser clearance will be permitted. In any case, this minimum side clearance applies to tangent track only. For curved track, provide additional minimum side clearance to compensate for curvature. Contact the railroad company's chief engineer to ascertain the amount of additional minimum side clearance required. If at any time during construction it is decided that project operations require overhead and/or side clearances less than the minimum stated or indicated submit a request to the railroad company's chief engineer as outlined above for safety and continuity of railroad operations. Deviate from those minimums stated above or indicated, only upon receipt of approval of such a request.

VII. Do not work over any high tension wires or within 10 feet on each side and below such wires. When it is necessary to work or place equipment within these limits, make arrangements with the railroad to furnish electrical clearance men and de-energize the wires contingent upon railroad operation. Where voltage exceeds 50,000 volts, increase this working clearance.

G2401A - a02401 RAILROAD PROTECTIVE SERVICES COSTS - GENERAL

Addendum:

Associated Item(s):

Header:

RAILROAD PROTECTIVE SERVICES COSTS

Provision Body:

I. The Department will make payment to the railroad for all costs associated with watchmen, operators, flagmen, clearance men, and similar protective services provided by the railroad company based on railroad regulations and the Contractor's construction schedule.

II. Actual costs will be assessed by the Department whenever protective services are provided by the railroad at the request of the Contractor, but if such requested services are not utilized due to a change in the Contractor's construction schedule or if it is determined by the Department that the requested services were not necessary, the actual costs to be assessed by the Department against the Contractor will be the amount billed by the railroad to the Department.

III. It will be the Contractor's responsibility to obtain the protective services from the railroad and the Department assumes no liability for any delays caused by the failure of the Contractor to obtain such services.

IV. The actual costs to be assessed above will be deducted from money due or that becomes due the Contractor.

G60B - a02501 NIGHT SHIFT

Addendum:

Associated Item(s):

Header:

NIGHT SHIFT

Provision Body:

If starting normal workday before 6:00 a.m. or at or after 12:00 noon, give the Assistant Construction Engineer written notice sixteen (16) days before starting.

Do not work on Sundays unless approved by the District Engineer sixteen (16) days in advance.

G4301D - a04301 UTILITIES--THE REQUIREMENT TO LIST INFORMATION

Addendum:

Associated Item(s):

Header:

UTILITIES--THE REQUIREMENT TO LIST INFORMATION

Provision Body:

I. Cooperate with the public utility companies and local authorities in the placement, replacement, relocation, adjustment, or reconstruction of their structures and facilities during construction. Contact all utility representatives at least 15 calendar days before starting operations.

PRIOR	Anticipated completion before the Notice to Proceed is issued. Use actual or anticipated completion date shown.
RESTRICTIVE	To be completed by the utility or string of utilities before operating without restriction. Number of calendar days will start from the actual notice to proceed that is issued to the contractor.
CONCURRENT	Simultaneous with, but not restricting, operations. Number of calendar days required.
COORDINATED	Phasing with specific construction operations. Number of calendar days required after completion of specific construction operations.
NOT AFFECTED	Identifies utility with facilities in the construction area not anticipated to be affected. Specific information may be provided by the utility.
INCORPORATED	Utility relocation work to be incorporated into the prime highway construction contract.
CONDITIONAL RESTRICTIONS AND TIME REQUIREMENTS	Identify conditions affecting the utility's ability to perform a certain type of utility relocation work, i. e., certain times of the day, week, or year that a facility cannot be shut down, acquisition of Right-of-Way by the state, or demolition of buildings.

FIRST TELECOM SERVICES, LLC

Contact: Dale Valentine, Project Manager, telephone 610 655-2565

RESTRICTIVE: (Aerial) SR 4062, Station 304+64 LT/RT. Utility will attach existing fiber optic cable to new AMTRAK catenary poles. Twenty (20) calendar days required.

NOT AFFECTED: (U/G) T-344, Station 0+00 to 7+30.

NOT AFFECTED: (U/G) T-347, Station 124+00+00 to 129+50.

NOTE: All work must be coordinated with AMTRAK. First Telecom's estimated number of days could change due to AMTRAK directing the utility to stop work for trains, movement of AMTRAK on-track maintenance equipment, availability of track outages or availability of AMTRAK equipment for required cable work. AMTRAK is to construct new catenary poles. Work requires catenary power and south side track to be taken out of service each work day. AMTRAK requires limited off hours work. The Department has no control over these items.

PPL ELECTRIC UTILITIES CORPORATION

Contact: Charlotte Krupa, telephone 610 774-6287

COORDINATED: (Aerial) SR 4062, Station 312+50 to 315+00 RT. Stake all road edges, cut and fill lines, ROW lines and clear affected areas before relocation work begins. Utility will remove one (1) pole, install one (1) anchor guy, install new primary and neutral terminations and rearrange and resag conductors. Six (6) Calendar days required.

Calendar days required are dependent upon weather and storm related work.

All costs associated with any request to de-energize that are not part of this relocation plan will be the responsibility of the requester. PPL must be notified at least two (2) weeks in advance of requested outage.

This relocation plan was designed to provide OSHA required clearances. Any costs for work associated with requests for additional clearances are the responsibility of the requester.

UNITED TELEPHONE CO OF PA LLC DBA CENTURYLINK

Contact: Sherry Mowery, Network Engineer, telephone (717) 245-6441

NOT AFFECTED: (U/G) T-344, Station 0+00 to 7+30.

NOT AFFECTED: (U/G) T-347, Station 124+00+00 to 129+50.

MOUNT JOY BOROUGH AUTHORITY

Contact: John Leaman, Assistant Authority Manager, telephone 717 653-5938

COORDINATED: (U/G) SR 4062, Station 315+22 LT/RT. Stake all road edges, cut and fill lines, ROW lines and clear affected areas prior to utility work. Utility will install water lateral and one (1) hydrant (LT) and remove one (1) hydrant (RT). Four (4) calendar days required.

COORDINATED: (U/G) T-347, Station 128+73 LT. Stake all road edges, cut and fill lines, ROW lines and clear affected areas prior to utility work. Utility will remove one (1) hydrant. Two (2) calendar days required.

COORDINATED: (U/G) T-347, Station 129+60 LT. Stake all road edges, cut and fill lines, ROW lines and clear affected areas prior to utility work. Utility will install water lateral and one (1) hydrant. Two (2) calendar days required.

NOT AFFECTED: (U/G) T-344, Station 0+00 to 7+30.

G4802A - a04802 INDEX PRICE FOR DIESEL FUEL

Addendum:

Associated Item(s):

Header:

Index Price for Diesel Fuel

Provision Body:

The index price for diesel fuel (FB), as determined by the Department, is **\$3.05 per gallon**. Use this index price in accordance with Section 110.12 PRICE ADJUSTMENT FOR DIESEL FUEL COST FLUCTUATIONS.

G4901A - a04901 PRICE INDEX FOR ASPHALT CEMENT

Addendum:

Associated Item(s):

Header:

PRICE INDEX FOR ASPHALT CEMENT

Provision Body:

The price index for asphalt cement (PG 64-22), as determined by the Department is **\$594.00 per ton**. Use this price index in accordance with Section 110.04 PRICE ADJUSTMENT OF BITUMINOUS MATERIALS.

G4902C - a04902 PRICE ADJUSTMENT FOR STEEL COST FLUCTUATIONS

Addendum:

Associated Item(s):

Header:

PRICE ADJUSTMENT FOR STEEL COST FLUCTUATIONS

Provision Body:

These requirements provide for a price adjustment, in the form of a payment to the Contractor or a rebate to the Department, for fluctuations in the cost of the steel used in the applicable materials placed as part of the construction work specified in Sections 620, 621, 948, 1002, 1005, 1050, 1056, 1080, and 1085.

(a) General. These price adjustment provisions apply to items in the contract Schedule of Prices, as specified above, including any modified standard or non-standard item where the work to be performed includes incorporation of one or more of the applicable steel materials specified in the above Sections and addressed herein. Additionally, items in the Component Item Schedule (CIS) for an "as-designed" or alternate design structure, as well as work performed under a design-build contract, will be included when applying the specified price adjustment requirements, provided the work to be performed includes incorporation of one or more of the applicable steel materials specified in the above Sections and addressed herein. Terminal sections, end treatments, transitions, and transition treatments associated with guide rail and metal median barrier work; as well as mechanical splice systems, pile tip reinforcement, high load multi-rotational bearings, shear connectors, and scuppers; will not be subject to the price adjustment criteria and conditions specified herein.

To elect to have these price adjustment provisions apply to one or more of the steel product categories identified herein, when planned for incorporation into a specific project, advance notification must be submitted to the Department. The apparent low bidder is required to submit the Steel Escalation Option form attached to the proposal, via fax, to (717) 705-1504, or email to steeloptions@pa.gov by 3:00 pm prevailing local time within 7 calendar days after the bid opening. When the seventh calendar day after the bid opening falls on a day PENNDOT offices are closed, submit the Steel Escalation Option form by 3:00 pm prevailing local time on the next business day. If a properly completed Steel Escalation Option form is not provided by the apparent low bidder within the time specified, the Department will consider the option to apply these price adjustment provisions to the project to be declined. Furthermore, if a Steel Escalation Option form, when provided within the specified time, has been completed such that the Department is unable to ascertain the bidder's intention with regard to the inclusion of any one of the applicable steel product categories, the Department will consider the option to apply these price adjustment provisions to that product category to be declined. No further opportunity to elect steel escalation for the project or an individual steel product category will be made available. In the event the apparent low bid is rejected, the next lowest bidder will be notified to submit the Steel Escalation Option form by 3:00 pm prevailing local time within 7 calendar days after notification.

The Department posts a monthly index price for steel (\$ per ton) based on data obtained from the U.S. Department of Labor (USDOL), Bureau of Labor Statistics, which publishes monthly Producer Price Index (PPI) values for various commodities. The statewide index price for steel will be based on the PPI value posted by USDOL for "Semi-finished Steel Mill Products" (Series ID:

WPU101702). The Department will post its monthly index price for steel after the USDOL lists the PPI value on which it is based as final.

The "base / benchmark" index price, SB, will be the steel index price posted by the Department, determined as specified above, for the month in which project letting occurred.

The "invoice" index price, SI, will be the steel index price posted by the Department, determined as specified above, for the month in which applicable steel material is invoiced.

Steel material will be considered invoiced as of the date when an invoice from the steel mill providing the necessary raw material is sent to the Contractor or to a subcontractor, fabricator, manufacturer, or supplier. The steel price adjustment provisions specified herein are not applicable to raw steel material having a mill invoice date that precedes the project letting date. On a quarterly basis, provide documentation of the invoice date for applicable steel material incorporated into the work during the prior 3-month period. Documentation is to be in the form of a tabulation that lists all material invoiced during the period, in chronological order by invoice date; the quantity invoiced; and the applicable contract item(s) and corresponding project location(s) where the invoiced quantity or portion thereof was incorporated, along with copies of supporting invoices. Have a representative of the Contractor, authorized to make such statements, certify that the information provided in the tabulation is complete and accurate and may be relied upon by the Department.

Failure to provide the required tabulation within 10 calendar days of the end of each, applicable 3-month period will result in the Department computing a price adjustment (rebate or increase) using a value for SI that results in the greatest possible price rebate or least possible price increase based on the monthly index prices posted by the Department, to date, since work on the project began.

(b) Price Adjustment Criteria and Conditions. The following criteria and conditions will be considered in determining a price adjustment for steel cost fluctuations.

1. No Price Adjustment. When the ratio SI/SB falls within the range of 0.95 to 1.05, no price adjustment will be made for applicable steel material having an invoice date that falls within the month for which the SI index price was posted.

2. Price Rebate. When the ratio SI/SB is calculated to be less than 0.95, the Department will receive an automatic price rebate, for applicable steel material having an invoice date that falls within the month for which the SI index price was posted, to be determined in accordance with the following formula:

$$P.R. = (0.95 - SI / SB) (SB) (ST)$$

where:

P.R. = Price Rebate

SI = Index price for the month in which applicable steel material is invoiced.

SB = Index price for the month in which project letting occurred.

ST = Quantity (tons) of applicable steel material incorporated into the work during the applicable 3-month period.*

*Computed based on the quantity paid, under applicable contract items, on current estimates processed during the 3-month period addressed in the tabulation provided by the Contractor. Not to exceed the total tonnage of applicable steel material invoiced during the month for which the SI index price was posted, as shown on the Contractor's tabulation.

3. Price Increase. When the ratio SI/SB is calculated to be greater than 1.05, the Contractor will receive a price increase, for applicable steel material having an invoice date that falls within the month for which the SI index price was posted, to be determined in accordance with the following formula:

$$P.I. = (SI / SB - 1.05) (SB) (ST)$$

where:

P.I. = Price Increase

SI = Index price for the month in which applicable steel material is invoiced.

SB = Index price for the month in which project letting occurred.

ST = Quantity (tons) of applicable steel material incorporated into the work during the applicable 3-month period.*

* Computed based on the quantity paid, under applicable contract items, on current estimates processed during the 3-month period addressed in the tabulation provided by the Contractor. Not to exceed the total tonnage of applicable steel material invoiced during the month for which the SI index price was posted, as shown on the Contractor's tabulation.

4. Equivalent Tonnage. For applicable steel material furnished under a separate contract item, under a design-bid-build contract, or under a design-build contract the equivalent steel tonnage will be computed as indicate in the following sections.

For design-build contracts, provide an itemized breakdown of the applicable steel materials addressed herein incorporated into the work and indicate the quantity of each actually installed. Indicated quantities should be based on field measurements or take-offs from the approved plans or shop drawings and be equivalent to those used to compute payments made against the Lump Sum construction item on current estimates.

4.a Guide Rail and Metal Median Barrier. For applicable guide rail and metal median barrier components (i.e. rail elements, posts, and rubbing rail) furnished under separate contract items or as part of a single contract item for guide rail / metal median barrier complete in place, the equivalent steel tonnage is computed as follows:

4.a.1 Guide Rail or Median Barrier Rail Element (Weak Post or Strong Post).

$$\text{Steel Tonnage (ST)} = 7.84 (Q) / 2000$$

where:

Q = Quantity (linear feet) of weak post or strong post guide rail element paid on current estimates processed during the applicable 3-month period

4.a.2. Type 2W Posts.

$$\text{Steel Tonnage (ST)} = 8.67 (L) (Q) / 2000$$

where:

L = Length of each post (feet) as required by the Standard Drawings or as specified

Q = Quantity (each) of Type 2W posts paid on current estimates processed during the applicable 3-month period.

4.a.3 Type 2S Posts.

$$\text{Steel Tonnage (ST)} = 9.17 (L) (Q) / 2000$$

where:

L = Length of each post (feet) as required by the Standard Drawings or as specified

Q = Quantity (each) of Type 2S posts paid on current estimates processed during the applicable 3-month period

4.a.4 Rubbing Rail.

$$\text{Steel Tonnage (ST)} = 8.56 (Q) / 2000$$

where:

Q = Quantity (linear feet) of rubbing rail paid on current estimates processed during the applicable 3-month period

4.b Reinforcement Bars. For applicable reinforcement bars furnished under a separate contract item, as a component item associated with an alternate design structure, or as a component item associated with a design-build contract, the equivalent steel tonnage is computed as follows:

$$\text{Steel Tonnage (ST)} = (Q) / 2000$$

where:

Q = Quantity (pounds) of reinforcement bars paid on current estimates processed during the applicable 3-month period.

4.c Piles. For applicable steel beam bearing piles, cast-in-place concrete bearing piles, cast-in-place concrete piles, and steel pipe piles, furnished under a separate contract item, as a component item associated with an alternate design structure, or as a component item associated with a design-build contract, the equivalent tonnage is computed as follows:

4.c.1 Steel H-Piles.

$$\text{Steel Tonnage (ST)} = (UW) (Q) / 2000$$

where:

UW= Unit Weight of the Steel Beam* (pounds per foot)

Q = Quantity (linear feet) of steel piles paid on current estimates processed during the applicable 3-month period.

* The unit weight of steel will be the second of the two numbers associated with the size designation for the beam as cited in the item description (i.e. If the item description is "Steel Beam Bearing Piles, HP12xZ4", the unit weight of the steel is 74 pounds per foot).

4.c.2 Cast-in-Place Concrete Piles.

$$\text{Steel Tonnage (ST)} = 2.80 (D) (Q) / 2000$$

where:

D = Diameter of the steel shell (inches)*

Q = Quantity (linear feet) of cast-in-place concrete piles paid on current estimates processed during the applicable 3-month period.

* From the approved structure Plans or field measurements. For cylindrical shells of varying diameter, a weighted average diameter will be used, computed based on the number of shells of each diameter actually installed. For tapered shells, an average diameter will be used, computed as the average of the shell diameters at the butt end and at the tip.

4.c.3 Pipe Piles.

$$\text{Steel Tonnage (ST)} = 6.70 (D) (Q) / 2000$$

where:

D = Diameter of the steel pipe (inches)*

Q = Quantity (linear feet) of pipe piles paid on current estimates processed during the applicable 3-month period.

* From the approved structure Plans or field measurements.

4.d Steel Sign Structure. For applicable steel sign structures constructed under a separate contract item, the equivalent tonnage is computed as follows:

$$\text{Steel Tonnage (ST)} = (Q) / 2000$$

where:

Q = Quantity (pounds) of steel in each sign structure, or portion thereof, paid on current estimates processed during the applicable 3-month period.*

*Not to exceed the estimated weight of each sign structure as indicated on the structure Plans.

4.e Fabricated Structural Steel. For applicable fabricated structural steel; furnished under a separate contract item, as a component item associated with an "as-designed" or alternate design structure, or as a component item associated with a design-build contract; the equivalent tonnage is computed as follows:

$$\text{Steel Tonnage (ST)} = (Q) / 2000$$

where:

Q = Quantity (pounds) of fabricated structural steel girders, rolled beams, angle, and plate paid on current estimates processed during the applicable 3-month period.

4.f Precast Reinforced Concrete Box Culverts and Prestressed Concrete Bridge Beams. For applicable precast reinforced concrete box culvert segments and prestressed concrete bridge beams; furnished under a separate contract item, as a component item associated with an "as-designed" or alternate design structure, or as a component item associated with a design-build contract; the equivalent tonnage is computed as follows:

$$\text{Steel Tonnage (ST)} = (UW)(Q)/2000$$

where:

UW= Unit Weight (pounds per foot) of reinforcing steel in a box culvert segment or of reinforcing steel and prestressing strands in a prestressed bridge beam.*

Q = Quantity (linear feet) of precast reinforced concrete box culvert segments and prestressed concrete bridge beams paid on current estimates processed during the applicable 3-month period.

* Submit documentation indicating the weight (pounds) of reinforcing steel included in and the length (feet) of each box culvert segment, and the weight (pounds) of mild reinforcing steel and prestressing strands included in and the length (feet) of each prestressed bridge beam. UW will be computed as the average of the unit weight of steel (i.e. weight of steel divided by length) in each box culvert segment, or as the average of the unit weight of steel (i.e. weight of steel divided by length) in each prestressed bridge beam. Documentation must be submitted at the time required shop drawings are submitted for approval.

5. Payment/Rebate. The price adjustment will be paid, or rebated, upon approval of a contract adjustment to be prepared on a quarterly basis as applicable work is completed. Cumulative quarterly price adjustments amounting to less than \$1,000 will be disregarded.

6. Expiration of Contract Time. When eligible materials are purchased after expiration of contract time and liquidated damages are chargeable, the value for SI used to compute the price adjustment will be either the index price for the month in which applicable steel material is invoiced or the index price at the time contract time expired, whichever is less.

7. Final Quantities. Upon completion of the work and determination of final pay quantities, a final contract adjustment may be prepared to reconcile any difference between estimated quantities previously paid and the final quantities. In this situation, the

value for SI used in the price adjustment formula will be the average of all SI values previously used for computing price adjustments.

8. Inspection of Records. The Department, through the Office of Inspector General, reserves the right to inspect the records of the prime contractor and its subcontractors and material fabricators and suppliers to ascertain actual invoicing dates and quantity information for the steel material used in the performance of applicable items of work.

9. Extra Work. When applicable items of work, as specified herein, are added to the contract as Extra Work, in accordance with the provisions of Section 110.03, no price adjustment will be made for fluctuations in the cost of the steel used in manufacturing the materials placed during performance of the extra work. The current price for steel is to be used when preparing required backup data for extra work to be performed at a negotiated price. For extra work performed on a force account basis, reimbursement of actual material costs, along with the specified overhead and profit markup, will be considered to include full compensation for the current cost of steel.

G110B - a05101 START OF WORK

Addendum:

Associated Item(s):

Header:

START OF WORK

Provision Body:

Notify the Assistant District Engineer for Construction three days prior to the actual start of work.

Keep constant liaison with the Assistant District Engineer for Construction as to any changes to the date of starting work.

G7022A - a07022 CHANGES TO SPECIFICATION: SECTION 107

Addendum:

Associated Item(s):

Header:

CHANGES TO SPECIFICATIONS: SECTION 107

Provision Body:

SECTION 107 - Legal Relations and Responsibility to the Public

- Section 107.30(a)1. Revise to read as follows:

1. Equal employment opportunity requirements not to discriminate and to take affirmative action to assure equal employment opportunity, as required by Executive Order 11246 and Executive Order 11375, are set forth in Required Contract Provisions (Form FHWA-1273, except V. 2.b. revise first sentence to read as follows: the payroll records shall contain the name; an individually identifying number [e.g., the last four digits of the employee's social security number]; his or her correct classification; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalent thereof the types described in Section 1(b)(2)(B) of the Davis Bacon Act); daily and weekly number of hours worked; deductions made; and actual wages paid) and these requirements; imposed pursuant to 23 U.S.C. 140, as established by Section 22 of the Federal-Aid Highway Act of 1968. The Equal Opportunity Construction Contract Specifications set forth under 41 CFR 60-43 and

the provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. The requirements set forth herein constitute the specific affirmative action requirements for project activities under this contract and supplement the equal employment opportunity requirements set forth in the Required Contract Provisions.

G7037D - a07037 CHANGES TO SPECIFICATIONS: SECTIONS 106, 108, 514, 515, 516, 676, AND 1107

Addendum:

Associated Item(s):

Header:

Changes to Specifications: Sections 106, 108, 514, 515, 516, 676, and 1107

Provision Body:

SECTION 106—CONTROL OF MATERIAL

• **Section 106.01 General. Revise to read as follows:**

106.01 GENERAL—Use material complying with the requirements of these specifications. At the pre-construction conference, submit a list of material to be sampled and tested by the Contractor and a list of material to be sampled and tested by the Department.

Comply with the provisions of the Pennsylvania Trade Practices Act, 71 P.S. Section 773.101, et seq., concerning the purchase of aluminum and steel products produced in a foreign country. On Federal - Aid projects, also comply with the provisions specified in Section 106.10.

Comply with the provisions of the Steel Products Procurement Act, 73 P.S. Section 1881, et seq. in the performance of the contract or any subcontract.

Following contract execution, furnish to the Department a complete statement of the project construction material's origin, composition, and manufacture.

For Fabricated Structural Steel materials, as identified in Section 1105.01(a) and inspected in accordance with Section 1105.01(e), and any other fabricated aluminum, precast or prestressed concrete products inspected during manufacturing, stamped and approved for shipment by the Department's Representative, furnish Form CS-4171 to the Inspector-in-Charge. Certified mill test reports for any steel included will be reviewed by the Department's Inspector and retained by the fabricator.

For all other steel products or products containing steel that will serve a permanent functional use in the project, provide the Inspector-in-Charge the following when the product is delivered to the project site:

- For any "identifiable" steel products, certification that Section 4 of the Steel Products Procurement Act, 73 P.S. Section 1884, has been complied with. Identifiable steel products are steel products which contain permanent markings which indicate the material was both melted and manufactured in the United States.
- For all other "unidentifiable" steel products, documentation such as invoices, bills of lading, and mill certification that positively identify that the steel was melted and manufactured in the United States.

The provisions of the Steel Products Procurement Act will not be waived unless the Secretary has determined, under authority granted in Section 4(b) of the act, that a certain steel product or products is not produced in the United States in sufficient quantities to meet contract requirements. Such a determination will be set forth in a proposal for the Department's review and response. Include with the proposal a comprehensive list of sources, including names and contact information, for verification. The Secretary does not have the authority to waive the provisions specified in Section 106.10.

Steel products are defined as products rolled, formed, shaped, drawn, extruded, forged, cast, fabricated, otherwise similarly processed, or processed by a combination of two or more of these operations from steel made in the United States by the open hearth, basic oxygen, electric furnace, Bessemer, or any other steel -producing process. Included are cast iron products and machinery and equipment as listed in United States Department of Commerce Standard Industrial Classification 25, 35, and 37 and made of, fabricated from, or containing steel components. If a product, as delivered to the project, contains both foreign and United States steel, such product is considered to be a United States steel product only if at least 75% of the cost of the articles, materials, and supplies have been mined, produced, or manufactured, as the case may be, in the United States. On Federal - Aid projects, comply with the provisions specified in Section 106.10.

No payment will be made on the contract if unidentified steel products are supplied, until the hereinbefore requirements are met.

Any payments made that should not have been made may be recoverable from a manufacturer or supplier as well as from a contractor or subcontractor.

Any person who willfully violates the Steel Products Procurement Act will be prohibited from submitting bids for any contract for a period of 5 years from the date of determination that a violation has occurred. If a subcontractor, manufacturer or supplier, violates the Steel Products Procurement Act, such person will be prohibited from performing any work or supplying any materials to the Department for a period of 5 years from the date of determination that a violation has occurred.

If steel products are used as a construction tool or appurtenance and will not serve a permanent functional use in the project, compliance with the Steel Products Procurement Act is not required.

When standard manufactured items are specified and these items are identified by unit mass (unit weight), section dimensions, or similar characteristics, their identification will be considered to be nominal masses (weights) or dimensions. Unless more stringently controlled by specified tolerances, industry established manufacturing tolerances will be accepted.

SECTION 108—PERFORMANCE AND PROGRESS

- **Section 108.07(a) Construction Engineering Liquidated Damages. Revise to read as follows:**

(a) Construction Engineering Liquidated Damages . For each day that any physical work remains uncompleted after the Required Completion Date, the sum per day specified in the following schedule, unless otherwise stated in the proposal, will be deducted from money due or to become due. This deduction will not be as a penalty, but as Construction Engineering Liquidated Damages.

Original Contract Amount		Schedule of Daily Charges For Construction Engineering Liquidated Damages
From More Than	To and Including	Per Calendar Day
\$ 0	\$ 400,000	\$ 825
400,000	1,000,000	1,535
1,000,000	5,000,000	2,085
5,000,000	10,000,000	3,280
10,000,000	15,000,000	4,285
15,000,000		5,660

In the event the Contractor is declared in default, as specified in Section 108.08, Construction Engineering Liquidated Damages will be charged as provided by this section. If the total amount chargeable as Construction Engineering Liquidated Damages exceeds the amount payable to the Contractor or the surety, the excess is to be paid to the State by the Contractor or the surety.

SECTION 514—DIAMOND GRINDING OF CONCRETE PAVEMENT

- **SECTION 514.3(e) Concrete Pavement Rehabilitation. Revise to read as follows:**

(e) Concrete Pavement Rehabilitation. Concrete pavement repairs including concrete pavement patching, concrete spall repair, dowel retrofit, slab stabilization, and slab jacking must be completed before the start of any diamond grinding operations.

After completing the concrete rehabilitation operation, determine the ride quality of the existing pavement in accordance with Section 507.3(a) and Section 507.3(b), before performing any diamond grinding. After completing the diamond grinding operations, reevaluate the ride quality of the pavement surface according to Section 507.3(a) and Section 507.3(b). Use the same pavement surface profile measuring equipment to perform all ride quality evaluations on the project.

After diamond grinding the pavement surface, provide a maximum IRI of 70 in/mile for facilities where posted speed limits are greater than 45 miles per hour, and a maximum IRI of 90 in/mile for facilities where posted speed limits are less than or equal to 45 miles per hour. Meet these requirements in all IRI lots where diamond grinding of the pavement was performed to receive payment.

1. Lots. A full lot is 528 feet of a single lane. The Representative will designate lots starting at the beginning ride quality limit and continuing to the ending ride quality limit for each pavement lane and ramp that is 12 feet or wider. Do not include the length of excluded areas in the 528 feet. Excluded areas will consist of; bridge decks, ramps less than 1,500 feet, in length, tapered pavements less than 12 feet wide, partial lots less than 100 feet in length, shoulders, medians, and other pavement surfaces as indicated.

SECTION 515—SAWING AND SEALING OF BITUMINOUS OVERLAYS

- **SECTION 515.3(b) Sawing. Revise to read as follows:**

(b) Sawing. Make all saw-cuts directly above the existing transverse joints within ± 1 inch. Saw-cuts which do not meet this tolerance will be declared defective as outlined in Section 105.12. Do not saw cut until the bituminous course has cooled below 140F. Perform saw cutting within 7 days after placing the wearing course. Perform this work on all finished overlay areas before discontinuing work due to seasonal paving limitations.

Make saw-cuts only in the lane in which the existing joint is located. Extend the saw-cuts through any existing widening. Provide separate saw-cuts in each lane if existing transverse joints are offset more than 1 inch.

Use the following table to determine saw-cut reservoir size:

Overlay Thickness	Reservoir
inches	inches
$\leq 1 \frac{1}{2}$	1/2 deep by 1/2 wide
$> 1 \frac{1}{2}$	1 deep by 1/2 wide

Additionally, if the total depth of overlay is 3 1/2 inches or greater, make an initial saw-cut 1/8 inch wide to a depth of 1 1/2 inches or one-third of the total overlay thickness, whichever is greater. Indicated overlay depths do not include scratch or leveling courses less than 1 inch.

If wet sawing, immediately flush the reservoir with water.

If not placing the wearing course within the same construction season, provide a 1/8-inch wide saw-cut in the last placed bituminous course to a minimum depth of 1 inch or one-third the thickness of the bituminous material placed, whichever is greater.

SECTION 516—CONCRETE PAVEMENT PATCHING

- **SECTION 516—Description. Revise to read as follows:**

516.1 DESCRIPTION—This work is the construction of single course, full depth, normal strength or accelerated strength, cement concrete pavement patches. Do not patch less than one lane width. If diamond grinding is to be performed, test the pavement surface in the longitudinal direction as specified in Section 514.3(d)2.

(a) Patching Joint. Provide full depth saw-cuts at the existing pavement/patch interface, install load transfer dowels in the transverse faces of the existing pavement, construct a sealant reservoir, and seal the joint.

(b) New Pavement Joint. Provide load transfer unit, construct sealant reservoir, and seal the joint.

(c) Normal and Accelerated Concrete Pavement Patching, Type A. Construct patches between 6 feet and 20 feet long.

(d) Normal and Accelerated Concrete Pavement Patching, Type B. Construct patches between 20.1 feet and 65 feet long.

(e) Normal and Accelerated Concrete Pavement Patching, Type C. Construct patches between 65.1 feet and 500 feet long.

- **Section 516.2(a) – Cement Concrete—Class AA. Revise to read as follows:**

(a) Cement Concrete—Class AA. Section 704

- **Section 516.2(g) Concrete Curing Materials. Revise to read as follows:**

(g) Concrete Curing Materials. For normal strength concrete, use Section 711.1(a), (b), (c), (d), and (e); or Section 711.2(a), Type 2.

For accelerated strength concrete, use Section 711.1(b) and Section 711.2(a), Type 2, or 711.2(b).

- **Section 516.2(j) Tape Bond Breaker. Revise to read as follows:**

(j) Tape Bond Breaker. An approved self adhesive tape.

- **Section 516.2(k) Anchor Material. Revise to read as follows:**

(k) Anchor Material. An approved adhesive anchoring material listed in Bulletin 15.

- **Section 516.3(a) General. Revise to read as follows:**

(a) General. Prepare a QC Plan as specified in Section 106.03(a)2.a and submit it for review. The QC Plan must describe appropriate action points for all phases of construction, including concrete mixing and curing, joint sawing and sealing, and sampling and testing for opening to traffic. If patching adjacent lanes, construct concrete pavement patches one lane at a time where two lane width construction would interfere with traffic. The Representative will surface mark patch areas in advance of the sawing operations.

Protect traffic from drop off conditions as specified in Section 901.3(j). Do not allow excavated patch areas to remain un-patched for more than 2 calendar days or over weekends or holidays.

If it rains while the patch area is open, excavate an outlet through the shoulder at the lowest point of the patch as directed. Repair any damage to the existing shoulders as a result of this work, at no expense to the Department. After saw cutting the existing pavement, allow traffic on patch areas of existing pavement for a maximum of 72 hours. Do not allow saw cuts in excess of 1/2 inch in width to be opened to traffic.

For normal strength patches, do not place concrete if the air temperature falls below 40F. For accelerated strength patches, do not place concrete if the air temperature falls below 45F. Before placing concrete, ensure adequate equipment and trained personnel are available, and sufficient hauling units scheduled, to maintain continuity in placement.

- **Section 516.3(b) Saw Cutting. Revise to read as follows:**

(b) Saw Cutting. Use a saw equipped with a diamond-tipped blade, a blade guard, alignment guides, water cooling system, and cut-depth controls for saw cutting the perimeter of the patch. Do not allow cooling water, slurry, and dust from the sawing operation to enter any lane opened to traffic. Make all required full depth longitudinal saw cuts along the perimeter of the patch prior to making any full depth transverse saw cuts.

Where only one lane is being patched, make a full depth saw-cut in the existing longitudinal joint for the full length of the patch. Where multiple lanes are being patched one lane at a time, perform one of the following:

- Make a full depth saw-cut within the adjacent lane to be patched. Make the saw-cut parallel and not more than 1 foot from the existing longitudinal joint. Form the patch joint in the same location as the existing longitudinal joint and backfill behind the forms with aggregate at no additional cost to the Department.
- Make a full depth saw-cut in the existing longitudinal joint for the length of the patch and insert a temporary rigid separator between the adjacent lane and the patch area. Do not use a temporary rigid separator greater than 1/8 inch thick.

Make full depth transverse saw-cuts at the locations marked on the pavement surface. Do not break back the underside of the existing pavement. If break back or spalling occurs, make a new full depth transverse saw-cut beyond the area of break back or spalling. Place the additional length of patch at no expense to the Department. If break back or spalling occurs in the adjacent lane, repair the damaged area at a minimum with a full depth Type A concrete patch at no additional expense to the Department. Full depth saw cuts at the patch limits will be allowed to extend transversely into the adjacent pavement up to full depth + 2 inches provided dowel bars in the adjacent lane are not damaged. Additional full depth transverse saw cuts will be allowed to facilitate slab removal but may not extend transversely into the adjacent pavement to remain in place.

- **Section 516.3(c) Removal of Existing Pavement. Revise to read as follows:**

(c) Removal of Existing Pavement. Remove concrete between narrowly spaced saw-cuts at the end of a proposed patch area in a manner that does not damage any adjacent pavement that is to remain in place.

As an alternate, a wheel saw having carbide steel tips may be used before making the full depth transverse saw-cuts necessary for the patching joint. Limit penetration of the wheel to minimize disturbance to the subbase. Do not allow wheel saws with carbide steel tips to cut into pavement that is to remain in place. Discontinue using a wheel saw if unsatisfactory results are obtained as determined by the Representative.

Remove the concrete in the patch area in one or more pieces minimizing disturbance to the subbase, subgrade, and the adjacent pavement to remain in place. Do not use drop hammers or hydro hammers. If damage occurs to pavement to remain in place, repair as specified in Section 516.3(b) at no additional cost to the Department.

If the surface of the subbase is disturbed by the removal technique, recompact the surface using small vibratory compactors. If the disturbed material is deeper than 1 inch, remove the disturbed material with hand tools and replace with concrete during paving at no expense to the Department.

Correct all subbase surface irregularities exceeding 1 inch in depth by loosening the surface and removing or adding material as required. Compact the corrected area and surrounding surface by rolling to proper grade and slope.

- **Section 516.3(j) Curing of Concrete. Revise to read as follows:**

(j) Curing of Concrete. For normal strength patches, immediately after finishing operations have been completed, cover and cure the patch surface as specified in Section 501.3(l).

For accelerated patches, cure concrete as specified in Section 501.3(l)1.b or using approved curing insulation materials. Apply white membrane-forming curing compound as specified in Section 501.3(l)1.c. The Contractor may use black membrane-forming curing compound provided the patch area will not be accessible to traffic before placement of a surface course. Discontinue use of black membrane-forming curing compound if it performs unsatisfactorily as a curing agent, and resume curing by other methods as specified. Cure test cylinders under the same conditions as the concrete pavement patch. Provide insulation or heating of patches if the ambient temperature drops below 80F during the curing operation. Control the curing temperature and monitor at least hourly to ensure that the concrete pavement patch does not experience a curing temperature change in excess 40F within any 1-hour period during the curing operation. If a change in curing temperature in excess of 40F occurs in the concrete pavement patch within any 1-hour period, the work will be considered defective.

- **Section 516.3(m) Longitudinal Joints. Revise to read as follows:**

(m) Longitudinal Joints. In two lane width patching being performed at the same time, construct a Type L joint as shown on the Standard Drawings.

In two lane patching being performed one lane at a time, or one lane patching, provide a 1/4-inch, full depth, polystyrene board bond breaker in the longitudinal joint of Type A and B patches. Do not provide a bond breaker in the longitudinal joint of Type C patches. Provide tiebars in all Type C patches. For all patch types, saw cut the longitudinal joint 1/4 inch wide and 1 inch deep. Center the saw-cut over the joint.

- **Section 516.3(n) Sealing. Revise to read as follows:**

(n) Sealing. Seal all longitudinal and transverse joints constructed as part of this work, as specified in Section 501.3(n).

Seal all saw-cuts extending beyond the patch limits.

- **Section 516.3(q) Opening to Traffic. Revise to read as follows:**

(q) Opening to Traffic. For normal strength patches, do not open the repaired area to traffic until the concrete has obtained a minimum compressive strength of 3,000 pounds per square inch, when tested according to PTM No. 604.

For accelerated strength patches, obtain samples of plastic concrete, for compressive strength testing for opening to traffic, from each 100 cubic yards or fraction thereof of the day's placement, and, unless otherwise required, from the last mixer load of the

day, according to the approved QC Plan. Sample locations will be selected according to PTM No. 1. Test concrete for compressive strength according to PTM No. 604, at the time of opening to traffic but no later than 7 hours after the test specimens were molded. Concrete lots that have not attained a minimum compressive strength of 1,200 pounds per square inch at the time of opening to traffic will be considered defective work.

SECTION 676—CEMENT CONCRETE SIDEWALKS

- **Section 676.3(h) Curb Ramps.** Revise to read as follows.

(h)Curb Ramps. As required and where indicated, construct cement concrete sidewalk for curb ramp configurations as indicated on Standard Drawing RC 67M except for the detectable warning surface located at the bottom of each ramp. Construct the detectable warning surface as specified in Section 695.

Create a slip-resistant textured surface for the full width and length of the curb ramp and any side-flares excluding the detectable warning surface. Use a coarse, stiff-toothed broom to create a textured pattern that is worked perpendicular to the slopes of the curb ramp.

Shape rounded edges instead of sharp angled edges while the concrete is still plastic for all slope changes of the curb ramp especially where the top of the curb ramp meets adjacent sidewalk surfaces.

Embed detectable warning surface in fresh, wet concrete at the proper location for the curb ramp before the wet concrete has set.

SECTION 1107—PRESTRESSED CONCRETE BRIDGE BEAMS

- **Section 1107.03(d)5.b. Air Content.** Revise to read as follows:

5.b Air Content. Provide an air content of $6\% \pm 1.5\%$ for traditional mixes and $7\% \pm 2\%$ for self consolidating (SCC) mixes. The air content requirement may be waived if the mix meets the following additional qualification tests before production:

- Rapid Chloride Permeability, AASHTO T277: 1500 coulombs at 56-days
- Freeze Thaw Resistance, ASTM C666, Procedure A or B: Minimum durability factor of 90 at 300 cycles.

G7038B - a07038 CHANGES TO SPECIFICATIONS: SECTIONS 101, 103, 110, 419, 695, 930, 931, 932, 934, 935, 938,

Addendum:

Associated Item(s):

Header:

a07038 Changes to Specifications: Sections 101, 103, 110, 419, 695, 930, 931, 932, 934, 935, 938, 1012, 1015, and 1103

Provision Body:

SECTION 101—ABBREVIATIONS AND DEFINITIONS OF TERMS

- **Section 101.03 DEFINITIONS.** Revise to include the following:

MAJOR ITEM OF WORK—Any item having a unit of measure of other than Lump Sum, Call, Dollar, or Predetermined Amount (PDA).

SECTION 103—AWARD AND EXECUTION OF CONTRACT

- **Section 103.03 Cancellation of Award.**Revise to read as follows:

103.03 CANCELLATION OF AWARD—The Secretary reserves the right to cancel the award of any contract at any time before its approval by the Chief Counsel, the General Counsel, and/or the Attorney General, or their designees, when such cancellation is in the best interests of the State. In the event of such cancellation, payment will be made for the documented costs of insurance and surety bonds required under Sections 103.04 and 103.05, and the documented cost of actual expenses reasonably incurred in accordance with a Letter of Intent, when specified and issued by the Deputy Secretary for Highway Administration. No payment will be made for damages of any other kind including, but not limited to, lost profits.

- **Section 103.07 Cancellation of Contract.**Revise to read as follows:

103.07 CANCELLATION OF CONTRACT—The contract may be canceled by either party if the Notice to Proceed is not issued on or before the Anticipated Notice to Proceed Date specified in the bid package or within 30 days of the Award of the contract, whichever is later. Extension(s) of the cancellation period will be made only by mutual written consent of the parties to the contract provided such written consent is given before the expiration of the cancellation period. Prices will not be renegotiated. The Secretary also reserves the right to cancel the contract any time before the actual Notice to Proceed Date. If the contract is canceled, payment will be made for the documented costs of insurance and surety bonds required under Sections 103.04 and 103.05, and the documented cost of actual expenses reasonably incurred in accordance with a Letter of Intent, when specified and issued by the Deputy Secretary for Highway Administration. No payment will be made for damages of any other kind including, but not limited to, lost profits.

SECTION 110—PAYMENT

- **Section 110.02(d) Required Changes in the Scope of Work.**Revise to read as follows:

(d) Required Changes in the Scope of Work.The Department reserves the right to make, in writing, at any time, such changes in quantities and such alterations in the work as are necessary to satisfactorily complete the project. Such changes in quantities and alterations in the work will neither invalidate the contract or release the surety, and the Contractor agrees to perform the work as changed or altered.

If alterations in the work or changes in quantities do not significantly change the character of the work to be performed under the contract, the work will be paid for at the original contract unit price.

If alterations in the work or changes in quantities significantly change the character of the work under the contract, whether such alterations or changes are in themselves significant changes to the character of the work or by affecting other work cause such other work to become significantly different in character, an adjustment, excluding loss of anticipated profits, will be made as specified in Section 110.03. The basis for the adjustment will be agreed upon before the performance of the work. If a basis cannot be agreed upon, the work will be paid for as extra work as specified in Section 110.03.

The term “significant change in character” applies only to the following circumstances:

- If the work as altered differs materially in kind or nature from that involved or included in the original proposed construction, or
- If any major item of work as defined in Section 101 is increased to in excess of 125% or decreased to below 75% of the original contract quantity. Any allowance for an increase in quantity applies only to that portion in excess of 125% of the original contract item quantity or, in case of a decrease below 75%, to the actual quantity of work performed.

When a contract item experiences a significant change in character as a result of a decrease to below 75% of the original contract quantity, the actual quantity of work performed may be paid at an adjusted price, as agreed upon with the Contractor and as approved; however, total compensation will not exceed the contract item’s original value. Item value is defined as the original contract quantity multiplied by the contract unit price.

SECTION 419—STONE MATRIX ASPHALT MIXTURE DESIGN, RPS CONSTRUCTION OF PLANT-MIXED HMA WEARING COURSES

- **Section 419.2(d) Stabilizer.**Revise to read as follows:

(d) Stabilizer. Provide mineral fiber, cellulose fiber, or crumb rubber (CR) stabilizers conforming to the requirements below and added at a rate specified in Table B. Use the dosage rate prescribed in the JMF.

1. Requirements for All Fiber Types. Fibers must prevent draindown in the mixture according to the tolerances in Table B. Use a fiber of the type and properties appropriate to the plant's metering and delivery system.

2. Cellulose Fibers. Fibers must be of sufficient quality to prevent mixture draindown.

3. Cellulose Pellets. Use cellulose fiber stabilizing additive in pellet form that disperses sufficiently at mixing temperature to blend uniformly into the asphalt mixture. Use pellets that do not exceed 6 mm (0.25 inch) average diameter. Pellets may contain binder ingredients such as asphalt cement, wax, or polymer. Do not use pellets if the binder ingredient exceeds 20.0% of the total mass (weight) of the pellets. Use binder that produces no measurable effect on the properties of the asphalt cement. Do not use fiber pellets which soften or clump together when stored at temperatures up to 50 °C (122F).

Note: If the binder material constitutes more than 3% of the pellet mass (weight), base the dosage rate on the net fiber content.

4. Mineral Fibers. Use mineral fibers made from virgin basalt, diabase, slag, or other silicate rock. Use an approved mineral fiber meeting the following requirements for shot content, as tested according to ASTM C 612.

Sieve	Percent Passing
250 µm (No. 60)	85 - 95
63 µm (No. 230)	60 - 80

5. Crumb Rubber (CR). Use CR derived from the processing of recycled tires. Rubber tire buffings produced by the retreading process qualify as a source of CR. Furnish processed, free flowing CR from a manufacturer listed in Bulletin 15, certified as specified in Section 106.03(b)3.

5.a Gradation. Meet the following gradation as determined according to ASTM D 5461 using 200 mm diameter sized sieves and maintaining a maximum allowable loss after sieve analysis of 7.65%. As an alternative dry sieve analysis test method, perform the sieve analysis of the CR according to Florida Test Method, FM 5-559.

CR Gradation	
Sieve Size	Percent Passing
4.75 mm (No. 200)	100
2.36 mm	98 - 100
75 µm (No. 200)	0 - 3

5.b Contaminants. Provide CR relatively free from fabric, wire, cord, and other contaminating materials to a maximum total contaminant content of 2.5% (maximum of 1.0% iron, 1.0% fiber, and 0.5% other contaminants by mass (weight) of total CR sample components).

Remove rubber particles from the fiber balls before weighing. Determine the metal content by thoroughly passing a magnet through a 50 ± g (1.76 ± 0.004 ounces) sample. Determine fiber content by weighing fiber balls, which are formed during the gradation test procedure.

- **Section 419.2(d) Table B. Revise to read as follows:**

TABLE B

Mix Design Requirements for SMA Mixtures

AGGREGATE GRADATION REQUIREMENTS, PERCENT PASSING		
Sieve Size	9.5-mm Mixture	12.5-mm Mixture
19.0 mm (3/4 inch)	-	100
12.5 mm (1/2 inch)	100	90 – 99
9.5 mm (3/8 inch)	75 – 95	70 – 85
4.75 (No. 4)	30 – 50	28 – 40
2.36 mm (No. 8)	20 – 30	20 – 30
1.18 mm (No. 16)	-	-
600 mm (No. 30)	-	-
300 mm (No. 50)	-	-
150 mm (No. 100)	-	-
75 mm (No. 200)	8 – 13	8 – 11
VOLUMETRIC DESIGN REQUIREMENTS		
Design Gyration (N_{design})	100	
Voids in Mineral Aggregate	18.0 % Minimum	
Voids in Course Aggregate (VCA)	$VCA_{mix} < VCA_{dry\ rodde d}$	
Design air voids	3.5 - 4.0 %	
Minimum asphalt binder content	Table C	
Binder grade	PG 76-22	
Stabilizer content	Cellulose:0.2 to 0.4 % by total mix mass (weight)	

	Mineral:0.3 to 0.4 % by total mix mass (weight) CR:0.3 to 1 % by total mix mass (weight)
Draindown	0.3 % maximum

- **Section 419.3(l) Joints.Revise to read as follows:**

(l)Joints.Section 409.3(k).

SECTION 695—DETECTABLE WARNING SURFACE

- **Section 695.2(a) Detectable Warning Surface (DWS).Revise to read as follows:**

(a) Detectable Warning Surface (DWS). Provide a DWS product from a manufacturer listed in Bulletin 15 and meeting the requirements of the Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way (PROWAG). Provide certification as specified in Section 106.03(b)3 that the DWS meets the following PROWAG criteria:

- **General.**Detectable warning surface with the surface comprised of truncated domes.Dome size and spacing as specified and as indicated on Standard Drawing, RC-67M.
- **Surface.**Slip resistant.
- **Contrast.**Provide a DWS color, as approved by the Representative, that contrasts visually with adjacent walking surfaces either light-on-dark or dark-on-light.

SECTION 930—POST MOUNTED SIGNS, TYPE A

- **SECTION 930.2(a) Extruded Aluminum Channel Signs, Posts, and Miscellaneous Material.Revise to read as follows:**

(a) Extruded Aluminum Channel Signs, Posts, and Miscellaneous Material.

- Extruded Aluminum Channel Signs—Section 1103.02
- Steel S or W Beam Posts and Breakaway System—Section 1103.07
- Galvanized Steel Hex Head Bolts, Nuts, Lock - Washers; Aluminum Post-Clips, Auxiliary Supports for Exit Panels, 1/8-inch Rivets—Section 1103.11

- **SECTION 930.3(h) Erection.Revise to read as follows:**

(h) Erection. Install nuts on post clips with a torque wrench for extruded aluminum channels. Apply 225 inch-pounds of torque to each galvanized nut with the threads dry, clean, and unlubricated.

Attach the sign to posts with twist - in toggle and buckle straps or stainless steel post - clips for flat sheet aluminum. Apply 225 inch-pounds of torque to each stainless steel nut with the threads dry, clean, and unlubricated.

Clean signs after erection, removing any accumulation of oil, grease, dirt, or foreign material.

Brace the panel with one or more auxiliary supports if exit panels cannot be supported by two sign posts.

SECTION 931—POST MOUNTED SIGNS, TYPE B

- **SECTION 931.2 MATERIAL. Revise to read as follows:**

931.2MATERIAL—As shown on the Standard Drawings and as follows:

- Flat Sheet Signs—Section 1103.04
- Breakaway Steel Posts—From a manufacturer listed in Bulletin 15, and as specified in Section 1103.08.
- Anti - Theft Hardware—Section 1103.11, System A
- Packaged Dry Concrete—Section 624.2(b)

SECTION 932—POST MOUNTED SIGNS, TYPE C

- **SECTION 932.2(a) Signs, Posts, Supports, and Miscellaneous Material.** Revise to read as follows:

(a) Signs, Posts, Supports, and Miscellaneous Material.

- Flat Sheet Signs—Section 1103.04
- Treated Wood Posts—Section 1103.09
- Anti-Theft Hardware—Section 1103.11, System A
- Lag Screws—Section 1103.11(d)
- Shims and Bars—Section 1105.02(a)2
- Brackets—Section 1105.02(f)2

SECTION 934—POST MOUNTED SIGNS, TYPE E

- **SECTION 934.2(a) Extruded Aluminum Channel Signs, Posts, Supports, and Miscellaneous Material.** Revise to read as follows:

(a) Extruded Aluminum Channel Signs, Posts, Supports, and Miscellaneous Material.

- Extruded Aluminum Channel Signs—Section 1103.02
- Treated Wood Posts—Section 1103.09(a)
- Composite Posts—Section 1103.09(b)
- Galvanized Steel Hex Head Bolts, Nuts, Lock-Washers; Aluminum Post-Clips, Auxiliary Supports for Exit Panels, Rivets—Section 1103.11
- Angles (Supports)—Section 1103.12(g)
- Shim Bars and Plates (Supports)—Section 1105.02(a)2

- **SECTION 934.2(b) Flat Sheet Aluminum Signs with Stiffeners, Posts, and Miscellaneous Material.** Revise to read as follows:

(b) Flat Sheet Aluminum Signs with Stiffeners, Posts, and Miscellaneous Material.

- Flat Sheet Aluminum Signs with Stiffeners—Section 1103.03
- Treated Wood Posts—Section 1103.09(a)
- Composite Posts—Section 1103.09(b)
- Rivets—Section 1103.11(e)
- Stainless Steel Bolts, Nuts, Washers, Post-Clips; Twist-In Toggles and Buckle Straps; Butting Plates; Auxiliary Supports for Exit Panels—Section 1103.11
- Angles (Support)—Section 1103.12(g)
- Shim Bars and Plates (Supports)—Section 1105.02(a)2

SECTION 935—POST MOUNTED SIGNS, TYPE F

- **SECTION 935.2 MATERIAL.** Revise to read as follows:

935.2 MATERIAL—As shown on the Standard Drawing for the corresponding type post and as follows:

- Flat Sheet Signs—Section 1103.04
- Brackets and Bars (Supports)—Section 1103.12
- Extruded Aluminum Channel Signs—Section 1103.02
- Flat Sheet Aluminum Signs with Stiffeners—Section 1103.03
- Galvanized Steel Hex Head Bolts, Nuts, Lock-Washers; Aluminum Post-Clips; Lag Screws; Rivets; Anti-Theft Sign Hardware (System A)—Section 1103.11

SECTION 938—DISTANCE MARKERS

- **SECTION 938.2 MATERIAL.** Revise to read as follows:

938.2 MATERIAL—As shown on the Standard Drawings and as follows:

- Aluminum Blanks—Section 1103.04(a)
- Breakaway Steel Posts—Section 1103.08
- Anti - Theft Hardware—Section 1103.11(j)
- Brackets, Bars, Clamps, Straps and Gussett Plates (Supports)—Section 1103.12(i)

SECTION 1012—PEDESTRIAN RAILING

- **SECTION 1012.2(a) Railing.Revise to read as follows:**

(a)Railing.

- Aluminum-Alloy Casting—ASTM B 26/B 26M, Alloy SG70A-T6 or ASTM B 108, Alloy SG70A-T6.
- Aluminum-Alloy Bolts—ASTM B 211/B 211M, Alloy 2024-T4.
- Aluminum-Alloy Nuts—ASTM B 211/B 211M, Alloy 6061-T6.
- Nylon Washers—Section 1103.11(j)2
- Bolt Heads—Regular hexagon, ANSI B18.2.3.5M (ANSI B18.2).
- Nuts. Finished hexagon, ANSI B18.2.4.6M (ANSI B18.2)—Threads, Class 6, 6g, or 6H (Threads, Class 2, 2A, or 2B).
- Aluminum Alloy Balusters – ASTM B 221/B 221M, Alloy 6061-T4.
- Post assembly and panel to post aluminum washers – ASTM B209, Alloy 2024-T3.
- Cast Aluminum Post Base – ASTM B 26/B 26M, Alloy SG70A-T6 or ASTM B 108/ B 108M, Alloy SG70A-T6.
- Other Aluminum Alloys—Section 1013.2(a)

Certify as specified in Section 106.03(b)3.

SECTION 1015—PROTECTIVE BARRIER

- **SECTION 1015.2(a) Barrier.Revise to read as follows:**

(a)Barrier.

- Aluminum-Alloy Extruded Section—ASTM B 221/B 221M, Alloy 6061-T6 or 6351-T5.
- Aluminum-Alloy Sheet and Plate—Alloy 6061-T6
- Aluminum-Alloy Bolts— ASTM B 211, Alloy 2024-T6 or 6061-T6
- Aluminum-Alloy Nuts—ASTM B 211/B 211M, Alloy 6061-T6.
- Nylon Washers—Section 1103.11(j)2
- Bolt Heads—Regular hexagon. ANSI B18.2.3.5M (B18.2)
- Nuts—Finished hexagon, ANSI B18.2.4.6M (B18.2) Thread, Class 6, 6g, or 6H (2, 2A, or 2B)
- Other Aluminum Alloys—Section 1013.02(a)

Certify as specified in Section 106.03(b)3.

SECTION 1103—TRAFFIC SIGNING AND MARKING

- **SECTION 1103.11 MISCELLANEOUS MATERIALS.Revise to read as follows:**

1103.11MISCELLANEOUS MATERIALS—

(a) **Hex Head Bolts, Nuts, and Washers for Extruded Panel Sign Post-Clips.** Galvanized steel as specified in Section 1105.02 (s):

1. **Hex Head Bolts.** ASTM A307, Grade A or B.
2. **Nut.** ASTM A563 DH or ASTM A194 Grade 1 or 2.
3. **Washer.** Carbon steel helical coil or ASTM F436 or ASTM F844 (Note 1)

Note 1: If either ASTM F436 or ASTM F844 flat washers are used, bolt must be fastened either using two nuts or a single nut with the threads galled adjacent to the nut to prevent loosening.

(b) **Post - Clips.** For extruded panel signs, aluminum, conforming to ASTM B 108, Alloy 356-T6. For flat sheet aluminum signs with stiffeners, stainless steel, Type 304, 14 gage.

(c) Auxiliary Supports for Exit Panels. Aluminum conforming to ASTM B 211/B 211M, Alloy 6061-T6. 3 inches by 3 inches by 3/16-inch angle, 6 1/2 feet long or long enough to attach to three stiffeners on the main sign.

(d) Lag Screws. 5/16-inch round head, galvanized steel as specified in Section 1105.02(s); ASTM A 307.

(e) Rivets. Aluminum, self - plugging or hollow - core, as follows:

- 3/16-inch for mounting reflective units and distance plaques—Alloy 5056 with 7178 mandrels.
- 3/16-inch for mounting flat aluminum sheets to stiffeners sections— Alloy 5056 with carbon steel mandrels.

Rivet size specified is the minimum shank diameter. Use rivets with sufficient grip range to attach to background sign material, stiffeners, or posts. Use a No. 10 drill for 3/16-inch rivets for attachment of stiffeners and splice bars.

(f) Bolts, Nuts, and Washers for Flat Sheet Aluminum Signs with Stiffeners. Stainless steel, Type 304 bolts. Use 5/16-inch by 1 inch long for butting plates and 5/16-inch by 2 inches long for post - clips. Use standard connection bolts or twist - in bolts.

(g) Twist - in Toggle and Buckle Straps. Stainless steel, Type 201, and 0.75 inch wide and 0.03 inch thick, with rounded edges. Spot welded, twist - in type toggle on end of strap. Spot welded, antirotational buckle on other end of strap. Toggles and buckles shall be stainless steel, Type 304, and 1/16 inch thick.

(h) Butting Plates. Fabricate from stainless steel, Type 304.

(i) Anchors. Section 1105.02(c)2. From a manufacturer listed in Bulletin 15.

(j) Anti - Theft Sign Hardware.

1. System A.

- **Bolts.** Section 1105.02(c)1 and as follows:

Provide 5/16 inch by 2 1/2-inch steel carriage bolts with minimum 1711/16-inch diameter round head, square neck, and threads to within 1 inch of head.

Furnish bolts having a mechanically deposited cadmium coating, ASTM B 696, or zinc, Type I coating as specified in Section 1105.02(s).

- **Nuts.** Square, pyramidal-shaped nuts with all four sides sloping at an angle of 41 degrees; 5/16-18 UNC threads; C-1010 cold-rolled steel, case hardened to Rockwell hardness of 55 to 60.

Furnish nuts having a 0.002 inch to 0.005 inch thick, mechanically deposited, zinc, Type II yellow chromate coating as specified in Section 1105.02 (s) (ASTM B 695), tested according to ASTM B 201.

2. System B.

- **Bolts.** Section 1103.11(m) and as follows:

Provide 5/16-inch by 2 1/2-inch and 5/16-inch by 3-inch bolts with minimum 9/16-inch diameter one-way heads and threads to within 1 inch of head.

- **Nuts.** Section 1103.11(n) and as follows:

Provide nuts, Alloy 2011-T3, double-chamfered hexagon with self-locking conical shape 9/16-inch - 3/8-inch by 3/16-inch unit under the nut with 5/16-18 UNC threads. Hexagon portion should break away from self-locking unit with 5/16-18 UNC to 40 inch-pounds to 80 inch-pounds of torque.

- **Washers.** Nylon 1/8 inch thick by 1-inch minimum outside diameter with 480 inch-pounds maximum allowable applied torque.

(k) Banding. Stainless steel, Type 201, 0.750 inch wide by 0.030 inch thick, with rounded edges for handling ease and safety. Buckles and other necessary hardware shall be of stainless steel, Type 304.

(m) Aluminum Bolts. ASTM B 211/B 211M. Alloy 2024-T4, thread fit, ANSI Class 6g, and threads shall be within two threads of the head or a minimum of 1 3/4 inches.

(n) Aluminum Nuts. ASTM B 211/B 211M. Alloy 2024-T6, thread fit, ANSI Class 6H (ANSI Class 2B, 18 UNC threads).

N10401B - a10401 BRIDGE PARAPET

Addendum:

Associated Item(s):

Header:

BRIDGE PARAPET

Provision Body:

All references to Precast Parapet in Standard Drawings, BLC Standards, and Publication 408 Specifications are voided. Only cast-in-place parapets are permitted.

N10601A - a10601 DRIVE ADJUSTMENTS

Addendum:

Associated Item(s):

Header:

DRIVE ADJUSTMENTS

Provision Body:

Adjust driveways as indicated or directed. Any excavation necessary will not be paid for separately but will be considered incidental to the material used for paving the drive.

G50D - a10701 GUIDE RAIL MOUNTED DELINEATORS

Addendum:

Associated Item(s):

Header:

GUIDE RAIL MOUNTED DELINEATORS

Provision Body:

In accordance with Section 937 and as follows:

Section 937.2 MATERIAL - Revise by adding the following:

Guide rail mounted delineators from a manufacturer listed in Publication 35 (Bulletin 15).

Section 937.3 CONSTRUCTION - Revise by adding the following:

On strong post guide rail, install both a Type D web mounted delineator and a Type B offset bracket mounted delineator at 37.5-foot spacing on curves and at 75-foot spacing on tangents.

On weak post guide rail, install both a Type D web mounted delineator and a Type C guide rail post mounted delineator at 37.5-foot spacing on curves and at 75-foot spacing on tangents.

On two, three, or four-lane undivided roadways, use two-sided white/white on right side of roadway.

On ramps, use two-sided white/red on right side of ramp.

On ramps, use two-sided yellow/red on left side of ramp.

On divided highways, use one-sided white on right side of roadway.

On divided highways, use one-sided yellow on median guide rail.

In addition to the above, place both a one-sided yellow Type D web mounted delineator and a one sided yellow Type B offset bracket mounted delineator (for strong post) or a one sided yellow Type C guide rail post mounted delineator (for weak post) at the following locations:

1. At the post closest to the end of a flared or radius section of guide rail where the guide rail becomes parallel to the roadway centerline.
2. At the post closest to where guide rail transitions to a barrier or bridge parapet.

Section 937.4 MEASUREMENT AND PAYMENT - Revise completely as follows:

This will be incidental to the work specified in Section 620.

N11701D - a11701 MECHANICALLY STABILIZED RETAINING WALL SYSTEMS

Addendum:

Associated Item(s):

Header:

MECHANICALLY STABILIZED RETAINING WALL SYSTEMS

Provision Body:

I. DESCRIPTION - This work is the designing, furnishing, and erecting of approved mechanically stabilized systems used as retaining walls. These systems, some of which are proprietary, employ either strip or grid type metallic reinforcements in the soil mass and a discrete modular precast facing.

II. DESIGN - Submit to the District Bridge Engineer, for review and for approval, 4 sets of plans and design calculations for mechanically stabilized earth retaining walls, prepared in accordance with PENNDOT Design Manual Part 4. Allow a maximum of 30 calendar days from the day final plans are received by the District Bridge Engineer for review and approval. Perform fabrication of standard panels in accordance with the approved plans using pre-approved standard shop drawings. Do not perform any construction before approval of design and completed plans. Use mylar furnished by the Department.

Have a Professional Engineer (P.E.), registered in the Commonwealth of Pennsylvania, sign and date the first sheet of the computations.

Include the following statement on the first sheet of the drawings above the P.E. seal:

"I hereby certify that all design assumptions have been validated either through construction details or notes on these drawings, or through the contract plans and provisions."

In the event certain design parameters, stresses, or specifications are in conflict, the following order of predominance will govern:

- Design requirements listed herein and in PART B, "SPECIAL DRAWINGS AND SPECIAL DESIGN REQUIREMENTS", of the special provisions.
- Design related Strike-off Letters in effect on the date of project advertisement. Refer to the list in PART B.
- PENNDOT Design Manual Part 4, "Structures".
- PENNDOT Design Standards.
- AASHTO Standard Specifications for Highway Bridges (date as indicated) and interim specifications.

In the event that a clear order of predominance cannot be established, or a difference in the interpretation of the design cannot be resolved, the Chief Bridge Engineer will arbitrate and such decision will be final.

If weep holes are not indicated, and no other provision for subsurface drainage has been incorporated into the design but is required to validate design assumptions of lateral earth pressure from dry backfill, provide a weep hole in every other precast face panel exposed at ground elevation. Locate weep holes a minimum of 300 mm (1 foot) above finished ground elevation.

Provide cast-in-place or preapproved, precast concrete bridge barriers as shown on plans.

Provide cast-in-place or precast copings.

III. MATERIAL -

(a) Precast Concrete Face Panels. Furnish precast face panels as specified in Section 714, except provide concrete having a 28-day minimum compressive strength of 28 MPa (4,000 pounds per square inch) when tested in accordance with PTM No. 604.

Provide panels having a minimum structural thickness of 140 mm (5 1/2 inches).

Place tie strips, reinforcement bars, connecting rods (where required), PVC pipe for weep holes when indicated, PVC tubes (where required), and handling devices, to the dimensions and tolerances indicated or as approved by the Representative, before casting.

1. Testing and Inspection. Acceptability of the precast panels will be determined on the basis of slump and entrained air content testing of the concrete mixture, compressive strength testing, and visual inspection. Furnish facilities for the Department to perform all necessary sampling and testing in an expeditious and satisfactory manner. Acceptance will be as herein specified.

Acceptance of precast concrete panels with respect to compressive strength will be based on the results of production lot testing. A production lot is defined as the panels represented by 1-day's production or 40 panels whichever is less. Acceptance will be based on compliance with the requirements of Sections 714.4(b) and 714.7(a), except the lot compressive strength will be determined as the average of the compressive strength testing of two cylinders and no individual test result may be below 25 MPa (3,600 pounds per square inch).

Acceptance with respect to visual inspection will be based on compliance with the requirements of Section 713.2(d). In addition, precast units may be rejected for color variations on the front.

Completed precast units will be inspected before shipment, and cracked, damaged, or otherwise unsatisfactory units will be rejected. Properly patch all excessive voids and other defects on exterior surfaces in accordance with the approved QC Plan.

Repairs and repair procedures beyond the limits of repair defined in Publication 145 require the approval of the Representative. Mark rejected panels with the words "Rejected for Department Use" using waterproof paint.

2. Forms. Construct forms of steel in a manner that assures the production of uniform units, and leave forms in place until they can be removed without damage to the unit.

Replace damaged forms or forms having a deteriorated surface on the finished face.

3. Mixing and Placing Concrete. Mix and deliver concrete as specified in Section 704. For transporting, placement, and consolidation of concrete, use methods that will prevent segregation of concrete materials and displacement of steel reinforcement from its proper position in the form. Do not place concrete in forms or casting beds when ambient temperatures are below 4 °C (40F) or above 38 °C (100F). Do not use admixtures containing chlorides.

4. Casting. Cast the panels on a flat area, front face down. Set connection guides into the rear face. Do not attach the panel reinforcing steel to or allow contact with embedded loops, tie strips, reinforcing steel, or other devices. Hold attachment devices in place during concrete placement to ensure that proper alignment is maintained. Place concrete in each unit without interruption and consolidate by use of a vibrator, supplemented by such hand tamping as may be necessary to force concrete into the corners of the form and prevent formation of honeycomb segregation, cracking, or cleavage planes. Use clear form oil throughout the casting operation.

5. Concrete Finish. Provide a conventional surface finish for the front face, unless otherwise indicated or specified, and, for the rear face, a floated surface finish. Screed to eliminate open pockets of aggregate and surface distortions in excess of 6 mm (1/4 inch) on the rear face of the panel.

When a special or decorative surface finish is required, display for approval a typical sample of the face panels, showing the color, texture, and finish intended to be used, before standard production of panels. Acceptability of the production units with respect to their architectural surface treatment will be made at a distance of 9000 mm (30 feet), in natural daylight, when compared to the approved sample(s).

6. Curing. Cure units in accordance with the approved QC Plan until the concrete obtains 80% of the specified minimum 28-day compressive strength.

7. Tolerances. Manufacture all units within the following tolerances:

- Do not exceed an angular distortion with regard to height of 5 mm (0.02 inch) in 1525 mm (5 feet).
- Panel Dimensions. Position of panel connection devices within 25 mm (1 inch). All other dimensions within 5 mm (3/16 inch).
- Panel Squareness. Not to exceed 13 mm (1/2 inch), as determined by the difference between two diagonals.
- Panel Surface Finish. Surface defects on smooth formed surfaces, measured over a length of 1525 mm (5 feet), not to exceed 3 mm (1/8 inch) and on texture finished surfaces not to exceed 8 mm (5/16 inch).

For panels using welded wire fabric as grid reinforcement, fabricate panels in a manner that ensures compliance with the wire mesh to panel connection requirements indicated in BC-799M.

8. Marking. Clearly scribe or paint with waterproof paint, on the rear face of each panel, the date of manufacture, lot production number and piece mark.

9. Handling, Storing, and Shipping. Handle, store, and ship all units in such a manner as to eliminate the danger of chipping, cracking, fracture, and excessive bending stress, or damage to connection hardware. Support the panels in storage, on firm blocking located immediately adjacent to the tie strips, to avoid bending tie strips. Care should be taken to not bend or damage tie strips when handling with a forklift. Use dunnage or blocking which will not stain the face of the precast unit.

Do not ship units until the 28-day minimum compressive strength is attained. Provide 24-hour advance notice of loading and shipping schedule.

Repair or replace any unit damaged during handling, transporting, erecting, or backfilling, or any unit that cannot be placed satisfactorily in the wall, in accordance with the approved QC Plan.

(b) Reinforcement.

1. Reinforcing Strips and Tie Strips. Fabricate tie strips of hot rolled steel conforming to the requirements of ASTM-A1011/1011M, Structural Steel (SS), Grade 340, or ASTM A1011/A1011M, High-Strength Low-Allow Steel (HSLAS), Grade 340 (Grade 50), Class 1, including all trace elements. Hot roll reinforcing strips from bars conforming to ASTM-A36/A36M or ASTM-A572/A572M (AASHTO-M223/223M), Grade 450, or equivalent, to the required shape and dimensions. Hot dip galvanize reinforcing strips and tie strips, after fabrication, as specified in Section 1105.02(s)) and in accordance with ASTM-123. Cut to length within the tolerances indicated on approved shop drawings. Punch holes for bolts, in the location shown, before galvanizing.

Carefully inspect all reinforcing and tie strips to ensure they are true to size and free from defects that may impair their strength and durability. Cutting of reinforcing strips at pile locations, vertical obstacles, or utilities is not acceptable.

Care must be taken to avoid bending or damage to the galvanized coating on reinforcing and tie strips during handling, storing, and shipping.

2. Steel Mesh Reinforcement. Conform to the requirements of ASTM-A82 for cold drawn wire. Shop fabricate and weld the finished mesh fabric in accordance with ASTM-A185. In addition, comply with the following:

- Fabricate, transport, store, and place steel mesh in a manner that ensures compliance with the wire mesh to panel connection requirements as indicated in BC-799M.
- Fabricate wire mesh in a manner that produces a flat mesh with straight longitudinal and transverse wires meeting the following tolerances:

Flatness:

Length of Wire Mesh:	3000 mm (10') or less	3300 mm (11') to 6000 mm (20')	6300 mm (21') to 9000 mm (30")	9300 mm (31') or greater
Permissible Variation:	50 mm (2")	70 mm (2 3/4")	90 mm (3 1/2")	100 mm (4")

Straightness of Longitudinal Wires:

Length of Wire Mesh:	3000 mm (10') or less	3300 mm (11') to 6000 mm (20')	6300 mm (21') to 9000 mm (30")	9300 mm (31') or greater
Permissible Variation:	50 mm (2")	70 mm (2 3/4")	90 mm (3 1/2")	100 mm (4")

Maintain flatness and straightness of the wire mesh during transportation and assembly. Wire mesh not meeting the flatness and straightness tolerances may be realigned using a method that does not damage the galvanizing, damage or weaken the weld at intersection points of the longitudinal and transverse wires, or weaken the strength of the wires. Submit the realignment procedure to the Representative for approval.

Galvanize mesh panels as specified in Section 1105.02(s) and in accordance with ASTM-A641, after fabrication. Provide wire size and mesh configuration as indicated. Carefully inspect all mesh reinforcement and attachment devices to ensure they are true to size and free from any defects that may impair their strength and durability. Cutting of steel mesh or grids at pile locations, vertical obstacles, or utilities is not acceptable.

Care must be taken to avoid bending or damage to the galvanized coating on reinforcing mesh or grids during handling, storing, and shipping.

3. Reinforcement Bars. Grade 420 (Grade 60), Section 709.1(a)1. Provide epoxy coated reinforcement bars, as specified in Section 709.1(c), or galvanized reinforcement bars, as specified in Section 709.1(e) for cast-in-place or precast concrete bridge, barrier, moment slab (cast-in-place) curb, and copings and precast panels.

(c) Fasteners and Attachment Devices.

- Provide galvanized, high strength hexagonal bolts and nuts meeting the requirements of Section 1105.02(d) for reinforcement in Section III (b)1.
- Provide embedded loops fabricated from cold drawn steel wire conforming to ASTM-A82 and welded in accordance with ASTM-A185. Galvanize loops as specified in Section 1105.02(s) and in accordance with ASTM-A641 for reinforcement in Section III (b)2.
- Provide connector bar fabricated from cold drawn steel wire conforming to ASTM-A82 and galvanized as specified in Section 1105.02(s) and in accordance with ASTM-A641 for reinforcement in Section III (b)2.
- Fabricate connector rods (where required) from PVC conforming to material as recommended by the manufacturer or steel conforming to ASTM-A36/A36M and galvanize as specified in Section 1105.02(s) and in accordance with ASTM-A123. Fabricate to required diameters and lengths as indicated.

(d) Bearing Pads.

- For horizontal joints between panels, provide preformed EPDM rubber pads conforming to ASTM-D 2000 2AA 812 A13 C12 F17, neoprene elastomeric pads having a Durometer Hardness of 80 ± 5 , or preformed high density polyethylene panel pads conforming to ASTM-D1505 and having a minimum density of 0.946 g/cm^3 .

(e) Granular Fill Material. Provide crushed or natural sand, crushed or uncrushed gravel, blasted limestone, blasted sandstone, or any standard size coarse aggregate meeting the following gradation as determined in accordance with PTM 616:

Sieve Size Percent Passing

75 mm (3 inches) 100
 19 mm (3/4 inch) 20 - 100
 425 μm (No. 40) 0 - 60
 75 μm (No. 200) 0 - 10*

*Determination of the fines content (minus 75 μm (No. 200) sieve material) for MSE wall reinforced backfill must be determined by wash test according to PTM No. 100, Amount of Material Finer Than 75 μm (No. 200) sieve in Aggregate. This is in addition to PTM No. 616, Sieve Analysis of Coarse and Fine Aggregate.

Have the backfill conform to all of the following additional requirements:

1. Furnish materials meeting the quality requirements of Type C coarse aggregate or better as specified in Section 703.2(a), Table B, except furnish materials free of clay lumps, friable particles, coal and coke. Do not use metallurgical slag or cinders.
2. Furnish materials with a maximum plasticity index (PI) of 3 as determined in accordance with AASHTO T89 and T90.
3. Furnish material exhibiting an angle of internal friction of not less than 34 degrees as determined, in accordance with AASHTO-T236, on the portion finer than the 2.0 mm (No. 10) sieve compacted to 95% of PTM No. 106, Method B, at optimum moisture content, except for coarse aggregate meeting the requirements of Section 703.2.

Direct shear testing may be performed on samples containing material larger than the 2.0 mm (No. 10) sieve, if the shear device conforms with AASHTO-T236, Sections 5.4 and 5.5.

4. Provide materials meeting the following electrochemical criteria:

Test	Criterion
pH, AASHTO T289	6 - 10
Resistivity, AASHTO T288	<ul style="list-style-type: none"> • ≥ 5000 ohm-centimeters - No chloride or testing is required. • 2000 - 5000 ohm centimeters - <p>Perform the specified chloride and sulfate tests.</p>
Chlorides, AASHTO T291, Method B	< 100 parts per million (ppm)
Sulfates, AASHTO T290, Method B	< 200 parts per million (ppm)

Provide randomly selected backfill samples for testing 30 calendar days before use, as directed by the Representative. Obtain approval for backfill material, before use. Each sample submitted is to consist of the following:

- Three bags of approximately 20 kg (40 pounds) containing a normal specimen representing the complete gradation.
- One bag containing approximately 5 kg (10 pounds) of material passing the 2.36 mm (No. 8) sieve.

During the backfilling operation, under the direction and supervision of the Representative, obtain verification samples (n=3) as specified in Section 703.5(b), Table F. The Representative will select sample locations according to PTM No. 1.

If the material sampled fails to meet the specified requirements, immediately discontinue its use, and remove and replace all material placed since the last passing acceptance or verification sample was obtained. Do not continue backfilling until new backfill material has been sampled and approved.

(f) Pipe Underdrain. Section 610.2(a)

(g) Polyvinyl Chloride (PVC) Pipe. Section 610.2(a)4.

(h) Cast-in-Place Concrete. Section 704. Provide Class A Cement Concrete for footings and leveling pads and Class AA Cement Concrete for curbs, concrete bridge barriers or traffic barriers, moment slabs, and backwalls above bridge seats.

(i) Geomembrane. Section 736.

- Dimensional Stability (ASTM-D1204).....+2 %

(j) Geotextiles. Class 2, Type A, Section 735

(k) Certification. Certify as specified in Section 106.03(b)3. Furnish a copy of the results of all tests performed which are necessary to assure compliance with the specifications. Furnish a copy of Form CS-4171 with each shipment of precast products.

(l) Nonshrink Grout. Section 1080.2(c)

IV. CONSTRUCTION -

(a) Shop Drawings. Before fabrication, submit and obtain approval for shop drawings. Show complete fabrication details and dimensions, as well as handling, transportation, and construction procedures for all wall elements.

(b) Excavation and Foundations. Grade the structure foundation level, or to the indicated slope, for a width equal to or exceeding the length of the reinforcing strips or mesh, or as indicated. Before wall construction, except where constructed in rock, compact the foundation with a smooth wheel vibratory roller. Remove any foundation soils found to be unsuitable and replace with granular material. Excavate, as specified in Section 204, to the limits and construction stages indicated.

Do not begin wall erection until the foundation has been accepted.

Construct cast-in-place footings and leveling pads as specified in the applicable portions of Section 1001.3, to the dimensions and details indicated and within the right of way, before placement of precast wall units.

Place bottom of footing and/or leveling pad at a minimum depth equal to prevailing frost depth but not less than 900 mm (3 feet) below finished ground elevation unless otherwise indicated.

(c) Stub Abutment on Piles. If stub abutment supported on piles is indicated, construct stub abutment support system, during placement of MSE wall backfill, as follows:

- Drive all piles before MSE wall installation.
- Encase each pile in a Smooth Wall or Corrugated Galvanized Steel (SWCGS) pipe of sufficient thickness to prevent buckling or distortion during placement and compaction of wall backfill.
- Place spacers between the pile and the SWCGS pipe to prevent the pipe from coming in contact with the pile during backfilling of the wall.
- Extend SWCGS pipe from the bottom of MSE wall backfill to the bottom of the bridge stub abutment footer.

- After positioning, seal the top of the SWCGS pipe to prevent debris accumulation during placement of wall backfill, and keep the pipe sealed until filled with Type A fine aggregate.
- Fill the SWCGS pipe loosely with Type A fine aggregate either before or after completion of MSE wall construction and as directed and approved by the Representative.

(d) Wall Erection. Align precast concrete panels, vertically, using inserts cast into the top edge of the panels. Place panels in successive horizontal lifts, in the sequence indicated or shown on the approved shop drawings, as backfill placement proceeds. As the specified granular fill material is placed behind a panel, maintain the panel in a vertical position by means of clamps placed at the junction of adjacent panels and temporary wooden wedges placed in the horizontal joint at the junction of the two adjacent panels on the external side of the wall. Provide external bracing, if required, for the initial lift.

Install drainage system behind the wall as indicated or as shown on the approved shop drawings.

At least two, but no more than three, rows of panel wedges are to remain in place at all times during construction. Carefully remove wooden wedges, as panel erection progresses, so as to prevent chipping or cracking of concrete panels. Properly repair any damage to erected concrete panels as directed. Remove all wedges when the wall is completed.

Install joint filler as indicated or as shown on the approved shop drawings.

Cover all joints between panels, on the back side of the wall, with geotextile fabric. Apply adhesive to panels only. Do not apply adhesive to geotextile fabric or within 50 mm (2 inches) of a joint. Provide geotextile fabric having a minimum width of 300 mm (12 inches), and overlap fabric a minimum of 100 mm (4 inches).

(e) Backfilling. Have backfill placement closely follow the erection of each lift of panels. Roughly level the backfill at each reinforcing element location before placing and bolting.

As indicated, place reinforcing elements normal to the face of the wall. Do not exceed 200 mm (8 inches) (loose) for the maximum lift thickness and closely follow panel erection. Decrease lift thickness if necessary, to obtain the specified density.

Place backfill in such a manner as to avoid any damage or disturbance to wall materials or misalignment of facing panels. Remove and replace any wall materials which become damaged during backfill placement. Correct any misalignment or distortion of wall facing panels due to placement of backfill. Place backfill to the level of the connection and in such a manner as to assure that no voids exist directly beneath reinforcing elements.

Under fill conditions, place specified backfill material to the dimensions as indicated.

At the end of each day, slope the last level of backfill away from the wall in order to rapidly direct runoff away from the wall face. In addition, do not allow surface runoff from adjacent areas to enter the wall construction site. Place and compact the backfill as specified in Section 1001.3(q)2.b; except, the 7 day waiting period for backfilling is not required. Place backfill material at a moisture content less than or equal to the optimum moisture content. Compact backfill without causing disturbance to or distortion of reinforcing members and panels. Achieve compaction within 900 mm (3 feet) of the wall by making at least three passes with light mechanical tampers, rollers, or vibratory systems.

For applications where stub abutments are to be used to support bridge or other structural loads, compact the top 1525 mm (5 feet) below footing elevation to 100% of the determined dry mass (weight) density.

Do not exceed 20 mm (3/4 inch) for vertical tolerances and horizontal alignment tolerances when measured along a 3 m (10-foot) straightedge. The maximum allowable offset in any panel joint is 20 mm (3/4 inch). Do not exceed an overall vertical tolerance for the wall (top to bottom) of 12 mm per 3 m (1/2 inch per 10 feet) of wall height. Provide uniform vertical and horizontal joint openings between panels.

Check the top row of panels with a level and 3 m (10-foot) straightedge, after each layer of backfill material is placed and compacted. Satisfactorily correct panels not within specified tolerances, before placing additional backfill material.

For structures at stream crossings, provide a blanket of No. 57 coarse aggregate behind the wall panels, to a width of 460 mm (18 inches), for the full length and to the height indicated (minimum 100-year flood level).

Provide Class 2, Type A geotextile fabric, with a minimum overlap of 100 mm (4 inches), at the interface of the coarse aggregate blanket and the granular fill material.

Place geomembrane as indicated. Overlap seams a minimum of 457 mm (18 inches) or seam joints by use of extrusion welding methods with a maximum overlap of 100 mm (4 inches).

Perform site-specific field or laboratory pullout tests, for fully saturated conditions, as indicated or directed and in the presence of the Representative.

(f) Pipe Underdrain. Place, as required, as specified in Section 610.3 and as indicated.

(g) Dewatering. Furnish, install, operate, and maintain satisfactory dewatering systems as required to maintain the site in a dry and workable condition. Include all equipment and materials, and continue as long as necessary.

(h) Technical Assistance. Arrange for a company representative to be present at the project site to assist the fabricator, Contractor, and Representative until they are familiar and confident in casting, installation, and erection procedures. Arrange for monthly visits to the project site by a company representative/engineer during wall construction. Provide a technical representative to assist in the event unusual problems or special circumstances arise.

00 - a12201 POST MOUNTED & STRUCTURE MOUNTED SIGNS

Addendum:

Associated Item(s):

Header:

POST MOUNTED & STRUCTURE MOUNTED SIGNS

Provision Body:

Revise Sections 930.2, 931.2, 932.2, 933.2, 934.2, 935.2, and 936.2 – MATERIAL by adding the following:

On non-standard signs, provide a legend consisting of the sign size (W"x H"), date of manufacture (month/year), and sign retro-reflectivity type at a location 1" above and to the right of the border on the bottom left of sign panel. Numerals and letters are to be direct applied cutout 1" high series D font. On standard size signs, provide a legend consisting of the date of manufacture (month/year) and sign retro-reflectivity type. Numerals and letters are to be direct applied cutout 5/8" high series C font located 1/2" above the bottom border offset towards the right of centerline but no more than 1" from the border of the sign panel.

Color of legend is to be the same color as the sign border.

N12501A - a12501 PRECAST MODULAR RETAINING WALL SYSTEMS

Addendum:

Associated Item(s):

Header:

PRECAST MODULAR RETAINING WALL SYSTEMS

Provision Body:

I. DESCRIPTION -

This work is the designing, furnishing, and erecting of precast modular systems used as retaining walls. These systems, some of which are proprietary, consist of modular precast concrete units erected to form a gravity retaining wall.

II. DESIGN -

Submit to the Engineer, for review and for approval, 4 sets of plans and design calculations for precast modular retaining walls, prepared in accordance with PennDOT Design Manual Part 4M (Design Manual Part 4). Allow a maximum of 30 calendar days from the day final plans are received by the Engineer for review and approval. Do not begin fabrication or perform any construction prior to approval of design and completed plans. Use mylar furnished by the Department.

Have a Professional Engineer, registered in the Commonwealth of Pennsylvania, sign and date the first sheet of the computations.

Include the following statement on the first sheet of the drawings above the P.E. seal:

"I hereby certify that all design assumptions have been validated either through construction details or notes on these drawings, or through the contract plans and provisions."

In the event certain design parameters, stresses, or specifications are in conflict, the following order of predominance will govern:

- Design requirements listed herein and in PART B, SPECIAL DRAWINGS AND SPECIAL DESIGN REQUIREMENTS", of the special provisions.
- Design related Strike-off letters in effect on the date of project advertisement. Refer to the list in PART B.
- PennDOT Design Manual Part 4M (Design Manual Part 4), "Structures"
- PennDOT Design Standards
- AASHTO Standard Specifications for Highway Bridges (date as indicated), and interim specifications

In the event that a clear order of predominance cannot be established, or a difference in the interpretation of the design cannot be resolved, the Chief Bridge Engineer will be arbiter and such decision will be final.

If weep holes are not indicated, and no other provision for subsurface drainage has been incorporated into the design but is required to validate design assumptions of lateral earth pressure from dry backfill, provide a weep hole in every other precast module exposed at ground elevation. Locate weep holes a minimum of 300 mm (1 foot) above finished ground elevation.

Provide cast-in-place or preapproved, precast parapets and barriers.

III. MATERIAL -

(a) Precast Concrete Modules (Units). Furnish precast modules in accordance with the requirements of Section 714, except provide concrete for precast modular units, filler panels, and end panels having a 28-day minimum compressive strength of 35 MPa (5,000 psi) when tested in accordance with PTM No. 604.

Place reinforcement bars, PVC pipe for weep holes, and handling devices, to the dimensions and tolerances indicated or as approved by the Engineer, prior to casting.

1. Testing and Inspection. Acceptability of the precast modules will be determined on the basis of slump and entrained air content testing of the concrete mixture, compressive strength testing, and visual inspection. Furnish facilities for the Department to perform all necessary sampling and testing in an expeditious and satisfactory manner. Acceptance will be as herein specified.

Acceptance of precast concrete modules with respect to compressive strength will be based on the results of production lot testing. A production lot is defined as the modules represented by one day's production. Four cylinders per lot will be selected in accordance with PTM No. 1 and PTM No. 601. Cylinder specimens will be cured with the product and tested in accordance with PTM No. 611. Acceptance will be based on compliance with the requirements of Sections 714.4(b) and 714.7(a), except the lot compressive strength will be determined as the average of the compressive strength testing of 2 cylinders and no individual test result may be below 31 MPa (4500 psi).

Acceptance with respect to visual inspection will be based on compliance with the requirements of Section 713.2(d). In addition, precast modules may be rejected for color or texture variations on the front face due to excess form oil or other causes.

Completed precast units will be inspected before shipment, and cracked, damaged, or otherwise unsatisfactory units will be rejected. Properly patch all excessive voids and other defects on exterior surfaces in accordance with the approved Quality Control Plan.

Repairs and repair procedures require the approval of the Engineer. Mark rejected precast units with the words "Rejected for Department Use" using waterproof paint.

2. Forms. Construct forms of steel in a manner that assures the production of uniform units, and leave forms in place until they can be removed without damage to the unit.

Replace damaged forms or forms having a deteriorated surface.

3. Mixing and Placing Concrete. Mix and deliver concrete as specified in Section 704. For transporting, placement, and consolidation of concrete, use methods that will prevent segregation of concrete materials and displacement of steel reinforcement from its proper position in the form. Do not place concrete when ambient temperatures are below 4 C (40F) or above 38 C (100F). Do not use admixtures containing chlorides.

4. Casting. Carefully place concrete in the forms and vibrate sufficiently to produce a surface free from imperfections such as honeycombing, segregation, or cracking. Use clear form oil throughout the casting operation.

5. Finish. Provide a conventional surface finish unless otherwise indicated. When a special or decorative surface finish is required, display for approval a typical sample of the modular unit, showing the color, texture, and finish intended to be used, prior to standard production of units.

6. Curing. Cure units in accordance with Section 1001.3(p) for the period of time required for the concrete to obtain the specified minimum compressive strength. Control curing until a compressive strength of 21 MPa (3000 psi) is achieved.

7. Tolerances. Manufacture all units within the following tolerances:

- Face of Module. Length or height, +/- 5 mm (+/- 3/16-inch).
- Deviation From Square. Not to exceed 13 mm (1/2-inch), as determined by the difference between two diagonals.
- Thickness. - 6 mm (1/4-inch), + 13 mm (1/2-inch)
- Location of Reinforcement Steel. Cover: - 6 mm (1/4-inch), + 13 mm (1/2-inch); otherwise within + 13 mm (1/2 inch).
- Surface Finish. Surface defects, measured over a length of 1500 mm (5 feet), not to exceed 3 mm (1/8-inch) on smooth formed surfaces and, on texture finished surfaces, not to exceed 8 mm (5/16-inch).
- Bearing Surfaces. Finish to within 3 mm (1/8-inch) when tested with an 2450 mm (8-foot) straightedge.

8. Marking. Clearly scribe or paint with waterproof paint, on the interior surface of each unit, the date of manufacture, lot production number, piece mark, and inspection date and stamp.

9. Handling, Storing and Shipping. Handle, store, and ship all units in such a manner as to eliminate the danger of chipping, cracking, fracture, and excessive handling stress.

Do not ship units until the 28-day minimum compressive strength is attained. Provide 24-hour advance notice of loading and shipping schedule.

Repair or replace any unit damaged during handling, transporting, erecting, or backfilling, or any unit that cannot be placed satisfactorily in the wall, in accordance with the approved Quality Control Plan.

(b) Reinforcement Bars. Grade 400 (60), Section 709.1(a)1., except No. 10 (No. 3) stirrup bars may be Grade 300 (40). Provide epoxy coated reinforcement bars, as specified in Section 709.1 (d), for cast-in-place or precast parapets, barrier, curbs, and copings and precast modules, if indicated or specified.

(c) Cast-in-Place Concrete. Section 704. Provide Class A Cement Concrete for footings and leveling pads and Class AA Cement Concrete for curbs, parapets, and backwalls above bridge seats.

(d) Joint Filler.

- For vertical joints, joint filler is not required.

- For horizontal joints, provide Type II preformed cork conforming to AASHTO-M153 and a premium grade, closed cell, polyethylene foam backer rod as detailed on the approved shop drawings.
- Provide rubber pads having a Durometer Hardness of 75 +/- 5 between modules that are not placed in quick set mortar. If specified, use quick set mortar meeting the requirements of Section 1001.2(d) for setting precast units.

(e) Granular Fill Material for Precast Modules. Provide crushed or natural sand, crushed or uncrushed gravel, blasted limestone, blasted sandstone, and/or Type C coarse aggregate meeting the following gradation as determined in accordance with AASHTO-T27:

Sieve Size Percent Passing

75mm (3 inches) 100
19 mm (3/4 inch) 20 - 100
450 um (# 40) 0 - 60
75 um (# 200) 0 - 10

Furnish Type C coarse aggregate meeting the requirements of Section 703.2, except having a maximum of 2% deleterious shale and an allowable total of deleterious shale, clay lumps, friable particles, and coal or coke of 2%, maximum.

Have all granular fill material conform to the following additional requirements:

- Furnish material having a minimum dry weight density of 1921 kg per cubic meter (120 lb per cubic foot) when compacted to 95% of AASHTO-T99 at optimum moisture content.
- Do not use metallurgical slag or cinders.
- Furnish material exhibiting an angle of internal friction consistent with that used in design but not less than 34 degrees as determined, in accordance with AASHTO-T236, on the portion finer than the 2 mm (#10) sieve compacted to 95% of AASHTO-T99, Method C or D (with oversize correction as outlined), at optimum moisture content, except for coarse aggregate meeting the requirements of Section 703.2.

Direct shear testing may be performed on samples containing material larger than the #10 sieve, if the shear device conforms with AASHTO-T236, Sections 5.4 and 5.5.

(f) Polyvinyl Chloride (PVC) Pipe. Section 610.2(a)4.

(g) Geotextiles. Class 1, Section 735

(h) Certification. Certify as specified in Section 106.03(b)3. Furnish a copy of Form CS-4171 with each shipment of precast products.

IV. CONSTRUCTION -

(a) Shop Drawings. Prior to fabrication, submit and obtain approval for shop drawings. Show complete fabrication details and dimensions, as well as handling, transportation, and construction procedures for all wall elements.

(b) Excavation and Foundations. Grade the structure foundation level, or to the indicated slope, for the width required or as indicated. Prior to wall construction, except where constructed in rock, compact the foundation with a smooth wheel vibratory roller. Remove any foundation soils found to be unsuitable and replace with granular material. Excavate, in accordance with Section 204, to the limits and construction stages indicated.

Do not begin wall erection until the foundation has been approved.

Construct cast-in-place footings and leveling pads as specified in the applicable portions of Section 1001.3, to the dimensions and details indicated and within the right of way, prior to placement of precast wall units. Provide a wood float finish and cure in accordance with Section 1001.3(p). Construct in conformance with the grades and cross slopes indicated. Do not allow grades and cross slopes to vary by more than 3 mm in 3000 mm (1/8-inch in 10 feet) when tested with a 3000 mm (10-foot) straightedge.

Place bottom of footing and/or leveling pad at a minimum depth equal to prevailing frost depth but not less than 900 mm (3 feet) below finished ground elevation, unless otherwise indicated.

(c) Wall Erection. Install precast modular units as shown on the approved shop drawings. Take special care to set the bottom course of modules to true line and grade.

Install drainage system behind the wall as indicated or as shown on the approved shop drawings.

Interlock all modular units from course to courses. Stagger vertical joints with each successive course, as indicated. Do not exceed 19 mm (3/4-inch) for the vertical joint openings on the front face of the wall. Install joint filler in the horizontal joints on the front face of the wall. Close joints at corners or angle points in accordance with the manufacturer's recommendations. Cover all vertical joints on the back side of the front face of the wall with geotextile fabric. Provide geotextile fabric having a minimum width of 300 mm (12 inches), and overlap fabric a minimum of 100 mm (4 inches). Place rubber bearing pads under each module, throughout the wall, or set modules in a quick set mortar bed, depending on wall type and manufacturer's recommendations.

Have repairs made, at the job site, by experienced personnel utilizing methods and materials recommended by the manufacturer. Do not patch unless conditions exist which assure that the repaired area will conform to the remainder of the work with respect to appearance, strength, and durability.

(d) Backfilling. Fill the interior of each precast modular unit with the specified granular fill material, as each successive course is set. Fill units in 600 mm (2-foot) maximum lifts and thoroughly compact each lift with a vibratory tamping device. Place specified backfill material behind the wall within the limits shown on the Standard Drawings, as indicated or directed, in accordance with the requirements of Section 1001.3(t), except the 10-day waiting period is not required.

Where modules are open and tiered in construction and plant growth is planned, topsoil may be placed at the outer front edge of each tier to a maximum depth of 150 mm (6 inches).

When erecting a battered wall, place backfill behind the wall to closely follow the erection of successive courses of precast units.

At the end of each day, slope the last level of backfill away from the wall in order to rapidly direct runoff away from the wall face. In addition do not allow surface runoff from adjacent areas to enter the wall construction site.

At no time allow the difference in elevation between the backfill and the top of the last erected course to exceed 1800 mm (6 feet).

(e) Dewatering. Furnish, install, operate, and maintain satisfactory dewatering systems as required to maintain the site in a dry and workable condition. Include all equipment and materials, and continue as long as necessary.

(f) Technical Assistance. Arrange for a company representative to be present at the project site to assist the fabricator, Contractor, and Engineer until they are familiar and confident in casting, installation, and erection procedures. Arrange for monthly visits to the project site by a company representative/engineer during wall construction. Provide a technical representative to assist in the event unusual problems or special circumstances arise.

00 - a12601 SHOP DRAWING REVIEW

Addendum:

Associated Item(s):

Header:

SHOP DRAWING REVIEW

Provision Body:

The District Engineer has designated (C. C. Johnson & Malhotra, P.C.) to act as agent for the review and acceptance of bridge and other related shop drawings. Submit print sets for review and acceptance, as specified in Section 105.02(d), to the following address:

C. C. Johnson & Malhotra, P.C.

Attn: Charles Babcock, P.E.
4640 Trindle Road, Suite 103
Camp Hill, PA 17011-5610
(717)-730-4160 ext. 101
cbabcock@ccjm.com

For electronic submissions:

Construction Methodology Plans: Demolition, Falsework, Beam Erection, Temporary Shoring – send to District 8-0 Construction Unit – Structure Control Section at email below:

RA-pdDist80StructCU@pa.gov

Cc to Assistant District Construction Engineer, Barbara Karsok-Anderson. Email: bkarsokand@pa.gov

For electronic submissions:

Fabricated Structural Materials: Expansion Joints, P/S Concrete Beams, Elastomeric Bearings, Stay-in-Place Forms, Aluminum Protective Barrier, MSE Wall Panels, Structural Steel and material associated with the ET Plan and catenary system, etc. - send to Design Consultant at email below:.

Charles Babcock, P.E. Email: cbabcock@ccjm.com

Cc to PennDOT Design Project Manager, Doug Murphy Email: doumurphy@pa.gov

00 - a12801 WIRELESS AIR CARD

Addendum:

Associated Item(s):

Header:

WIRELESS AIR CARD

Provision Body:

Whenever a high-speed (cable, DSL, or other Broadband) Internet connection cannot be supplied, provide a compatible air card and monthly Internet service for the computer supplied through the Department lease. A USB port air card is preferred. Use an aircard carrier of sufficient bandwidth to provide at least 450 kb/s on both upload and download stream. The Contractor may be required to replace the aircard and/or carrier if this bandwidth requirement cannot be met at any time during the usage period.

00 - a12901 PRELOAD EMBANKMENT

Addendum:

Associated Item(s):

Header:

PRELOAD EMBANKMENT

Provision Body:

DESCRIPTION - This work is the construction of a preload embankment from Station 308+00 to Station 310+00, as indicated on the Construction Drawings.

MATERIAL – Standard Specifications, Section 206.2, except as follows:

1.d Rock - not applicable

CONSTRUCTION – Standard Specifications, Section 206.3, except as follows:

- a. No preload embankment material can be placed until initial section settlement platform is installed. See Special Provision entitled “Settlement Platforms” for details.
- b. Construct the embankment section, excluding the coping.
- c. No roadway/pavement construction is permitted until after the quarantine period has expired.
- d. Respective quarantine periods, as listed below, will not begin until the preload embankment is placed to its final height.
- e. Quarantine period may be extended by the Engineer if the results of settlement platform monitoring indicate any unusual or unexpected behavior.
- f. Shape the top layer of the compacted embankment to drain during quarantine time. Ensure that no ponding of water occurs on top of the embankment and no excessive water flow occurs along slopes to cause erosion.

Section	Quarantine Period
Sta. 308+00 to Sta. 310+00	45 days

MEASUREMENT AND PAYMENT - Embankment. When measurement is required, embankment will be measured in its final position, as specified in Section 203.4(a)2, by the cubic yard. Embankment construction will be considered incidental to excavation or borrow excavation and will not be paid for separately.

S2011C - b02011 SECTION 201.3

Addendum:

Associated Item(s):

Header:

SECTION 201.3

Provision Body:

Revise the fifth paragraph of Section 201.3 CONSTRUCTION to read as follows:

Trees and shrubs along a highway previously opened to traffic belong to the property owner. Surrender all material from the removal of trees and shrubs to the owner of the abutting property. Deliver accepted wood to a nearby location as directed. Dispose of the trees and shrubs if the owner refuses to accept the wood.

S4091C - b04091 SECTION 409.3

Addendum:

Associated Item(s):

Header:

SECTION 409.3

Provision Body:

Section 409.3(b) Weather Limitations. Replace the first sentence with the following:

Do not place HMA wearing and binder paving mixtures from October 16 to March 31, unless allowed in writing by the District Engineer/Administrator.

Section 409.3(b)1. Wearing Courses. Delete this subsection.

Section 409.3(d) Hauling Equipment. Revise to read as follows:

(d) Hauling Equipment. Haul the mixtures in tightly sealed vehicles that do not contain petroleum oils, solvents, or other materials that adversely affect bituminous concrete. Provide covers of sufficient size and quality to protect the entire load under all conditions. Maintain the proper and uniform placement temperature specified in Section 409.3(h)1. Provide insulation on all sides and the bottom of the truck body or a heated truck body when the air temperature is below 10C (50F). Place insulation on the inside surfaces of the hauling vehicle. All areas not effectively heated must be insulated. Provide a 10mm (3/8") diameter hole near the center and approximately two-thirds the distance down from the top of the vehicular box, on both sides, to allow for temperature checks.

Section 409.3(k)1.b Vertical Joints.

Replace the first bullet with the following:

- The Contractor may use vertical joints for base and binder courses.

Section 409.3(k)1.c Notched Wedge Joints.

Add the following bullet to the beginning:

- The Contractor will use notched wedge joints for all wearing courses.

Replace the first bullet with the following:

- The Contractor may use notched wedge joints for binder courses with \leq 19.0mm nominal maximum aggregate size mix designs.

Section 409.3(k)3 Other Joints.

Revise to read as follows:

When placing a wearing course abutting existing pavement at locations such as paving notches, lane additions, or utility openings, seal the joint with hot, bituminous material, PG 64-22. Evenly apply the sealant a minimum of 150 mm (6 inches) on both sides of the joint. Before sealing, clean and remove harmful material from the area to be sealed. Control the application rate so residual asphalt completely fills surface voids and provides a water-tight joint. Remove excess bituminous material and immediately cover the sealed area with a light application of dry sand that is acceptable to the Representative.

S6081C - b06081 SECTION 608 - MOBILIZATION

Addendum:

Associated Item(s):

Header:

SECTION 608 - MOBILIZATION

Provision Body:

- Section 608.1 Description. Revise by adding the following:

When developing agreements with DBE subcontractors include an opportunity for the DBE to identify an item for their mobilization. Include any agreed upon amounts in the contract lump sum price bid for mobilization. Also, list agreed to amounts for each DBE subcontractor on the DBE Participation for Federal Projects form specified in the "Disadvantage Business Enterprise Requirements" Designated Special Provision in Appendix C of Pub. 408.

- Section 608.4 Measurement and Payment. Revise by adding the following:

(c) DBE Payment Schedule. Within the Schedule submitted as specified in Section 108.03, indicate the starting date of work subcontracted to DBE's. One month before the scheduled start of subcontracted DBE work, but not earlier than the Notice to Proceed, pay 25% of the amount shown for mobilization on the applicable DBE Participation for Federal Projects form. Pay the remaining 75% of the amount shown for mobilization on the applicable DBE Participation for Federal Projects form, in three equal payments, when subcontracted DBE work is 25%, 50%, and 75% complete. Pay the affected DBE within 7 days of its reaching the specified milestones for percentage of work completed.

S6092A - b06092 SECTION 609.2(g) MISCELLANEOUS MATERIALS

Addendum:

Associated Item(s):

Header:

SECTION 609.2(g) MISCELLANEOUS MATERIALS

Provision Body:

Section 609.2(g) Miscellaneous Materials. Add the following new set of bullets:

The laser printer(s) and/or color printer(s) needed for this project will be obtained for Department use through a statewide lease agreement and not as part of the Equipment Package contract item.

A total of (See "a" in Project Specific Details) Laser Printer(s) and (See "b" in Project Specific Details) Color Printer(s) will be leased for the project.

Provide compatible toner cartridges for each laser printer and compatible ink jet cartridges for each color printer indicated above, as required. The exact make and model of laser printer and/or color printer being used on the project will not be known until the start of work. For cost estimating purposes, toner cartridges and/or ink jet cartridges furnished must be usable with the type of printer specified in Section 609.2(d)3. and Section 609.2(d)4., as applicable.

Project Specific Details:

a. zero (0)

b. one (1)

00 - b06301 SECTION 630 - PLAIN CEMENT CONCRETE CURB

Addendum:

Associated Item(s):

Header:

SECTION 630 - PLAIN CEMENT CONCRETE CURB

Provision Body:

Revise Section 630.3 CONSTRUCTION by adding the following:

Construct curb to match existing curb height.

S9311B - b09311 SECTION 931.2

Addendum:

Associated Item(s):

Header:

SECTION 931.2

Provision Body:

Revise the second bullet of Section 931.2 MATERIAL as follows:

- Breakaway Steel Posts - From a manufacturer listed in Bulletin 15, and as noted in Section 1103.08, except delete Section 1103.08(a).

00 - b09711 SECTION 971.3

Addendum:

Associated Item(s):

Header:

SECTION 971.3

Provision Body:

Revise Section 971.3 as follows: Return one railroad crossing sign to to Rapho Township; contact John Haldeman at (717) 665-3827. Return one railroad crossing sign to Mount Joy Borough; contact Scott Hershey at (717) 653-2300.

S10011B - b10011 SECTION 1001.3(k)5

Addendum:

Associated Item(s):

Header:

SECTION 1001.3(k)5

Provision Body:

Section 1001.3(k)5. Bridge Decks. Add the following to the first paragraph:

Do not place concrete when the air temperature at the project site is above 80F.

Add the following new paragraph:

One week prior to the scheduled bridge deck placement date, a mandatory meeting will be held at the project site. The Contractor, concrete producer, and the Department Engineer will be in attendance.

S10301A - b10301 SECTION 1030 - BENCH MARKS (SU)

Addendum:

Associated Item(s):

Header:

SECTION 1030 - BENCH MARKS

Provision Body:

1030.1 DESCRIPTION - This work is the placing of bench marks on structures.

1030.2 MATERIAL - Bench marks will be furnished and delivered to the project by the Department.

1030.3 CONSTRUCTION - Unless otherwise indicated, place the bench marks on top of the right parapet walls over the near abutments of the indicated structures in a position so the bridge railings do not obstruct use of the bench marks.

No bench marks, other than those furnished by the Department will be permitted on any structures.

1030.4 MEASUREMENT AND PAYMENT - Bench Marks will be considered incidental to the other items of bridge construction and will not be paid for separately.

I6091F - c06091 ITEM 0609-0009 - EQUIPMENT PACKAGE

Addendum:

Associated Item(s): 0609-0009

Header:

ITEM 0609-0009 - EQUIPMENT PACKAGE

Provision Body:

Appendix

Table A

EQUIPMENT PACKAGE	
Equipment	Quantity
Communications Equipment	
Copier ⁽¹⁾	one
Fax Machine ⁽¹⁾	one
Cellular Phone(s)	n/a
Electronic Equipment	

Digital Camera	n/a
Document Scanner ⁽²⁾	n/a
Laser Printer ⁽²⁾	n/a
Color Printer ⁽²⁾	n/a
Specialized Equipment	
Surveyor's Level & Measuring Rod	n/a
Electronic Digitizer	n/a
Digital Display Level	n/a
Infrared Thermometer	n/a
Laser Range Finder	n/a
Paper Shredder	n/a
Miscellaneous Items	
Internet Service Provider	Yes
Computer Media	Yes
Toners/Cartridges	Yes

(1) Unless otherwise approved, a multifunction machine may not be furnished in lieu of a separate copier and fax.

(2) Unless otherwise approved, a multifunction machine may not be furnished in lieu of a separate scanner, laser printer and color printer.

Microcomputer Systems. A total of one (1) microcomputer system will be used on the project.

This information is being provided to assist Bidders in meeting the requirements of Section 609.2(f), Internet Service, and Section 609.2.

Microcomputer systems may be furnished by the Department. If microcomputer systems are to be furnished by the Contractor, as per 0688-XXXX bid items. When indicated, furnish microcomputer systems meeting the requirements of Section 688.

00 - c06781 ITEM 4678-0110 - PERMANENT BARRICADE MODIFIED

Addendum:

Associated Item(s): 4678-0110

Header:

ITEM 4678-0110 - PERMANENT BARRICADE MODIFIED

Provision Body:

In accordance with Section 678 and as indicated. The detail for the barricade is on Sheet 5 of 11 of the Newcomer Road Plan.

18041A - c08041 ITEMS 4804-0011/0013/0014 - SEEDING AND SOIL SUPPLEMENTS - FORMULAS B, D, & E (MODIFIED)

Addendum:

Associated Item(s): 4804-0011, 4804-0013, 4804-0014

Header:

ITEM 4804-0011 - SEEDING AND SOIL SUPPLEMENTS - FORMULA B (MODIFIED)
ITEM 4804-0013 - SEEDING AND SOIL SUPPLEMENTS - FORMULA D (MODIFIED)
ITEM 4804-0014 - SEEDING - FORMULA E (MODIFIED)

Provision Body:

I. In accordance with Section 804, modified as follows:

Section 804.1 DESCRIPTION - Revise to read:

This work is the furnishing and placing of seed and soil supplements and mulch of the type indicated.

II. Section 804.2(d) Herbicides. Delete this section and replace with the following:

(d) Mulch. Section 805.2(a)1., for the type indicated

III. Section 804.2(e) Mow-Line Delineator Stakes. Delete this section and replace with the following:

(e) Mulch Binder. Section 805.2(b)

IV. Section 804.3(g) Mow-Line Delineation. Delete this section and replace with the following:

(g) Mulching. Section 805.3

V. Section 804.3(h) Herbicides. Delete this section.

Section 804.3(j) Maintenance. Revise the last paragraph as follows:

After the seeding, soil supplement, and mulch work on a slope has been satisfactorily completed, if a slope failure occurs, one which requires redressing, excavation, or establishment of a new slope, reapply soil supplements, reseed, and mulch as specified for the original treatment.

Section 804.4 MEASUREMENT AND PAYMENT - Revise as follows:

(a) Seeding and Soil Supplements. Kilogram(Pound)

Includes mulch and mulch binder.

Measured by the number of kilograms(pounds) of seed actually incorporated into the work, for the formula specified.

Reapplying soil supplements and reseeding and mulching on failed slope areas, as specified in Section 804.3(j), will be paid for at the contract unit price, in addition to the original accepted application of seeding, soil supplements, and mulch.

00 - c09011 ITEM 0901-0001 - MAINTENANCE AND PROTECTION OF TRAFFIC DURING CONSTRUCTION

Addendum:

Associated Item(s): 0901-0001

Header:

ITEM 0901-0001 - MAINTENANCE AND PROTECTION OF TRAFFIC DURING CONSTRUCTION

Provision Body:

In accordance with Section 901 and as follows:

This work is the maintenance and protection of traffic for the SR 4062 and EBY CHIQUES ROAD portion of the project.

No lane restrictions, including turning lanes, are permitted from 6:00 AM to 9:00 AM on SR 0230 in either direction; maintain at least one lane of traffic short-term, while work is in progress.

Maintain two lanes of traffic for the life of this project on Eby Chiques Road; maintain at least one lane of traffic short-term, while work is in progress.

Do not close or construct cul-de-sacs at Eby Chiques Road or Newcomer Road until the new bridge over Amtrak and approach roadway is open to traffic.

Provide ingress and egress for businesses and dwellings within the project limits, unless prearranged with the property owner a minimum of two (2) business days in advance and the Inspector-In-Charge is informed of the arrangement. Also, maintain access to all side roads, alleys and fire hydrants.

At least two (2) weeks prior to imposing any traffic control/ work, go to <http://munstatspa.dced.state.pa.us/EAORReports.aspx?M=L> and gain contact information in order to notify project specific Local Municipalities, Emergency Services, Local and/ or State Police, Fire Departments, Post Offices, and School District Transportation Coordinators. The County Emergency Control centers are all listed at <http://www.paapco.org/centers.htm> . Provide written documentation of all contacts and notifications that were made to the Inspector-In-Charge, unless otherwise directed. Including but not limited to the following:

- Mount Joy Borough: 717-653-2300
- Rapho Township: Sara Gibson, Manager at 717-665-3827
- Manheim Central School District. Transportation Services: 717-664-8520.
- Donegal School District. Transportation Coordinator: 717-653-1447
- Mount Joy Fire Department: 717-653-1600
- Mount Joy Police: 717-653-1650
- Mount Joy Emergency Management Agency: 717-989-0379
- Susquehanna Valley EMS: 653-6247

Notify the Inspector-In-Charge three (3) days in advance of any proposed lane/ shoulder restriction or road closure. Also, notify the Inspector-In-Charge thirty (30) minutes prior to the start of work, (before placement of traffic control devices). The Inspector-In-Charge, in turn, will notify the District 8-0 Traffic Management Center (TMC) two (2) days in advance of any proposed lane/ shoulder restriction or road closure and fifteen (15) minutes prior to the start of work. The Inspector-In-Charge will notify the TMC when the road is restored back to full traffic. The TMC phone number is (717) 265-7600.

Cooperate and coordinate with local municipalities for any special events that may be scheduled during the life of this project:

Mount Joy Borough:

Scott Hershey - Director of Public Works

717-653-2300 or 717-653-8226

Rapho Township:

John Haldeman – Roadmaster

717-665-3827

Delineate open excavations, obstructions or other exposed hazards; maintain access to residences and businesses. Maintain pedestrians as field conditions necessitate. Provide delineation in such areas using orange, reflective safety fence.

Cooperate and coordinate in accordance with Publication 408, Section 105.07 with any adjacent contractor in the maintenance and protection of traffic during construction. Coordinate the placement and/or removal of signs, pavement markings, and traffic control devices throughout the duration of this contract that may conflict with adjacent work zones. This includes any work that may be adjacent to or within the limits of this project.

As required, provide temporary locations and continuous access for U.S. mail delivery to effected residents and businesses along the corridor. Permanent relocation of mail boxes shall be the responsibility of the property owner.

Maintain drop-offs from the edge of travel lanes according to section 901.3(j) of Publication 408.

Provide a flag-person at all intersecting roadways and major driveways within a lane closure.

All signs and channelizing devices shall have approved retro-reflective sheeting.

Furnish, erect, place and maintain traffic control signs and devices. Maintain traffic during hours of construction and at all other times in accordance with the methods indicated on these drawings and the following:

Special Provisions of the Contract

FHWA - Manual on Uniform Traffic Control Devices, 2009 Edition

PennDOT Pubs.: 35 - Approved Construction Materials (Bulletin 15)

111M - Traffic Control Pavement Markings & Signing Standards

212 § E - Official Traffic Control Devices

213 - Temporary Traffic Control Guidelines

236M - Handbook of Approved Signs, 2008

408 - Specifications (Let Date Version)

Traffic Control typical applications and parts thereof for this project are as follows:

- Long-Term Signing - PennDOT Publication 213, PATA 25, 40 and 41
- Short-Term Signing - PennDOT Publication 213, PATA's 5, 7, 8, 10a and 10b

All sign and channeling device locations may be adjusted back or forward due to intersecting streets, driveways, etc., and/or as field conditions necessitate.

00 - c10011 ITEM 5001-0020 - CLASS C CEMENT CONCRETE MODIFIED

Addendum:

Associated Item(s): 5001-0020

Header:

ITEM 5001-0020 - CLASS C CEMENT CONCRETE MODIFIED

Provision Body:

DESCRIPTION - This work is the excavation for, furnishing and placing of Class C Cement Concrete below the bottom of footing elevations (Abutment 2) as indicated and directed.

MATERIAL - Class C Cement Concrete – Section 704

CONSTRUCTION - Below the bottom of footing elevation over-excavate all soil material and loose or unsuitable rock to sound rock as indicated or as directed by the Engineer. Place Class C Concrete to the limits (i.e., bottom of footing elevation) as shown on the cross sections or as directed. Along the perimeter of the Class C, provide a vertical face. Provide a minimum depth of placement of 6". In areas where the bedrock slope exceeds 5H:1V bench the rock surface as directed to provide a level surface below the bottom of footing elevation for placement of Class C Cement Concrete. Key the Class C into bedrock as directed to ensure stability.

MEASUREMENT AND PAYMENT - Cubic Yard. Includes all excavation necessary to place Class C Cement Concrete.

00 - c10061 ITEMS 5006-0209/0308/0349 - 48" & 42" DIA. DRILLED CAISSONS, SHAFT SEC. & ROCK SOCKET MOD.

Addendum:

Associated Item(s): 5006-0209, 5006-0308, 5006-0349

Header:

ITEM 5006-0209 - 48" DIAMETER DRILLED CAISSONS, SHAFT SECTION MODIFIED
ITEM 5006-0308 - 42" DIAMETER DRILLED CAISSONS, ROCK SOCKET MODIFIED
ITEM 5006-0349 - 48" DIAMETER DRILLED CAISSONS, ROCK SOCKET MODIFIED

Provision Body:

DESCRIPTION - This work is the drilling of caissons as indicated on the ET plans.

MATERIAL - Section 1006.2. Concrete in accordance with Section 1006.2(b) except minimum Mix Design Compressive Strength of 4500 psi, minimum w/c ratio of 0.45 and minimum 5.5% air content.

CONSTRUCTION - In accordance with Section 1006.3. and ET Plans. Complete Item 9000-0001 - Confirmatory Borings for Caisson Locations of Catenary Structures p1154a and 1159b in its entirety at least 30 days prior to beginning this work.

MEASUREMENT AND PAYMENT – Linear Foot.

119992A - c19992 ITEM 1999-9999 - TRAINEES

Addendum:

Associated Item(s): 1999-9999

Header:

ITEM 1999-9999 - TRAINEES

Provision Body:

This Special Provision is an implementation of 23 U.S.C. 140 (a).

I. DESCRIPTION - As part of the project equal employment opportunity affirmative action program, provide on the job training aimed at developing candidates toward full journeymen in the type of trade or job classification involved.

The number of trainees to be trained under this contract is (***as found in the Project Specific Details, Detail 1.***)

II. CONSTRUCTION -

(a) In the event a subcontract is given for a portion of the contract work, determine how many, if any, of the trainees are to be trained by the subcontractor. However, retain the primary responsibility for meeting the training requirements imposed by this special provision. Insure that this Special Provision is physically included and is made applicable to any such subcontract. Where feasible, provide 25% of apprentices or trainees in each occupation, in their first year of apprenticeship or training.

(b) Distribute the number of trainees among the work classifications on the basis of the project needs and the availability of journeymen in the various classifications within a reasonable area of recruitment. Within 10 calendar days following the Notice to Proceed, submit to the Department for approval the number of trainees to be trained in each selected classification and training program to be used, specifying the starting time for training in each of the classifications. The Department will give credit for each trainee employed on the contract who is currently enrolled or becomes enrolled in an approved program and payment will be made for such trainees as provided herein.

(c) Training and upgrading of minorities and women toward journeyman status is a primary objective of this Special Provision. Accordingly, make every effort to enroll minority trainees and women (e.g., by conducting systematic and direct recruitment

through public and private sources likely to yield minority and women trainees) to the extent that such persons are available within a reasonable area of recruitment. Accept responsibility for demonstrating that steps are taken in pursuance thereof, prior to a determination as to whether compliance is made with this Special Provision. This training commitment is not intended, and do not use it, to discriminate against any applicant for training, whether a member of a minority group or not.

(d) Do not employ a person as a trainee in any classification in which he/she has successfully completed a training program leading toward journeyman status or in which he/she has been employed as a journeyman. Candidates may be trained a maximum of 3 times as long as the training is not repetitious in the scope of work and is not on the same project. Those candidates having attained journeyman status would be acceptable as trainee candidates only in classifications where they have not attained journeyman status. Satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used, provide records documenting the findings in each case.

(e) The minimum length and type of training for each classification will be as established in the training program selected and submitted to and approved by the Department. The Department will approve a program if it is reasonably calculated to meet the project equal employment opportunity obligations and gives meaningful training to move candidates toward journeyman status. Furthermore, apprenticeship programs registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau and training programs approved but not necessarily sponsored by the U.S. Department of Labor, Manpower Administration, Bureau of Apprenticeship and Training will also be considered acceptable provided they are being administered in a manner consistent with the equal employment obligations of Federal-aid highway construction contracts. Obtain approval or acceptance of a training program and training candidate from the Department prior to commencing work on the classification covered by the program. It is the intention of these provisions that training is to be provided in the construction crafts rather than clerk-typists or secretarial-type positions. Training is permissible in lower level management positions such as office engineers, estimators, timekeepers, etc., where the training is oriented toward construction applications. Training in the laborer classification may be permitted provided that significant and meaningful training is provided and approved by the Department. Some offsite training is permissible as long as the training is an integral part of an approved training program and does not comprise a significant part of the overall training.

(f) Furnish the trainee a copy of the program he/she will follow in providing the training.

(g) Provide each trainee with a certification showing the type and length of training satisfactorily completed.

(h) Provide for the maintenance of records and furnish required reports documenting his/her performance under this Special Provision.

(i) Pay no less than the common laborer rate for this project to any trainee performing in a construction craft (percentage payments are no longer in effect). Pay non-construction crafts, such as timekeeper, office manager, and surveyor, the fair market rate for those services or classifications. Trainees in construction crafts may remain at the common laborer rate throughout the training program. Upon completion, pay trainees in accordance with wage rates scale for this contract for work performed. In the case of apprentices, the appropriate rates approved by the Federal Departments of Labor or Transportation in connection with the existing program apply to all trainees being trained for the same classification who are covered by this Special Provision.

III. MEASUREMENT AND PAYMENT - Hour

Will be paid as follows:

(a) Except as otherwise noted below, payment will be made per hour of training given an employee on this contract in accordance with an approved training program. As approved by the Engineer, payment will be made for training persons in excess of the number specified herein. Payment for offsite training indicated above may only be made where one or more of the following is done and the trainees are concurrently employed on a Federal-aid project; contributes to the cost of the training, provides the instruction to the trainee or pays the trainee's wages during the offsite training period.

(b) No payment will be made due to failure to provide the training required as stated in the approved training program. Make every good faith effort to retain the trainee upon completion of the training program, if work continues to be available in that classification. It is normally expected that a trainee will begin his/her training on the project as soon as feasible after start of work utilizing the skill involved and remain on the project as long as training opportunities exist in the work classification or until he/she has completed the training program. It is not required that all trainees be on board for the entire length of the contract. Responsibilities will have been fulfilled under this Special Provision if acceptable training has been provided to the number of trainees specified. Determine the number trained on the basis of the total number enrolled on the contract for a significant period.

Project Specific Details:

1. The number of trainees to be trained under this contract as referred to in para I. is: one (1).

I30041D - c80041 ITEMS 8030-0001/8000-0001/8100-0001 - BRIDGE STRUCTURE, AS DESIGNED & ALTERNATES, S-29760

Addendum:

Associated Item(s): 8000-0001, 8030-0001, 8100-0001

Header:

ITEM 8030-0001 - BRIDGE STRUCTURE, AS DESIGNED S-29760
ITEM 8000-0001 - PRESTRESSED CONCRETE BRIDGE STRUCTURE
ITEM 8100-0001 - STEEL BRIDGE STRUCTURE

Construct one of the above at Segment 0010, Offset 0397.

Provision Body:

PART A

I. DESCRIPTION - This work is either construction of the bridge structure as designed or designing and constructing an equivalent bridge structure of an alternate design in place of the "as-designed" bridge structure.

II. DESIGN -

(a) General. If an alternate design bridge structure is bid, furnish, to the Department, preliminary conceptual design calculations and drawings for the alternate bridge structure, on reproducible tracing cloth or drafting film. Provide an alternate design equivalent to the original design and meeting applicable design criteria for strength and serviceability. Submit the alternate design to the District Bridge Engineer for acceptance. Refer to PENNDOT Design Manual Part 4, PP 1.10, Bridge Submissions-Construction Phase, for details on procedures for contractor submissions. If the equivalency of an alternate design cannot be clearly established, the Chief Bridge Engineer will arbitrate and the Chief Bridge Engineer's decision will be final. Furnish, with the preliminary conceptual design submission, a tabulation identifying the differences between the "as-designed" bridge structure and the alternate design bridge structure.

Any delay in submission and acceptance of a proposed alternate design or a revision, and/or approval of required permits, will not extend the contract time.

If an alternate design bridge structure is bid, and an acceptable preliminary conceptual design is not approved within 30 calendar days from the award date (6 days for the submission and 24 days for Department review), construct the "as-designed" bridge structure at no additional cost to the Department.

Alternate designs which take advantage of any errors and/or omissions in the plans for the "as-designed" bridge structure, or discrepancies between the "as-designed" bridge structure plans and the special provisions covering alternate designs, will not be accepted. In the event any such error, omission, or discrepancy is discovered, immediately notify the Department. Failure to notify the Department will constitute a waiver of all claims for misunderstandings, ambiguities, or other situations resulting from the error, omission, or discrepancy.

Experimental or demonstration-type design concepts; or products, structures, or elements not preapproved by the Department for general usage, will not be allowed in the alternate design.

Only eligible types of bridge structures, as shown in the Project Items and Quantities, bid documents, or special provisions, are allowed as contractor-designed alternates.

Value Engineering will not be allowed for elements changed by an approved alternate design.

Use the same type foundation for an alternate design as that indicated for the "as-designed" bridge structure. Contractor-designed alternate foundation types will not be allowed, but Value Engineering of the as-designed foundation will be allowed.

Do not use Integral or Semi-Integral Abutment design as an alternate or as Value Engineering.

Have the alternate design completed by a Professional Engineer (P.E.) registered in the Commonwealth of Pennsylvania.

Submit an affidavit, before or along with the preliminary conceptual design submission, stating that the designer is familiar with AASHTO, PENNDOT, and other applicable design criteria, standards, and construction specifications. Also, submit a list of bridges designed for the Department within the past 5 years.

In identifying alternate design bridge structures, retain the "as-designed" bridge structure number, but suffix the numbers with the letters A, B, etc.

Show, on all sheets of the alternate design, the seal of a P.E. registered in the Commonwealth of Pennsylvania, a valid signature in ink, the date signed, a business name, a business address, and the note "These drawings (S-XXXXXA) supersede drawings (S-XXXXX) approved (insert appropriate date)".

The Department will furnish tracings and design computations for the "as-designed" bridge structure to the successful bidder upon request.

Complete original plans for an alternate design entirely in either ink or pencil. Make changes in the same medium. Prepare alternate design plans using Department drafting standards.

Ink reproductions on tracing cloth may be furnished, if made by the "contact negative process".

(b) Design Computations and Design Specifications. On the first sheet of the computations for the alternate design show the seal of a P.E. registered in the Commonwealth of Pennsylvania, a valid signature in ink, and the date signed.

Provide a complete set of computations for the alternate design of the superstructure and/or substructure, including foundation. Reproduce and insert computations from the "as-designed" bridge structure, as needed. Provide additional calculations, as needed by the District Bridge Engineer to evaluate any details, throughout the life of the contract.

Designs copied directly from approved Department Standards need not be documented through independent computations. List such designs on the submission by referencing the drawing number of the applicable standard, and the sheet number, table, or graph.

Use PENNDOT Design Manual Part 4 for design policy procedures and criteria. All design related Strike-off Letters listed in PART B, "SPECIAL DRAWINGS AND SPECIAL DESIGN REQUIREMENTS", are applicable to the alternate design.

In the event that certain design parameters, stresses, or specifications are in conflict, the following order of predominance governs:

- Design requirements listed herein and in PART B, "SPECIAL DRAWINGS AND SPECIAL DESIGN REQUIREMENTS."
- Design related Strike-off Letters in effect on the date of project advertisement. Refer to the list in PART B.
- PENNDOT Design Manual Part 4, "Structures"
- PENNDOT Bridge Design and Bridge Construction Standards
- AASHTO Standard Specifications for Highway Bridges, and interim specifications, as indicated for the "as-designed" bridge structure.

In the event that a clear order of predominance cannot be established, or a difference in the interpretation of the design criteria, standards, specifications, or methodology cannot be resolved, the Chief Bridge Engineer will arbitrate and the Chief Bridge Engineer's decision will be final.

Do not use BLC standards unless HS-20 design load is specifically allowed by the "as-designed" plans or in PART B.

Submit shop drawings on standard ANSI D size 863.6 mm × 558.8 mm (34 inch by 22 inch) to the District Bridge Engineer for review and acceptance. The Department is not responsible for work done without approved shop drawings.

If any provisions in PART B conflict with those in PART A, the provisions in PART B are to govern.

Within 60 calendar days after completion of the bridge structure, revise the structure drawings to show "as-built" conditions and submit them to the Representative. If caissons or piles are utilized, show, on the bridge elevation view, the maximum and minimum tip elevation and the average length for each substructure unit.

(c) Design Requirements. In the design of an alternate bridge structure, comply with PENNDOT Design Manual Part 4, "Structures", and other design criteria as specified for the "as-designed" bridge structure, subject to the exceptions and/or additions in PART B, "SPECIAL DRAWINGS AND SPECIAL DESIGN REQUIREMENTS".

Provide clear span distances between faces of substructure units and underclearances of not less than the minimum values indicated for the "as-designed" bridge structure, except as noted in PART B.

The minimum underclearance for stream or river crossings is defined as the high water elevation for the design flood plus the specified debris clearance or as indicated for the "as-designed" bridge structure, whichever is less.

The minimum clearance for overpass structures is defined as the minimum required underclearance plus 75 mm (3 inches) or the minimum underclearance indicated for the "as-designed" bridge structure, whichever is less. Provide additional underclearance to compensate for foundation settlement if applicable to the alternate design.

Provide equivalent inspection and maintenance accessibility for the alternate bridge structure as for the "as-designed" bridge structure. In case of a disagreement on accessibility, the Chief Bridge Engineer's decision will be binding.

Do not change the indicated horizontal and vertical alignments, except as noted in PART B.

For an alternate bridge structure, design the substructure to be within the limits of allowable foundation pressures and allowable pile loads, as indicated for the "as-designed" bridge structure.

Provide structure and end structure drainage as indicated for the "as-designed" bridge structure.

1. Deck Joints. Provide the same type and number of expansion joints for an alternate bridge structure as specified for the "as-designed" bridge structure.

2. Bearings. Provide the same type bearings for an alternate bridge structure as specified for the "as-designed" bridge structure.

Provide an expansion dam support system as indicated for the "as-designed" bridge structure unless otherwise specified in PART B, "SPECIAL DRAWINGS AND SPECIAL DESIGN REQUIREMENTS".

3. Superstructure. If the as-designed bridge superstructure consists of curved girders, as shown on the structure drawings, the alternate design bridge superstructure is also to consist of curved girders.

Provide slab designs conforming to the requirements of Standard Drawing BD-601M. Use composite design only, unless the "as-designed" bridge structure utilized noncomposite design.

4. Super Load Bridge Beams. Do not use super load bridge beams (beams over 48 800 mm (160 feet) in length or total load over 894 kN (201,000 pounds) gross weight) unless included in the "as-designed" bridge structure or permitted in PART B, "SPECIAL DRAWINGS AND SPECIAL DESIGN REQUIREMENTS". Verify that an oversize and/or overweight permit can be issued for superloads, before incorporating them into the alternate design.

If super load bridge beams are used, for transportation of these beams conform to the requirements of PENNDOT Design Manual Part 4, Appendix E, and the following:

- o Requests for waiver of any provisions of Chapter 179 of Title 67 will not be approved, except as noted herein.
- o Transportation equipment axles will not be permitted in excess of 120 kN (27,000 pounds), regardless of gross weight.

5. Alternate Prestressed Concrete Bridge Structure. Use the Department's prestressed concrete girder computer program to design precast prestressed concrete beams.

Prestressed Concrete Beams. Prestressed concrete beam sections, differing significantly from the standards specified herein, will be considered special sections and subject to the requirements of Section 1107.03(a)4. Do not deviate from the minimum flange and web thicknesses or section properties shown in the Bridge Design Standards.

The redesign of precast diaphragms as specified in PENNDOT DWG. #95-604-BQAD dated 11/20/96 from as designed cast-in-place diaphragms will be considered an alternate bridge structure also.

Use of low mass (lightweight) concrete for prestressed beams is not allowed.

- o Deck Slab. If the effective slab span is less than 1100 mm (3 1/2 feet), a minimum slab thickness of 190 mm (7 1/2 inches), using all No. 13 (No. 4) reinforcement bars, is allowed.

- o Prestressed Concrete Segmental Box Girders. Use either single or multiple cell box girders, trapezoidal in shape (inclined webs) or rectangular in shape (vertical webs). Provide for future deck removal and replacement in the design and details. Conform to design criteria specified for the "as-designed" bridge structure; and as follows:

Cast-in-place joints may be used to join precast segments, in place of match cast joints sealed with epoxy. If cast-in-place joints are used, shear keys may be omitted. However, if shear keys are omitted, striate and/or heavy score the surfaces to be joined to a minimum depth of 6 mm (1/4 inch). Use the same concrete mix for cast-in-place joints as for the precast segments, and ensure that strength development is the same.

Maintain a joint width as needed for coupling conduits, welding or lapping reinforcement, and placement of concrete, but in no case allow a joint width of less than 100 mm (4 inches) at the closest point. Keep adjacent concrete surfaces thoroughly wet or apply an approved bonding agent before placing concrete in the joint.

Identify anchor piers. Provide box girder diaphragms having sufficient openings to allow for continuous inspection of the inside of the box girder. Provide steel access doors with master locks, at each abutment, for each box. Provide diaphragms that are substantially solid at piers and abutments, except for access and utility holes.

Design adjacent prestressed box beam as a composite beam unless otherwise specified in PART B, "SPECIAL DRAWINGS AND SPECIAL DESIGN REQUIREMENTS".

6. Alternate Steel Bridge Structure. Do not use unpainted weathering steel unless permitted in PART B, "SPECIAL DRAWINGS AND SPECIAL DESIGN REQUIREMENTS".

Do not include longitudinal stiffeners in computing steel section properties.

7. Nonstandard Designs. Do not submit an alternate design bridge structure, either prestressed concrete or steel, which is not covered by the aforementioned Standards, or under PART B, "SPECIAL DRAWINGS AND SPECIAL DESIGN REQUIREMENTS".

8. Pile-Supported Foundation. Base pile design for the alternate bridge structure on the same type, size, length, tip reinforcement, maximum design load, and driving criteria specified for piles for the "as-designed" bridge structure. Piles will be measured and paid for as specified herein.

Include test piles in the lump sum price bid for the bridge structure. Provide the same number of test piles per substructure unit for alternate designs as specified per substructure unit for the "as-designed" bridge structure.

Load test piles, when specified for the "as-designed" bridge structure, will be measured and paid for separately, as specified. Provide the same number of load test piles per bridge structure for an alternate design as specified for the "as-designed" bridge structure, located at a substructure unit as close as possible to the "as-designed" location.

Bearing piles, additional test piles, test pile extensions, load test pile extensions, and pile tip reinforcement will be measured and paid for separately as specified in Section 1005.4. Determine test pile extensions and load test pile extensions relative to the pile lengths indicated in the estimated quantities for the "as-designed" bridge structure or approved alternate bridge structure.

Record the bid quantities for bearing piles and pile tip reinforcement in the spaces provided in the Project Items and Quantities for the alternate design.

Base the estimated quantity for bearing piles used in an alternate design on maximum utilization of the allowable design load indicated for piles used in the "as-designed" bridge structure.

Calculate the lengths of bearing piles used in an alternate design as follows:

- o Determine the bearing pile length for each as-designed substructure unit, to the next longer 100 mm (foot), by dividing the quantity of bearing piles by the number of bearing piles for that unit, using the estimated quantities indicated for the "as-designed" bridge structure.
- o For alternate designs involving the relocation of substructure units, determine bearing pile lengths by straight line interpolation, to the next 100 mm (foot), using as-designed pile lengths and the average distance between as-designed substructure units in back and ahead of the relocated unit. Base the average distance between as-designed substructure units on measurements between the centerlines of piers (or centerline of bearing at abutments) along the centerlines of exterior girders or beams. If the alternate design bridge structure is longer than the "as-designed" bridge structure, provide bearing piles for the relocated abutment of the same length as the bearing piles for the as-designed abutment.
- o If one of the as-designed substructure units in back or ahead of a relocated unit is wholly supported on a spread foundation, determine the bearing pile length for the relocated unit, to the next 100 mm (foot), by a straight line interpolation, using the bearing pile length of the as-designed, pile supported unit and zero length at the spread foundation supported unit. However, do not use lengths of less than 3000 mm (10 feet) for determining the bid quantity.
- o For relocated substructure units, test pile lengths, which are included in the lump sum price for the alternate design bridge structure, are to be the average lengths determined using the procedures specified above. The load test pile length at a relocated substructure unit is to be the same as the bearing pile length at that unit.
- o For the purpose of determining pile lengths at relocated substructure units, consider a unit relocated if the average distance from the closest, as-designed unit is 6000 mm (20 feet) or more. Determine the average distance as specified above.

Show the estimated quantities of as-designed load test piles, test piles, bearing piles, and pile tip reinforcement used in an alternate design on the alternate design plans when submitted for approval. Show test pile lengths, included in the lump sum price bid for the alternate bridge structure, and load test pile length, included in the lump sum price bid for load test piles, in the estimated quantities. Tabulate piling quantities using a format similar to that used for the "as-designed" bridge structure. Show alternate design bid quantities for load test piles, bearing piles, and pile tip reinforcement for comparison with approved, as-designed, estimated quantities.

Value Engineering of as-designed piles used in an approved alternate design bridge structure is allowed.

If as-designed piles for a relocated substructure unit in an alternate design cannot be driven, thereby necessitating a redesign of the substructure unit, furnish the revised design and complete construction drawings as part of the lump sum price bid for the alternate bridge structure.

If the as-designed pile layout can not be used in an alternate design involving a relocated substructure unit, alternate design piles will be measured and paid for as part of the lump sum price bid for the alternate bridge structure. Exclude from the bid all pile load tests specified for as-designed piles which are replaced by alternate design piles.

Compute the pay quantity for as-designed bearing piles incorporated into an alternate design as follows:

Case 1: If D and E are less than or equal to B, the Pay Quantity = D

Case 2: If D and E are greater than B, the Pay Quantity = D - (E-B)

Case 3: If E is greater than B but D is equal to or less than B, the Pay Quantity = D

For all other cases, use D as the Pay Quantity.

where:

D = Actual acceptable driven quantity per structure

B = Bid quantity per structure entered in the Project Items and Quantities.

E = Estimated quantity per structure shown on the approved

alternate drawings.

III. MATERIAL - As indicated and as specified for the "as-designed" bridge structure; in accordance with applicable Sections of the Specifications, Publication 408, and numbered changes thereto; and/or the Special Provisions for each respective item included in the bridge structure.

IV. CONSTRUCTION - In accordance with applicable Sections of the Specifications, Publication 408, and numbered changes thereto in effect before the letting date; the Special Provisions for each respective item; and any additional requirements contained herein. Submit construction procedures for an alternate design, for acceptance, if other than those contained herein.

Erection methods are open, but submit the proposed method to the Chief Bridge Engineer for approval.

If utility relocations are required to accommodate the proposed locations of substructure units in an alternate design, be responsible for the cost of the utility relocations and any related delay claim costs.

V. MEASUREMENT AND PAYMENT - Lump Sum

For the type of alternate design bridge structure selected, subject to a reduction equal to the amount of the Contractor's share of the Department's engineering costs to be determined as follows:

- For each alternate bridge structure with lump sum bid item amount less than \$2,000,000 = 2% of the lump sum bid amount for structure
- For each alternate bridge structure with lump sum bid item amount over \$2,000,000 = \$40,000 plus 0.25% of the lump sum bid amount over \$2,000,000, total amount not to exceed \$85,000

Each alternate bridge structure involving a redesign from cast-in-place diaphragms to precast diaphragms will be subject to a reduction of \$300 per structure if contractor's bid lump for lump sum item is less than \$2,000,000 and a reduction of \$750 per lump sum item if structure is over \$2,000,000, for the amount of the Contractor's share of the Department's engineering cost.

The Contractor's share of the Department's engineering costs will be recovered by processing a contract adjustment (Alternate Design Review) to reduce the contract lump sum price by an amount equal to the Contractor's share.

A utility company's share of fabricated structural steel and/or installation of sleeves, inserts, casings, hanger assemblies, ducts, etc. for utilities is to be a separate item. Do not include the utility company's share in the bid price for the alternate design bridge structure unless otherwise specified.

For an alternate design bridge structure, all items of work are to be included in and will be paid for as part of the contract lump sum price; except, bearing piles; pile tip reinforcement; pile load tests; dynamic pile testing; Class C cement concrete under footings; Class 3 excavation, reinforcement bars, and Class A cement concrete for pedestals; and caissons.

Placing deck concrete in excess of the indicated quantity will not be considered a change from the design. The contract lump sum price for each alternate bridge structure includes full compensation for all deck concrete.

(a) Bridge Structure As Designed. If the "as-designed" bridge structure is bid, submit the "Component Item Schedule", included with the Proposal, as specified in Section 103.01(a).

Make the "Total" at the end of the "Component Item Schedule" equal the amount of the lump sum bid for Bridge Structure as Designed.

(b) Alternate Bridge Structure. If an alternate design bridge structure is bid, the apparent low bidder is required to submit a "Component Item Schedule for Alternate Design" as specified in Section 103.01(a). No adjustments will be made to the contract lump sum price bid for alternate design bridge structure for any field adjustments necessary to complete the structure.

Make the "Total" at the end of the "Component Item Schedule for Alternate Design" equal the amount of the lump sum bid for Alternate Bridge Structure.

(c) Alternate Structure Design Costs. The apparent low bidder is to include a component item for Alternate Design Costs in the Component Item Schedule when an alternate design is bid. Include the cost of this item in the total of the lump sum bid price. Payment of 25% of the total design costs will be made upon approval of the preliminary conceptual design. The remaining amount will be paid for in a proportionate manner, designated by the Department, on the basis of approval of the final design.

00 - c80042 PART B - SPECIAL DRAWINGS AND SPECIAL DESIGN REQUIREMENTS S-29760

Addendum:

Associated Item(s):

Header:

PART B - SPECIAL DRAWINGS AND SPECIAL DESIGN REQUIREMENTS

Provision Body:

Design Alternate Structures as specified and in accordance with the applicable PennDOT Strike-Off letters listed in the attachment entitled "Bridge/Structures Related Effective Policy Letters for Contractor's Alternate Designs".

A minimum underclearance of 24'-3" is to be provided. The minimum horizontal clearances from the centerline of rail are to be 18'-0" South and 12'-6" North.

Do not use precast panel forms for placing the concrete deck slab in lieu of metal stay-in-place forms.

For all alternate structural designs, submit with conceptual drawing submission a list describing all changes made to the as-designed structure.

Do not use alternate types of abutments or foundations.

A complete set of computations is required for the alternate design. Document all loadings that are applicable to the alternate design.

Do not change the vertical or horizontal alignment of T-364 (Eby Chiques Road) from what is indicated on the as-designed plans.

The skew angle of the structure may not be changed.

Do not use precast concrete parapets.

Do not slip-form cast-in-place concrete parapets.

Provide epoxy coated reinforcement bars in the entire structure.

Provide alternate designs in English units.

Do not relocate the substructure units.

If a steel alternate is selected, paint the structural steel in accordance with Section 1060.

A minimum embedment depth of 3'-6" as measured from the finished ground line in front of the abutments to the bottom of the footing must be provided for frost protection.

Do not use light-weight concrete.

Do not use concrete segmental construction.

In any alternate superstructure design, use composite design for superimposed dead loads and live loads. Submit the erection methods to the District Bridge Engineer for approval. Do not exceed the design stresses with temporary erection stresses.

Do not use steel box girders.

A back wall is required if a steel superstructure is selected.

If a steel superstructure is selected, provide I-shaped girders. If a prestressed concrete superstructure is selected, provide I-beams or box beams conforming to the BD standard drawings.

If I-shaped girders are selected, they can be hybrid girders, or any standard shape, or standard shapes modified in depth and/or configuration to fit the proposed design concept.

For steel or prestressed concrete superstructures alternates, use only laminated neoprene-bearing pads. Design the bearings using the BPLRFD program.

Design alternate structures with a minimum of five longitudinal girders in the bridge cross-section.

Design alternates as a single span structure with a reinforced concrete deck slab.

Maintain lane and shoulder configurations as indicated on the "as-designed" cross-section.

The Department reserves the right to reject alternate designs for aesthetic reasons or quality of product.

Design alternate structures as specified for Seismic Zone 2 and in accordance with Design Manual 4, and applicable Strike-Off Letters.

I30141B - c85101 ITEMS 8510/8520-0001 - PRECAST RC BOX CULVERT, AS DESIGNED & ALTERNATE, S-31698

Addendum:

Associated Item(s): 8510-0001, 8520-0001

Header:

ITEM 8510-0001 - PRECAST REINFORCED CONCRETE BOX CULVERT, AS DESIGNED, S-31698

ITEM 8520-0001 - CAST-IN-PLACE REINFORCED CONCRETE BOX CULVERT

Construct one of the above at Segment 0010, Offset 1006.

Provision Body:

PART A

I. DESCRIPTION - This work is either construction of the culvert as designed or designing and constructing an equivalent culvert of an alternate design in place of the "as-designed" culvert.

II. DESIGN -

(a) General. If an alternate design culvert is bid, furnish, to the Department, preliminary conceptual design calculations and drawings for the alternate culvert, on reproducible tracing cloth or drafting film. Provide an alternate design equivalent to the original design and meeting applicable design criteria for strength and serviceability. Submit the alternate design to the District Bridge Engineer for acceptance. Furnish, with the preliminary conceptual design submission, a tabulation identifying the major differences between the "as designed" culvert and the alternate design culvert.

Any delay in submission and acceptance of a proposed alternate design will not extend the contract time.

If an alternate design culvert is bid, and an acceptable preliminary conceptual design is not approved within 30 calendar days from the award date (6 days for the submission and 24 days for Department review), the Department reserves the right to reject the alternate design. Resubmit an acceptable alternate design or furnish the "as-designed" culvert at no additional cost to the Department.

Experimental or demonstration-type design concepts; or products, structures, or elements not preapproved by the Department for general usage, will not be permitted in the alternate design.

Value Engineering may be applied to the "as-designed" culvert, but do not Value Engineer an alternate design culvert.

Have the alternate design completed by a Professional Engineer (P.E.) registered in the Commonwealth of Pennsylvania.

In identifying alternate design culverts, retain the "as designed" culvert number, but suffix the number with the letters A, B, etc.

Show, on the alternate design, the seal of a P.E. registered in the Commonwealth of Pennsylvania, a valid signature in ink, the date signed, a business name, a business address, and the note "These drawings (S-XXXXXA) supersede drawings (S-XXXX) approved (insert appropriate date)".

The Department will furnish tracings for the "as-designed" culvert upon request.

Complete original plans for an alternate design entirely in either ink or pencil. Make changes in the same medium.

Ink reproductions on tracing cloth may be furnished, if made by the "contact negative process".

(b) Design Computations and Design Specifications. On the first sheet of the computations for the alternate design, show the seal of a P.E. registered in the Commonwealth of Pennsylvania, a valid signature, and the date signed.

Perform required design of an alternate culvert in accordance with current Department practice, unless otherwise indicated or specified. Current design practice includes the use of all applicable codes and Department design specifications, publications, policies, and procedures in effect on the date bids are opened.

In the event that certain design parameters, stresses, or specifications are in conflict, the following order of predominance governs:

- Design requirements listed herein and in PART B, "SPECIAL DRAWINGS AND SPECIAL DESIGN REQUIREMENTS".
- Design related Strike-off letters in effect on the date of project advertisement. Refer to the list in PART B.
- Pennsylvania Department of Transportation (PENNDOT) Design Manual Part 4M (Design Manual Part 4).
- PENNDOT Design Standards.
- AASHTO Standard Specifications for Highway Bridges, and interim specifications, as indicated for the "as-designed" walls.

In the event that a clear order of predominance cannot be established, or a difference in the interpretation of the design criteria, standards, specifications, or methodology cannot be resolved, the Chief Bridge Engineer will be arbiter and the Chief Bridge Engineer's decision will be final.

Submit shop drawings to the District Engineer for review and acceptance. The Department will in no way be responsible for work done without approved shop drawings.

(c) Design Requirements. In the design of an alternate culvert, comply with PENNDOT Design Manual Part 4, "Structures", and other design criteria as specified for the "as-designed" culvert, subject to the exceptions and/or additions in PART B, "SPECIAL DRAWINGS AND SPECIAL DESIGN REQUIREMENTS".

Do not change the indicated horizontal and vertical alignment or the waterway opening of the culvert, except as noted in PART B.

Design the alternate culvert to be within the limits of allowable foundation bearing pressures as indicated for the "as-designed" culvert. Do not change the bottom of footing elevation, unless approved by the District Bridge Engineer or District Geotechnical Engineer.

Do not change from the culvert protective system(s) indicated or specified for the "as-designed" culvert.

III. MATERIAL - As indicated and as specified for the "as-designed" culvert; in accordance with applicable sections of the Specifications, Publication 408, and numbered changes thereto; and/or the Special Provisions for each respective item included in the culvert. Provide Class A Cement Concrete for cast-in-place walls and footings.

IV. CONSTRUCTION - In accordance with applicable sections of the Specifications, Publication 408, and numbered changes thereto in effect before the letting date; the Special Provisions for each respective item; and any additional requirements contained herein. Submit construction procedures for an alternate design for acceptance, if other than those contained herein.

If utility relocations are required as part of an alternate design, be responsible for the cost of the utility relocations and any related delay claim costs.

If unsuitable foundation material or rock is encountered, construct footings as specified in Section 1085.3(g)1. Excavation beyond the limits indicated or specified and backfill material required to replace unsuitable material will be paid for in accordance with Section 110.03(c).

Install precast concrete culvert segments starting from the outlet end; taking special care to place segments to the correct line and grade.

Seal all joints between precast concrete culvert segments with membrane waterproofing as shown on the Standard Drawings.

V. MEASUREMENT AND PAYMENT - Lump Sum

For the type of alternate design culvert selected; subject to a reduction of \$1,000 for each alternate culvert for the Contractor's share of the Department's engineering costs.

The Contractor's share of the Department's engineering costs will be recovered by processing a work order, using the contract item number for the applicable Alternate Culvert and Item Type Code B. The contract lump sum price will be reduced by an amount equal to the Contractor's share.

A utility company's share of fabricated structural steel and/or installation of sleeves, inserts, casings, hanger assemblies, ducts, etc. for utilities is to be a separate item. Do not include the utility company's share in the bid price for the alternate design culvert unless otherwise specified.

(a) Culvert As Designed. If the "as-designed" culvert is bid, submit the "Component Item Schedule", included with the Proposal, as specified in Section 103.01(a).

Make the "Total" at the end of the "Component Item Schedule" equal the amount of the lump sum bid for Culvert As Designed.

(b) Alternate Culvert. If an alternate design culvert is bid, the apparent low bidder is required to submit a "Component Item Schedule for Alternate Design" as specified in Section 103.01(a). No adjustments will be made to the contract lump sum price bid for alternate design culvert for any field adjustments necessary to complete the structure.

Make the "Total" at the end of the "Component Item Schedule for Alternate Design" equal the amount of the lump sum bid for Alternate Culvert.

(c) Alternate Structure Design Costs. The apparent low bidder is to include a component item for Alternate Design Costs in the Component Item Schedule when an equivalent item of an alternate design is bid. Include this item in the total of the lump sum bid price. Payment of 25% of the total design costs will be made upon approval of the preliminary conceptual design. The remaining amount will be paid for in a proportionate manner, designated by the Department, on the basis of approval of the final design.

00 - c85102 PART B - SPECIAL DRAWINGS AND SPECIAL DESIGN REQUIREMENTS, S-31698

Addendum:

Associated Item(s):

Header:

PART B - SPECIAL DRAWINGS AND SPECIAL DESIGN REQUIREMENTS, S-31698

Provision Body:

PART B - SPECIAL DRAWINGS AND SPECIAL DESIGN REQUIREMENTS, S-31698

Design alternate structures as specified and in accordance with the applicable strike-off letters listed in the attachment entitled "Bridge/Structures related Effective Policy Letters for Contractor's Alternate Designs".

Relocation of box culvert and substructure units is not permitted.

Use epoxy coated reinforcing bars in the culvert, headwalls, wingwall stems and footings as indicated.

Maintain the as-designed minimum vertical and horizontal clearance.

Maintain the as-designed profile grade elevations.

Use PENNDOT's computer program "BXLRFD" for design, including latest revisions.

Design alternate structures in accordance with AASHTO and as supplemented by the Design Manual, Part 4, Structures and the BD-600M and BC-700M Series standards.

Be responsible for revising the Erosion and Sediment Pollution Control Plan as necessary to construct the alternate structure.

Submit an alternate Erosion and Sediment Pollution Control Plan to the Lancaster County Conservation District for approval, with a copy submitted to the Inspector-in-Charge.

Box culvert must tie-in with adjacent MSE Retaining Walls using details shown on BC-799M Sheet 3 of 13.

Alternate design for cast-in-place box culvert must have reinforced concrete paved invert or be supported on a pile foundation.

Do not use welded wire fabric with the exception of cast-in-place aprons, which if used, must be epoxy coated.

130121B - c86101 ITEMS 8610-0001/0002/0003/0004 & 8622-0001/0002/0003/0004 - ALTERNATE WALLS

Addendum:

Associated Item(s): 8610-0001, 8610-0002, 8610-0003, 8610-0004, 8622-0001, 8622-0002, 8622-0003, 8622-0004

Header:

ITEM 8610-0001 - CONCRETE RETAINING WALL
ITEM 8610-0002 - CONCRETE RETAINING WALL
ITEM 8610-0003 - CONCRETE RETAINING WALL
ITEM 8610-0004 - CONCRETE RETAINING WALL

ITEM 8622-0001 - PRECAST MODULAR WALL
ITEM 8622-0002 - PRECAST MODULAR WALL
ITEM 8622-0003 - PRECAST MODULAR WALL
ITEM 8622-0004 - PRECAST MODULAR WALL

SR 4062

RETAINING WALL A - STATION 300+75.00 TO 303+87.33
RETAINING WALL B - STATION 301+25.00 TO 303+87.33
RETAINING WALL C - STATION 305+38.33 TO 310+60.00
RETAINING WALL D - STATION 305+38.33 TO 311+00.00

Provision Body:

PART A

I. DESCRIPTION - This work is designing and constructing retaining walls and/or wingwalls as specified herein and in accordance with the specifications for the retaining wall and/or wingwall selected.

II. DESIGN -

(a) General. If alternate designs are bid, furnish to the Department, preliminary conceptual design calculations and drawings for the retaining walls and/or wingwalls, on reproducible tracing cloth or drafting film. Submit the design to the District Office for acceptance within 6 calendar days from the award date.

On the design plans include the type of wall, location, length, top elevation(s), proposed bottom of footing/leveling pad elevation(s), cross-sections including backfill material type and limits, and quantities. Also show, as required, details for parapets, copings, barriers, conduit, or other attachments to precast wall panels/units. Show complete layout plans and fabrication details for precast wall panels/units and footings/leveling pads including reinforcement and attachments, and step-by-step erection instructions. Include details for strip or wire mesh reinforcement and attachments, for anchoring panels into the soil. Any fabrication done prior to acceptance of the plans will be at the Contractor's risk.

Any delay in submission and acceptance of a proposed design will not extend the contract time.

Experimental or demonstration-type design concepts; or products, structures, or elements not preapproved by the Department for general usage, will not be permitted in the design.

Have the design of retaining walls and/or wingwalls completed by a Professional Engineer (P.E.) registered in the Commonwealth of Pennsylvania.

Show, on the design, the seal of a P.E. registered in the Commonwealth of Pennsylvania, a valid signature in ink, the date signed, a business name, and a business address.

Complete original plans entirely in either ink or pencil. Make changes in the same medium.

Ink reproductions on tracing cloth may be furnished, if made by the "contact negative process".

(b) Design Computations and Design Specifications. On the first sheet of the computations show the seal of a P.E. registered in the Commonwealth of Pennsylvania, a valid signature, and the date signed.

Perform required design of retaining walls and/or wingwalls in accordance with current Department practice, unless otherwise indicated or specified. Current design practice includes the use of all applicable codes and Department design specifications, publications, policies, and procedures in effect on the date bids are opened.

In the event that certain design parameters, stresses, or specifications are in conflict, the following order of predominance governs:

- Design requirements listed herein and in PART B, "SPECIAL DRAWINGS AND SPECIAL DESIGN REQUIREMENTS".
- Design related Strike-off letters in effect on the date of project advertisement. Refer to the list in PART B.
- Pennsylvania Department of Transportation (PENNDOT) Design Manual Part 4.
- PENNDOT Design Standards.
- AASHTO Standard Specifications for Highway Bridges, and interim specifications.

In the event that a clear order of predominance cannot be established, or a difference in the interpretation of the design criteria, standards, specifications, or methodology cannot be resolved, the Chief Bridge Engineer will be arbiter and the Chief Bridge Engineer's decision will be final.

(c) Design Requirements. In the design of retaining walls and/or wingwalls, comply with PENNDOT Design Manual Part 4, "Structures", Section 5, subject to the exceptions and/or additions in PART B, "SPECIAL DRAWINGS AND SPECIAL DESIGN REQUIREMENTS".

Do not change the indicated horizontal and vertical alignment of retaining walls and/or wingwalls, except as noted in PART B.

Design retaining walls and/or wingwalls to be within the indicated limits of allowable foundation bearing pressures and allowable pile loadings.

III. MATERIAL - In accordance with applicable sections of the Specifications, Publication 408, and numbered changes thereto; and/or the Special Provisions for each respective item included in the walls.

Use the same materials throughout any individual wall, or at both ends of any individual structure, unless otherwise specified or indicated.

IV. CONSTRUCTION - In accordance with applicable sections of the Specifications, Publication 408, and numbered changes thereto in effect before the letting date; the Special Provisions for each respective item; and any additional requirements contained herein. Submit construction procedures for acceptance, if other than those contained herein.

V. MEASUREMENT AND PAYMENT - Lump Sum

A utility company's share of fabricated structural steel and/or installation of sleeves, inserts, casings, hanger assemblies, ducts, etc. for utilities is to be a separate item. Do not include the utility company's share in the bid price for the retaining wall and/or wingwall unless otherwise specified.

All items of work are to be included in and will be paid for as part of the contract lump sum price; except, bearing piles; pile tip reinforcement; pile load tests; dynamic pile testing; Class C cement concrete under footings; Class 3 excavation, reinforcement bars, and Class A cement concrete for pedestals; and caissons.

(a) Alternate Structure. The apparent low bidder is required to submit a "Component Item Schedule" as specified in Section 103.01 (a). Tabulate the quantities, unit prices, and bid prices for excavation, select granular material, precast wall panels/units, and footings/leveling pads. Furnish a similar tabulation for any miscellaneous items such as parapets, copings, conduit, junction boxes, lighting pole anchorages, and lighting poles. No adjustments will be made to the contract lump sum price bid for retaining walls and/or wingwalls for any field adjustments necessary to complete the structures.

Make the "Total" at the end of the "Component Item Schedule" equal the amount of the lump sum bid for Retaining Walls and/or Wingwalls.

(b) Alternate Structure Design Costs. The apparent low bidder is to include a component item for Alternate Design Costs in the Component Item Schedule when an equivalent item of an alternate design is bid. Include this item in the total of the lump sum bid price. Payment of 25% of the total design costs will be made upon approval of the preliminary conceptual design. The remaining amount will be paid for in a proportionate manner, designated by the Department, on the basis of approval of the final design.

I30101B - c86211 ITEMS 8621-0001/0002/0003/0004 - MECHANICALLY STABILIZED RETAINING WALLS, AS-DESIGNED & ALTS.

Addendum:

Associated Item(s): 8621-0001, 8621-0002, 8621-0003, 8621-0004

Header:

- ITEM 8621-0001 - MECHANICALLY STABILIZED RETAINING WALL A, AS DESIGNED, S-29761
- ITEM 8610-0001 - CONCRETE RETAINING WALL
- ITEM 8622-0001 - PRECAST MODULAR RETAINING WALL

Construct one of the items 8621-0001, 8610-0001 or 8622-0002 at Segment 0010, Offset 0075.

- ITEM 8621-0002 - MECHANICALLY STABILIZED RETAINING WALL B, AS DESIGNED, S-29762
- ITEM 8610-0002 - CONCRETE RETAINING WALL
- ITEM 8622-0002 - PRECAST MODULAR RETAINING WALL

Construct one the items 8621-0002, 8610-0002 or 8622-0002 at Segment 0010, Offset 0125.

- ITEM 8621-0003 - MECHANICALLY STABILIZED RETAINING WALL C, AS DESIGNED, S-29759
- ITEM 8610-0003 - CONCRETE RETAINING WALL
- ITEM 8622-0003 - PRECAST MODULAR RETAINING WALL

Construct one the items 8621-0003, 8610-0003 or 8622-0003 at Segment 0010, Offset 0538.

ITEM 8621-0004 - MECHANICALLY STABILIZED RETAINING WALL D, AS DESIGNED, S-29763
ITEM 8610-0004 - CONCRETE RETAINING WALL
ITEM 8622-0004 - PRECAST MODULAR RETAINING WALL

Construct one the items 8621-0004, 8610-0004 or 8622-0004 at Segment 0010, Offset 0538.

Provision Body:

PART A

I. DESCRIPTION - This work is either construction of retaining walls and/or wingwalls as designed or designing and constructing equivalent retaining walls and/or wingwalls of an alternate design, in lieu of the "as-designed" retaining walls and/or wingwalls, as specified herein and in accordance with the specifications for the alternate retaining wall and/or wingwall selected.

II. DESIGN -

(a) General. If alternate design retaining walls and/or wing-walls are bid, furnish, to the Department, preliminary conceptual design calculations and drawings for the alternate retaining walls and/or wingwalls, on reproducible tracing cloth or drafting film. Provide an alternate design equivalent to the original design and meeting applicable design criteria for strength and serviceability. Submit the alternate design to the District Office for acceptance. Furnish, with the preliminary conceptual design submission, a tabulation identifying the major differences between the "as designed" retaining walls and/or wingwalls and the alternate design retaining walls and/or wingwalls.

On the alternate design plans include the type of wall, location, length, top elevation(s), proposed bottom of footing/leveling pad elevation(s), cross-sections including backfill material type and limits, and quantities. Also show, as required, details for parapets, copings, barriers, conduit, or other attachments to precast wall panels/units. Show complete layout plans and fabrication details for precast wall panels/ units and footings/ leveling pads including reinforcement and attachments, and step- by- step erection instructions. Include details for strip or wire mesh reinforcement and attachments, for anchoring panels into the soil. Any fabrication done prior to acceptance of the plans will be at the Contractor's risk.

Any delay in submission and acceptance of a proposed alternate design will not extend the contract time.

If alternate design retaining walls and/or wingwalls are bid, and an acceptable preliminary conceptual design is not approved within 30 calendar days from the award date (6 days for the submission and 24 days for Department review), the Department reserves the right to reject the alternate design. Resubmit an acceptable alternate design or furnish the "as-designed" retaining walls and/or wingwalls at no additional cost to the Department.

Experimental or demonstration-type design concepts; or products, structures, or elements not preapproved by the Department for general usage, will not be permitted in the alternate design.

Value Engineering may be applied to the "as-designed" retaining walls and/or wingwalls, but do not Value Engineer alternate design retaining walls and/or wingwalls.

Have the alternate design of retaining walls and/or wingwalls completed by a Professional Engineer (P.E.) registered in the Commonwealth of Pennsylvania.

In identifying alternate design retaining walls and/or wingwalls, retain the "as designed" retaining wall and/or wingwall number, but suffix the number with the letters A, B, etc.

Show, on the alternate design, the seal of a P.E. registered in the Commonwealth of Pennsylvania, a valid signature in ink, the date signed, a business name, a business address, and the note "These drawings supersede drawings approved (insert appropriate date)".

The Department will furnish tracings for the "as-designed" retaining walls and/or wingwalls upon request.

Complete original plans for an alternate design entirely in either ink or pencil. Make changes in the same medium.

Ink reproductions on tracing cloth may be furnished, if made by the "contact negative process".

(b) Design Computations and Design Specifications. On the first sheet of the computations for the alternate design, show the seal of a P.E. registered in the Commonwealth of Pennsylvania, a valid signature, and the date signed.

Perform required design of alternate retaining walls and/or wingwalls in accordance with current Department practice, unless otherwise indicated or specified. Current design practice includes the use of all applicable codes and Department design specifications, publications, policies, and procedures in effect on the date bids are opened.

In the event that certain design parameters, stresses, or specifications are in conflict, the following order of predominance governs:

- Design requirements listed herein and in PART B, "SPECIAL DRAWINGS AND SPECIAL DESIGN REQUIREMENTS".
- Design related Strike-off letters in effect on the date of project advertisement. Refer to the list in PART B.
- Pennsylvania Department of Transportation (PENNDOT) Design Manual Part 4.
- PENNDOT Design Standards.
- AASHTO Standard Specifications for Highway Bridges, and interim specifications, as indicated for the "as-designed" walls.

In the event that a clear order of predominance cannot be established, or a difference in the interpretation of the design criteria, standards, specifications, or methodology cannot be resolved, the Chief Bridge Engineer will be arbiter and the Chief Bridge Engineer's decision will be final.

(c) Design Requirements. In the design of alternate retaining walls and/or wingwalls, comply with PENNDOT Design Manual Part 4, "Structures", Section 5, and other design criteria as specified for the "as-designed" retaining walls and/or wingwalls, subject to the exceptions and/or additions in PART B, "SPECIAL DRAWINGS AND SPECIAL DESIGN REQUIREMENTS".

Do not change the indicated horizontal and vertical alignment of retaining walls and/or wingwalls, except as noted in PART B.

Design alternate retaining walls and/or wingwalls to be within the indicated limits of allowable foundation bearing pressures and allowable pile loadings as indicated for the "as designed" walls.

Provide clear span(s) and/or distances from wall faces of not less than the minimum values indicated for the "as-designed" retaining walls and/or wingwalls, except as noted in PART B.

III. MATERIAL - As indicated and as specified for the "as-designed" retaining walls and/or wingwalls; in accordance with applicable sections of the Specifications, Publication 408, and numbered changes thereto; and/or the Special Provisions for each respective item included in the walls.

Use the same materials throughout any individual wall, or at both ends of any individual structure, unless otherwise specified or indicated.

IV. CONSTRUCTION - In accordance with applicable sections of the Specifications, Publication 408, and numbered changes thereto in effect before the letting date; the Special Provisions for each respective item; and any additional requirements contained herein. Submit construction procedures for an alternate design for acceptance, if other than those contained herein.

If utility relocations are required as part of an alternate design, be responsible for the cost of the utility relocations and any related delay claim costs.

V. MEASUREMENT AND PAYMENT - Lump Sum

For the type of alternate design wall selected; subject to a reduction equal to the amount of the Contractor's share of the Department's engineering costs as follows:

- For each alternate wall \$100,000 or less..... \$1,000
- For each alternate wall over \$100,000 but less than \$500,000..... \$2,000
- For each alternate wall over \$500,000 but less than \$1,000,000.....\$3,500
- For each alternate wall \$1,000,000 or more..... \$5,000

The Contractor's share of the Department's engineering costs will be recovered by processing a work order, using the contract item number for the applicable Alternate Retaining Walls and/or Wingwalls and Item Type Code B. The contract lump sum price will be reduced by the applicable amount equal to the Contractor's share.

A utility company's share of fabricated structural steel and/or installation of sleeves, inserts, casings, hanger assemblies, ducts, etc. for utilities is to be a separate item. Do not include the utility company's share in the bid price for the alternate design walls unless otherwise specified.

For an alternate design wall, all items of work are to be included in and will be paid for as part of the contract lump sum price; except, bearing piles; pile tip reinforcement; pile load tests; dynamic pile testing; Class C cement concrete under footings; Class 3 excavation, reinforcement bars, and Class A cement concrete for pedestals; and caissons.

(a) Retaining Walls and/or Wingwalls As Designed. If the "as-designed" retaining walls and/or wingwalls are bid, submit the "Component Item Schedule", included with the Proposal, as specified in Section 103.01(a).

Make the "Total" at the end of the "Component Item Schedule" equal the amount of the lump sum bid for Retaining Walls and/or Wingwalls As Designed.

(b) Alternate Retaining Walls and/or Wingwalls. If an alternate design retaining wall and/or wingwall is bid, the apparent low bidder is required to submit a "Component Item Schedule for Alternate Design" as specified in Section 103.01(a). Tabulate the quantities, unit prices, and bid prices for excavation, select granular material, precast wall panels/units, and footings/leveling pads. Furnish a similar tabulation for any miscellaneous items such as parapets, copings, conduit, junction boxes, lighting pole anchorages, and lighting poles. No adjustments will be made to the contract lump sum price bid for alternate design retaining walls and/or wingwalls for any field adjustments necessary to complete the structures.

Make the "Total" at the end of the "Component Item Schedule for Alternate Design" equal the amount of the lump sum bid for Alternate Retaining Walls and/or Wingwalls.

(c) Alternate Structure Design Costs. The apparent low bidder is to include a component item for Alternate Design Costs in the Component Item Schedule when an equivalent item of an alternate design is bid. Include this item in the total of the lump sum bid price. Payment of 25% of the total design costs will be made upon approval of the preliminary conceptual design. The remaining amount will be paid for in a proportionate manner, designated by the Department, on the basis of approval of the final design.

00 - c86212 PART B - SPECIAL DRAWINGS AND SPECIAL DESIGN REQUIREMENTS S-29761 / 29762 / 29759 / 29763

Addendum:

Associated Item(s):

Header:

PART B - SPECIAL DRAWINGS AND SPECIAL DESIGN REQUIREMENTS, S-29761, S-29762, S-29759, S-29763

Provision Body:

PART B - SPECIAL DRAWINGS AND SPECIAL DESIGN REQUIREMENTS, S-29761, S-29762, S-29759, S-29763

Design Alternate Structures as specified and in accordance with the applicable PennDOT Strike-Off letters listed in the attachment entitled "Bridge/Structures Related Effective Policy Letters for Contractor's Alternate Designs".

Design structures for Seismic Zone 2 in accordance with Design Manual, Part 4 and applicable Strike-Off Letters.

If a mechanically stabilized wall is bid as the as-designed wall, follow the special provision "MECHANICALLY STABILIZED RETAINING WALL SYSTEMS" for the design, material specifications, and construction requirements, in addition to the requirements listed in Part A and Part B of this specification.

If a precast modular wall system is bid as the alternate wall, follow the special provision "PRECAST MODULAR RETAINING WALL SYSTEMS" for the design, material specifications, and construction requirements, in addition to the requirements listed in Part A and B of this specification.

The proposed roadway alignment and profile may not be changed.

Construction of the retaining walls cannot alter the right-of-way plans. There will be no additional construction easements provided.

Provide only one type of Retaining Wall at all locations specified.

00 - c87001 ITEM 8700-1000 - BRIDGE GROUNDING AND BONDING

Addendum: 2
Associated Item(s): 8700-1000

Header:
ITEM 8700-1000 - BRIDGE GROUNDING AND BONDING

Provision Body:

DESCRIPTION - This work includes the furnishing, delivering, and installing of grounding and bonding materials for attachment to the bridge structure.

MATERIAL - Provide and install all materials as indicated on the contract drawings and in accordance with the National Electric Code and UL-467, Grounding and Bonding Equipment.

CONSTRUCTION - Bond and ground the prestressed beams after installation and before catenary system is energized. Ground temporary protection shielding after installation and before catenary system is energized **in accordance with the attached "Amtrak Drawing ET-1447-D"**.

MEASUREMENT AND PAYMENT - Lump Sum.

00 - c88001 ITEM 8800-0001 - FABRICATION AND ERECTION OF CATENARY STRUCTURES

Addendum:
Associated Item(s): 8800-0001

Header:
ITEM 8800-0001 - FABRICATION AND ERECTION OF CATENARY STRUCTURES

Provision Body:

DESCRIPTION – This work is the fabrication and erection of catenary structures for Electric Traction as shown on the ET Plans. Work includes excavation, temporary excavation support and protection systems and concrete foundations. A complete listing of the material required is on Sheet 43 of 43 of the ET Plans.

MATERIAL AND CONSTRUCTION – As indicated on the ET Plan and as follows:

Complete all work in accordance with the following attachments: Amtrak Specifications, AED-1; Amtrak Catenary Structure Loading, Design Criteria and Standard, AED-2; and AREMA specifications. The AREMA specifications can be found at the following website: <http://www.arena.org/publications/index.aspx>

- (a) Provide notice 30 days in advance to Amtrak to allow inspection of fabricated steel prior to shipment to site.
- (b) Provide and erect fabricated steel as indicated on contract drawings where directed by the Department's Representative and/or Amtrak.

(c) Conform all new structural steel to ASTM standards, designation A992 grade 50 for rolled shapes, A36 for all other shapes.

(d) Galvanized all new structural steel in accordance with ASTM A123 and A153.

(e) Clean all galvanized steel items cut or modified in field with a wire brush and painted with one brush coat or two spray coats of zinc repair material in the affected areas.

(f) Concrete compressive strength is to be 4000 psi at 28 days.

MEASUREMENT AND PAYMENT – Lump Sum. Includes all material, equipment, and labor necessary to fabricate, inspect and erect steel for catenary structures.

00 - c88002 ITEM 8800-0002 - FURNISH AND INSTALL ELECTRIC TRACTION CABLING AND HARDWARE

Addendum:

Associated Item(s): 8800-0002

Header:

ITEM 8800-0002 - FURNISH AND INSTALL ELECTRIC TRACTION CABLING AND HARDWARE

Provision Body:

DESCRIPTION – This work is the furnishing of catenary structures for Electric Traction electric traction cabling and hardware as shown on the ET Plans, sheets 20 to 26 of 43. A complete listing of the material required is on sheet 27 of 43 of the ET Plans.

Complete all work in accordance with the following attachments: Amtrak Specification AED-1 and AREMA specifications at the time of advertisement. The AREMA specifications can be found at the following website: [http:// www.arema.org/ publications/ index.aspx](http://www.arema.org/publications/index.aspx)

MATERIAL – As indicated on ET Plan Sheet 27. The AMMS number is also listed. Includes assemblies, hangers and splices as shown on the ET Plan Sheets 20 to 26 and listed below:

Component Item name

1. Assembly SAP-5 (with Detail B)
2. NA-27A (MOD), Messenger Suspension to Bracket, High Curve
3. NA-35, Steady Insulator Assembly to Beam
4. NA-80 (MOD), Messenger Suspension to Beam, Tangent or Light Curve
5. NA-2, Transmission Suspension Assembly
6. NA-11, Signal Insulator Assembly
7. GWD-3A, Ground Wire Termination Assembly
8. GWD-1A, Ground Wire Termination Assembly
9. GWS-1, Ground Wire Support Assembly
10. H-Hanger, Auxiliary Hanger Assembly
11. ME-Hanger
12. J-Hanger
13. Assembly "V" or "W"
14. Splice SP-1, Transmission
15. Splice CC1/0, Signal Power
16. GWD-3B, Ground Wire Termination Assembly
17. JM-Hanger, Auxiliary Hanger Assembly

Manufacturer's and sources of supply for all material associated with this item must be approved by Amtrak. The listed manufacturers (on Sheet 27) are manufacturer's used by Amtrak in the past and are for information only.

Manufacturer's must fabricate hardware in accordance with the following Amtrak specifications in the bid package:

- Specification P-117. Bronze Castings Used in Catenary Construction
- Specification P-116. Malleable Iron Castings Used in Catenary Construction
- Specification CE565-A. Non-ferrous Rods, Bolts, Tubes, Bars, and Forgings

CONSTRUCTION – As indicated on the ET Plan and as follows:

- (a) Provide notice 30 days in advance to Amtrak to allow inspection of fabricated elements prior to shipment to site.
- (b) Assemble and install components as indicated on contract drawings where directed by the Department's Representative and/or Amtrak.
- (c) Store non-transmission cabling on-site.

MEASUREMENT AND PAYMENT – Lump Sum. Includes all material, equipment, and labor necessary to fabricate, inspect and install or store Electric Traction Cabling and Hardware.

00 - c90001 ITEM 9000-0001 - CONFIRMATORY BORINGS FOR CAISSON LOCATIONS CATENARY STRUCTURES

Addendum:

Associated Item(s): 9000-0001

Header:

ITEM 9000-0001 - CONFIRMATORY BORINGS FOR CAISSON LOCATIONS OF CATENARY STRUCTURES P1154a AND 1159b

Provision Body:

DESCRIPTION - A limited subsurface exploration investigation has been performed for this project. This work consists of providing and operating a suitable drilling rig and performing the necessary subsurface sampling to verify subsurface conditions identified in the caisson design for structures P1154A and P1159B. Boring locations and depths are given below and if necessary, will be modified by the Engineer.

REQUIRED GEOTECHNICAL EXPLORATION

The minimum number of borings and termination criteria that must be utilized for the foundation design is as follows:

- One boring per caisson location supporting catenary structure.
- Each boring must core 10 feet of competent bedrock. Competent bedrock is defined as bedrock with a minimum Total Recovery of 80% and a minimum Rock Quality Designation (RQD) of 20%. It is anticipated each boring will be a maximum of 50 feet in total depth. Previously obtained borings are located as shown on the Plans. Perform the geotechnical exploration for the caisson locations of the catenary structures indicated according to all applicable sections of the following Department publications and documents: Publication 222 Subsurface Boring, Sampling, and Testing Contract, Publication 293M Geotechnical Engineering Manual, BC-795M, Publication 408.

Complete this work at least 30 days before to beginning the following items:

- ITEM 5006-0209 48" Diameter Drilled Caissons, Shaft Section Modified
- ITEM 5006-0308 42" Diameter Drilled Caissons, Rock Socket Modified
- ITEM 5006-0349 48" Diameter Drilled Caissons, Rock Socket Modified

MEASUREMENT AND PAYMENT - Exploratory Drilling/Test Holes - Linear Foot. Augering and sampling through overburden, from existing ground surface to elevation at which NW (NX) core boring is to begin (bottom of caisson or rock socket excavation as specified in Section 1006.3(b)), is incidental to this work. Includes all costs associated with providing and operating the drilling rig, including the operator and all other required labor, equipment. No payment will be made for time lost due to equipment failure or time during which unacceptable or unauthorized work is performed.

00 - c90002 ITEM 9000-0002 - REMOVE AND SALVAGE ALL REDUNDANT CATENARY ASSEMBLIES AND CATENARY STRUCTURES

Addendum:

Associated Item(s): 9000-0002

Header:

ITEM 9000-0002 - REMOVE AND SALVAGE ALL REDUNDANT CATENARY ASSEMBLIES AND CATENARY STRUCTURES

Provision Body:

DESCRIPTION - This work is to remove and salvage all redundant catenary assemblies and catenary structures in accordance with the ET Plan.

CONSTRUCTION - Completely remove and disassemble all items from locations indicated. Poles and hardware from existing removed/obsolete OCS will become contractor's property except for the removed copper. Removed copper hardware and cabling must be stored at a secured nearby location outside Amtrak's property for further disposition by Amtrak. Stockpile material in neat piles, as directed. Supply the Department and AMTRAK with a written statement of material delivered.

Contact: Barry Bond, Amtrak Project Manager, I&C Mid Atlantic Division at (215) 349-3706 for final disposition of stockpiled material.

MEASUREMENT AND PAYMENT – Lump Sum.

00 - c90003 ITEM 9000-0003 - REMOVE REDUNDANT CATENARY STRUCTURE FOUNDATIONS

Addendum:

Associated Item(s): 9000-0003

Header:

ITEM 9000-0003 - REMOVE REDUNDANT CATENARY STRUCTURE FOUNDATIONS

Provision Body:

DESCRIPTION - This work is to remove the top 2.0 ft of redundant foundations.

CONSTRUCTION - Remove the top 2.0 ft of redundant foundations.

MEASUREMENT AND PAYMENT – Lump Sum.

00 - c90004 ITEMS 9000-0100/0300 - SETTLEMENT PLATFORMS

Addendum:

Associated Item(s): 9000-0100, 9000-0300

Header:

ITEM 9000-0100 - SETTLEMENT PLATFORMS
ITEM 9000-0300 - SETTLEMENT PLATFORMS

Provision Body:

DESCRIPTION - This work is the furnishing, delivering, installing, maintaining, and protecting of settlement platforms for Northern MSE Embankment at the following locations:

Station	Centerline Offset	Platform No.
308+00	18.0' RT	1
309+00	18.0' LT	2
310+00	18.0' RT	3

MATERIAL – See detail for material dimensions.

- a. Pipe and Couplings – ASTM A53, galvanized or black, certify as specified in Section 106.03(b)3. The upper and lower outer pipe and the riser pipe are standard steel threaded pipe of the sizes indicated.
- b. Steel Caps – ASTM A53, galvanized or black, certify as specified in Section 106.03(b)3. Steel caps, as indicated and properly threaded to an adequate depth to be securely fastened to applicable pipe.
- c. Pipe Flanges – ASTM A53, galvanized or black, certify as specified in Section 106.03(b)3. Flanges to be screw type sized to accept the pipe diameters indicated.
- d. Bearing Plate – Steel bearing plate forming the base of the settlement platform are of standard structural grade steel, Section 1105, ASTM A36, and dimensions are as indicated.
- e. Welding Material – AWS D1.1. Certify as specified in Section 106.03(b)3.
- f. Fine Aggregate Cushion – Section 703. Minimum dimensions of the fine aggregate cushion are as indicated and consist of clean fine aggregate having generally angular or rounded particles. Pass not more than 7 percent by weight through a No. 50 Sieve.
- g. Bentonite Slurry – This material consists of any commercial clay, usually in powdered form, consisting primarily of sodium montmorillonite, thoroughly mixed with water to form a uniform slurry having a maximum viscosity practical for placing in the pipe.
- h. Compacted Backfill – Granular material finer than the No. 4 Sieve.

CONSTRUCTION - Construct and install the initial section of the settlement platforms prior to preload embankment construction. Locate or establish a convenient benchmark, away from the influence of construction, and take readings of the elevation of the settlement plate as specified in the Special Provision entitled, “Monitoring Settlement Platforms”.

Construct the settlement platforms as indicated. Weld the pipe flanges to the top of the bearing plate as indicated. The initial section of platform consists of a length of lower pipe surrounding a length of riser pipe, both pipes attached to the bearing plate via the screw type flanges and having dimensions as indicated. Place this initial section on a compacted, level surface of fine aggregate; take care to ensure the riser pipe is plum. Backfill the initial section with compacted backfill placed in 4 to 6 inch lifts and compacted by hand equipment around the pipe.

Upon completion of backfill of the initial section to existing ground level, obtain the initial reading. See the Special Provision entitled, “Monitoring Settlement Platforms”, for details.

During preload embankment construction, before the preload embankment reaches the level of the top of the lower pipe, add an approximate 5-foot length of riser pipe and tightly fasten to the initial installation. Pour at this time a bentonite slurry into the lower pipe, completely filling the pipe. Place a length of upper pipe, as required to maintain clearance above the riser pipe, approximately 12 inches into the lower pipe. If difficulty is experienced maintaining the 12 inch overlap, hand compact a mound of soil around the pipe. Reinforcement bars welded to the upper pipe rest on the mound and prevent the upper pipe from settling.

Make additional extensions as preload embankment operations progress, using approximately 5-foot lengths of upper pipe and riser pipe. Connect pipe sections with treaded couplings. Secure pipe sections tightly together such that no shortening or elongation of connected sections due to rotation will occur. Plumb all pipe sections as added and maintain this plumbness throughout embankment operations. Accurately determine and record lengths of extension pipes. Required embankment compaction necessitates hand compaction adjacent to pipe. Use only soil embankment material adjacent to the pipe. Maintain a minimum pipe length of 3 feet above embankment operation at all times.

Upon completion of preload embankment operations, secure steel cap to the top of pipe with hasp and lock to prevent vandalism. Equip caps with an adequate handle for removal and tightening by hand.

Exercise caution during preload embankment operations to avoid damaging the settlement platforms. The vertical pipes should be flagged so that they are clearly visible. Repair or replace, to the satisfaction of the Engineer, any platform which is damaged by the operations or vandalism. Preload embankment operations will cease immediately if platforms are damaged. Operations may continue upon repair or replacement of the damaged platform to the Engineer's approval. Upon final grading, abandon all settlement platforms.

Prior to paving operations, as directed, cutoff upper and riser pipes at least 2 feet below subgrade elevation. Cap pipe and backfill with suitable compacted embankment material, in accordance with Section 206.

MEASUREMENT AND PAYMENT – Each.

00 - c90005 ITEMS 9000-0200/0400 - MONITORING SETTLEMENT PLATFORMS

Addendum:

Associated Item(s): 9000-0200, 9000-0400

Header:

ITEM 9000-0200 - MONITORING SETTLEMENT PLATFORMS
ITEM 9000-0400 - MONITORING SETTLEMENT PLATFORMS

Provision Body:

DESCRIPTION - This work is the obtaining, recording, reducing and storing settlement platform readings and location information for settlement platforms installed at Northern MSE Embankment.

CONSTRUCTION - Provide qualified personnel with a minimum of two years experience and the necessary equipment and materials to obtain, record, reduce and store the horizontal and vertical location of the settlement platforms, as specified or directed. Submit the names, duties and qualifications of the personnel four weeks prior to their obtaining readings. Include the equipment to be used, the manner in which information will be presented to the Engineer and the method of storage. Also, include the locations and methods of establishing permanent reference points. The Engineer may require a meeting with the personnel when evaluating their qualifications. Obtain written approval of the Engineer before obtaining first (i.e., initial) settlement platform reading.

Coordinate settlement platform readings with the Engineer and obtain only in his presence. Promptly reduce any readings to the format established, such that the Engineer will be able to make immediate evaluation of the conditions. Provide results to the Engineer within twelve hours of obtaining the readings.

Monitoring of settlement platforms will be performed during and after preload embankment construction for the duration of the quarantine period. Include in each set of readings the evaluation of the top of the preload embankment, the elevation of the top of the riser pipe, and the length of pipe to the bearing plate (constant after final grading), for each settlement platform. Record readings on acceptable data sheets.

Take the initial reading before upper pipe extensions are added to the initial section. This reading will establish the initial bearing plate elevation. Determine and record to the nearest hundredth (0.01) of a foot the elevation of the top of the bearing plate, the elevation of the top of the riser pipe, the elevation of top of the preload embankment, and the length of pipe to the bearing plate.

Take readings during preload embankment construction, after each additional placement of approximately 5 feet of embankment material, but no less frequently than twice a week. In addition to the items noted in the preceding paragraph, include in each set of readings taken during preload embankment construction, the elevation of the bottom of the upper pipe to verify that the upper pipe is not resting on the plate.

Take one complete set of readings upon completion of preload embankment construction and then at weekly intervals for the duration of the quarantine period. The settlement will be considered to have reached acceptable limits if four consecutive weekly

readings show no change, however, after reviewing the data collected during quarantine time, the Engineer will decide whether or not, the monitoring can be stopped. Take one complete set of readings prior to MSE wall coping installation.

The above requirements reflect the anticipated rate and magnitude of settlement. If the data being collected indicate unusual or unexpected behavior, the monitoring requirements may be changed at the direction of the Engineer. Therefore, it is imperative that a direct communication link between all personnel gathering data and the Engineer be maintained.

MEASUREMENT AND PAYMENT - Each. One reading includes all data specified at one settlement platform. The initial reading is one reading. Cumulative measurements from the top of the plate to the top of the riser pipe are incidental to this initial reading.

00 - c92011 ITEM 9201-0001 - CLEARING AND GRUBBING (NEWCOMER ROAD)

Addendum:

Associated Item(s): 9201-0001

Header:

ITEM 9201-0001 - CLEARING AND GRUBBING (NEWCOMER ROAD)

Provision Body:

DESCRIPTION - This is the clearing and grubbing item for the Newcomer Road portion of the project in accordance with Section 201.

MEASUREMENT AND PAYMENT - Lump Sum.

I2032C - c92031 ITEM 9203-0101 - TEMPORARY EXCAVATION SUPPORT AND PROTECTION SYSTEM

Addendum:

Associated Item(s): 9203-0101

Header:

ITEM 9203-0101 - TEMPORARY EXCAVATION SUPPORT AND PROTECTION SYSTEM

Provision Body:

I. DESCRIPTION - This work is the design and construction of a temporary excavation support and protection system or appropriately designed open cut excavation, as indicated, with a service life of less than or equal to 36 months.

II. MATERIAL - Provide certification or laboratory test results verifying material properties. For used steel, the salvage design values from AASHTO Guide Design Specification for Bridge Temporary Works (AASHTO Guide Spec) may be used as an alternate to testing to determine grade of steel. Materials need not be new but must be in serviceable condition as determined by the Engineer. Temporary material used does not have to be from a Bulletin 15 source, but must meet the following:

- Structural Steel.....AASHTO M 270M/270 (ASTM A709M/A709) Grade 250(Grade 36), Grade 345(Grade 50) or Grade 345W(Grade 50W)
- Steel Sheet Piling.....ASTM A328M/A328, ASTM A572M/A572
- Steel H-Piles.....AASHTO M 270M/270 (ASTM A709M/A709), Grade 250(Grade 36)

- Wood Lagging.....Rough Cut Species in AASHTO Guide Spec Appendix A and AASHTO Construction Handbook for Bridge Temporary Works Appendix C
- Cement.....AASHTO M85 and AASHTO M240
- Pre-Stressing Steel..... ASTM A416 Grade 270
- Welded Wire Fabric..... AASHTO A55 (ASTM A185)
- Reinforcement Bars..... AASHTO M 31M/31 (ASTM A615M/A615), AASHTO M42M/M42 (ASTMA616M/A616),Grade420(Grade 60)
- Other Material.....In accordance with applicable Sections of Publication 408

III. DESIGN - Design the temporary excavation support and protection system in accordance with current AASHTO LRFD Bridge Design Specifications and Design Manual, Part 4 (Metric) Specifications, current FHWA guidelines and AASHTO Guide Spec. Design temporary excavation support and protection system for final condition and all construction conditions, including surcharge loads due to vehicle traffic and construction equipment. Submit 4 sets of design calculations and 4 sets of completed detailed drawings, signed and sealed by a Professional Engineer, registered in the Commonwealth of Pennsylvania to the District Executive for review. Include in the design calculations all material properties, design loads, and design assumptions. Include on the completed detailed drawings all design dimensions, limits of work, elevations, material, member sizes and construction sequence. Provide cutoff elevation of steel and wooden components for work in streambed. Include specific installation procedures and testing requirements as part of the submittal. Allow 14 days for the review by the Department.

Ensure that temporary excavation support and protection system design and construction conforms to the following:

a) Open cut excavations are allowed, provided they meet OSHA requirements, the safety of the traveling public, the approved traffic control plan and existing structure is assured, and they stay within the legal right-of-way lines. Cuts can extend beyond legal right-of-way lines only with the written approval of the Department and written permission of the property owners. Ensure environmental compliance if cut extends beyond area cleared by the Department. Submit slope stability analysis in accordance with Publication 293.

b) The temporary excavation support and protection system will be selected by the Contractor. Examples include anchored walls, mechanically stabilized earth walls, prefabricated modular walls, cantilever walls, cofferdams, and soil nailing walls. These systems may be comprised of one or more of the following: Soldier Piles, Timber Lagging, Steel Sheet Piling, Caissons, Slurry Walls, Tiebacks, Soil Nails, Shotcrete, Deadman Anchors, Wales, Cross lot Bracing, Raker Braces, Precast Concrete, Precast Lagging, Soil Cement Lagging, Cement Bentonite, Gabions, Minipiles, Concrete Reaction Blocks, Mechanically Stabilized Earth Walls or other methods.

c) Design temporary excavation support and protection system based on the following parameters:

1. Soil parameters (**see Project Specific Details for following parameters**):

- 1.a Effective angle of friction _____
- 1.b Moist unit weight of soil _____
- 1.c Saturated unit weight of soil _____
- 1.d Effective cohesion _____
- 1.e Static groundwater level at elevation _____
- 1.f Undrained shear strength of cohesive soil_____
- 1.g Shear strength for rock mass_____

Provide other soil/rock properties with test data, needed in the design of the temporary excavation support and protection system.

2. Ensure that all components stay within the legal right-of-way unless an easement is obtained by the Contractor.

IV. CONSTRUCTION - Install temporary excavation support and protection system in accordance with applicable sections of Publication 408. Be responsible for adequacy, safety and compliance with Traffic Control Plan. If the design is not compliant with the approved Traffic Control Plan, furnish any additional traffic control devices at no additional cost to the Department. All steel and wooden components may remain in place to pavement subgrade or 0.6 meters(2 feet) below finish grade, whichever is higher elevation. Treated wood is not required unless it is within 2 meters(6 feet) of finish grade and is to remain in place. Pressure treat with chromate copper arsenate (CCA) to refusal. Finish grade is defined as top of pavement when a roadway is behind the temporary excavation support and protection system. Have a Professional Engineer, registered in the Commonwealth of Pennsylvania, certify that the temporary excavation support system or open cut excavation has been installed as shown on the Professional Engineer's signed and sealed drawings. Submit the certification to the Representative within 3 working days of completion of the system.

V. QUALIFICATIONS - The work must be supervised by a superintendent or foreman who is experienced, in the construction of temporary excavation support and protection system proposed. If the design height of the temporary excavation support and protection system exceeds 6 meters(20 feet), provide the following with the design submission:

- For the superintendent or foreman who will supervise the work, submit a list containing at least 5 projects which demonstrate a minimum of 3 years experience in the construction of the temporary excavation support and protection system proposed. Include a brief description of each project and the name and phone number of the owner's representative knowledgeable in each project listed.
- The name of the Professional Engineer, registered in the Commonwealth of Pennsylvania and having at least 3 years experience in the design and construction of temporary excavation support and protection systems, who will design and specify the sequence of construction of the temporary excavation support and protection of system.

VI. MEASUREMENT AND PAYMENT - Lump Sum.

This item will be measured and paid for in a proportionate manner, designated by the Department.

If an acceptable open cut excavation is provided in lieu of the temporary excavation support indicated, payment will be made for the as-bid lump sum temporary excavation support item, but no additional payment will be made for any class of excavation, structure backfill or additional shoring as a result of the open cut excavation or to restore the facilities to their original condition.

Project Specific Details:

The Soil Parameters as indicated in III. (b) 1. are:

- 1.a Effective angle of friction: 28 degrees
- 1.b Moist unit weight of soil: 120 pcf
- 1.c Saturated unit weight of soil: 125 pcf
- 1.d Effective cohesion: 0 psf
- 1.e Static groundwater level at elevation: 354.56
- 1.f Un-drained shear strength of cohesive soil: 0
- 1.g Shear strength of rock mass 100 ksf

In addition, comply with: Amtrak Specification - "Section 02261A - Requirements for Temporary Sheeting and Shoring to Support Amtrak Tracks"; as provided in the bid package.

00 - c96081 ITEM 9608-0001 - MOBILIZATION (NEWCOMER ROAD)

Addendum:

Associated Item(s): 9608-0001

Header:

ITEM 9608-0001 - MOBILIZATION (NEWCOMER ROAD)

Provision Body:

DESCRIPTION - This is the mobilization item for the Newcomer Road portion of the project in accordance with Section 608.

MEASUREMENT AND PAYMENT - Lump Sum.

00 - c96101 ITEM 9610-7002 - PERFORATED INFLOW PIPE

Addendum:

Associated Item(s): 9610-7002

Header:

ITEM 9610-7002 - PERFORATED INFLOW PIPE

Provision Body:

DESCRIPTION - This work is construction of a perforated inflow pipe as indicated.

MATERIAL - In accordance with Section 610.2.

CONSTRUCTION - In accordance with Section 610.3.

MEASUREMENT AND PAYMENT - Linear Foot. Back fill is incidental.

00 - c96241 ITEM 9624-0002 - REMOVE AND RESET EXISTING CHAIN LINK FENCE

Addendum:

Associated Item(s): 9624-0002

Header:

ITEM 9624-0002 - REMOVE AND RESET EXISTING CHAIN LINK FENCE

Provision Body:

DESCRIPTION – This work is removal of the existing fence and posts, placement of temporary fence during construction and setting fence and new posts to the final placement as indicated or directed. The item includes setting a fence to a temporary location while work is in progress and setting fence to final location once work is complete.

MATERIAL – In accordance with Section 624.2(b), (c) and (d).

CONSTRUCTION – In accordance with Section 624.3, and as follows:

Carefully remove wire fabric from the nearest existing splice, rolling back beyond the area required to trench and install the 30" RCP as shown. Upon completion of pipe installation operation, reattach the wire fabric to the existing posts in accordance with 624.3(d).

MEASUREMENT AND PAYMENT - Linear Foot.

00 - c96861 ITEM 9686-0040 - CONSTRUCTION SURVEYING, TYPE C (NEWCOMER ROAD)

Addendum:

Associated Item(s): 9686-0040

Header:

ITEM 9686-0040 - CONSTRUCTION SURVEYING, TYPE C (NEWCOMER ROAD)

Provision Body:

DESCRIPTION - This is the surveying item for the Newcomer Road portion of the project in accordance with Section 686.

MEASUREMENT AND PAYMENT - Lump Sum.

00 - c98591 ITEM 9859-0004 - CLEANOUT STAKE

Addendum:

Associated Item(s): 9859-0004

Header:

ITEM 9859-0004 CLEANOUT STAKE

Provision Body:

DESCRIPTION – This work is the construction of a sediment trap or basin Cleanout Stake as indicated or directed.

MATERIALS – Exterior grade 1 inch x 1 inch pressure treated lumber and oil based paint.

CONSTRUCTION – Construct the stake to the proper dimensions and locate within the sediment trap or basin as indicated. Remove the stakes prior to clean out of the trap or basin. Repair, replace, and repaint stakes as directed.

MEASUREMENT AND PAYMENT – Each.

00 - c99011 ITEM 9901-0001 - MAINTENANCE AND PROTECTION OF TRAFFIC DURING CONSTRUCTION (NEWCOMER ROAD)

Addendum:

Associated Item(s): 9901-0001

Header:

ITEM 9901-0001 - MAINTENANCE AND PROTECTION OF TRAFFIC DURING CONSTRUCTION (NEWCOMER ROAD)

Provision Body:

In accordance with Section 901 and as follows:

This work is the maintenance and protection of traffic for the NEWCOMER ROAD portion of the project.

On SR 0230, no lane restrictions, including turning lanes, are permitted from 6:00 am to 9:00 am and from 3:00 pm to 6:00 pm; maintain at least one lane of traffic short-term, while work is in progress.

Maintain two lanes of traffic for the life of this project on Newcomer Road until closure of the road; maintain at least one lane of traffic short-term, while work is in progress.

Do not close the road for construction of the cul-de-sacs at the Newcomer Road crossing until after the new bridge over the railroad at Eby Chiques Road is open to traffic.

Provide ingress and egress for businesses and dwellings within the project limits, unless prearranged with the property owner a minimum of two (2) business days in advance and the Inspector-In-Charge is informed of the arrangement. Also, maintain access to all side roads, alleys and fire hydrants.

Cooperate and coordinate with local municipalities for any special events that may be scheduled during the life of this project:

Contact and notify the following prior to construction:

- Mount Joy Borough. Scott Hershey - Director of Public Works, 717-653-2300 or 717-653-8226
- Rapho Township. John Haldeman - Roadmaster, 717-665-3827

At least two (2) weeks prior to imposing any traffic control/ work, go to <http://munstatspa.dced.state.pa.us/EAORReports.aspx?M=L> and gain contact information in order to notify project specific Local Municipalities, Emergency Services, Local and/ or State Police, Fire Departments, Post Offices, and School District Transportation Coordinators. The County Emergency Control centers are all listed at <http://www.paapco.org/centers.htm> . Provide written documentation of all contacts and notifications that were made to the Inspector-In-Charge, unless otherwise directed. Including but not limited to the following:

- Mount Joy Borough: 717-653-2300
- Rapho Township: 717-665-3827
- Manheim Central School District, Transportation Services: Kristee Reichard or Barbara Speece at 717-664-8520
- Mount Joy Fire Department: 717-653-1600
- Mount Joy Police: 717-653-1650
- Mount Joy Emergency Management Agency: 717-989-0379
- Susquehanna Valley EMS: 653-6247
- Donegal School District. Transportation Coordinator. 717-653-1447

Notify the Inspector-In-Charge three (3) days in advance of any proposed lane/ shoulder restriction or road closure. Also, notify the Inspector-In-Charge thirty (30) minutes prior to the start of work, (before placement of traffic control devices). The Inspector-In-Charge, in turn, will notify the District 8-0 Traffic Management Center (TMC) two (2) days in advance of any proposed lane/ shoulder restriction or road closure and fifteen (15) minutes prior to the start of work. The Inspector-In-Charge will notify the TMC when the road is restored back to full traffic. The TMC phone number is (717) 265-7600.

Delineate open excavations, obstructions or other exposed hazards; maintain access to residences and businesses. Maintain pedestrians as field conditions necessitate. Provide delineation in such areas using orange, reflective safety fence.

Cooperate and coordinate in accordance with Publication 408, Section 105.07 with any adjacent contractor in the maintenance and protection of traffic during construction. Coordinate the placement and/or removal of signs, pavement markings, and traffic control devices throughout the duration of this contract that may conflict with adjacent work zones. This includes any work that may be adjacent to or within the limits of this project.

As required, provide temporary locations and continuous access for U.S. mail delivery to effected residents and businesses along the corridor. Permanent relocation of mail boxes shall be the responsibility of the property owner.

Maintain drop-offs from the edge of travel lanes according to section 901.3(j) of Publication 408.

Provide a flag-person at all intersecting roadways and major driveways within a lane closure.

Construct the leveling course within 7 days of milling. No milled area will be left exposed to traffic for more than 7 days.

All signs and channelizing devices shall have approved retro-reflective sheeting.

Furnish, erect, place and maintain traffic control signs and devices. Maintain traffic during hours of construction and at all other times in accordance with the methods indicated on these drawings and the following:

Special Provisions of the Contract

FHWA - Manual on Uniform Traffic Control Devices, 2009 Edition

PennDOT Pubs.: 35 - Approved Construction Materials (Bulletin 15)

111M - Traffic Control Pavement Markings & Signing Standards

212 § E - Official Traffic Control Devices

213 - Temporary Traffic Control Guidelines

236M - Handbook of Approved Signs, 2008

408 - Specifications (Let Date Version)

Traffic Control typical applications and parts thereof for this project are as follows:

- Long-Term Signing - PennDOT Publication 213, PATA 25, 40 and 41
- Short-Term Signing - PennDOT Publication 213, PATA's 5, 7, 8, 10a and 10b

All sign and channeling device locations may be adjusted back or forward due to intersecting streets, driveways, etc., and/or as field conditions necessitate.

00 - c99991 ITEM 9999-0001 - AMTRAK TRACK MONITORING

Addendum:

Associated Item(s): 9999-0001

Header:

ITEM 9999-0001 - AMTRAK TRACK MONITORING

Provision Body:

DESCRIPTION - This item of work is for the daily surveying (monitoring) of the Amtrak tracks. See bid package document named "Amtrak Track Monitoring".

- Scope: If any work that could potentially affect the stability of the track is occurring within 50 feet of a track, or within the influence line of a track, then monitoring points is to be established along the track. The influence line descends from a point one foot horizontally away from the outside end of the tie bottom one unit vertically for every unit and a half horizontally.
- Safety: All work close enough to foul a track must only be performed under the direction of qualified railroad personnel. People performing track monitoring are classified as Roadway Workers and must be trained in Roadway Worker Protection.
- Points: Each location is to include a point on the top of rail marked with paint or crayon on the field side of the rail and used for vertical measurements, and a point on the tie for horizontal measurements. In wood ties, the point is to be marked with a PK nail or similar surveyor's marker; on concrete or steel ties the point is to be marked with paint.
- Point Locations: Reference points are to be established along the track beginning at the point where the work is closest to the track. Points are to continue to be placed at intervals of 50 feet along the track to the point where the work ends or does not meet the conditions outlined above, and then at 50 feet, 100 feet, and 200 feet away from the end point(s). Where more than one track may be affected, points are to be established on each track that could be affected.
- Measurement Accuracy: Monitoring points are to be established to within 0.001 feet, and monitoring is to be done to 0.01 feet.
- Monitoring: **Monitoring must be performed at the beginning and end of every shift of work.** Points are to be measured, the measurements recorded, and the numbers compared with previous measurements. All points are to be measured each time monitoring occurs, except for the points 200 feet away from the end of work; these points are to only be measured if any of the other measurements exceeds an allowable deviation.
- Allowable deviations: If track is found to have moved either vertically or horizontally by more than one half of the Amtrak Maintenance limits as specified in Amtrak's MW-1000 for the particular class of track involved, then all work is to cease immediately and the contractor must immediately notify the designated Amtrak Project Engineer. Work may not resume until the designated Amtrak Project Engineer has inspected the site and approved.
- Track Maintenance: Deficiencies in track surface and alignment caused by construction activities are to be corrected solely by Amtrak forces at project expense.

MEASUREMENT AND PAYMENT - Lump Sum. The Department will measure and pay for this item in a proportionate manner based on current estimates.

00 - c99992 ITEM 9999-0002 - AMTRAK PERMIT TO ENTER

Addendum: 1
Associated Item(s): 9999-0002

Header:
ITEM 9999-0002 - AMTRAK PERMIT TO ENTER

Provision Body:

DESCRIPTION - This work is reimbursement for the cost of the Amtrak Permit to Enter. The reimbursement is payable to the prime contractor and any subcontractor's that are required to obtain the Amtrak Permit to Enter. **This work also includes reimbursement for costs associated with Amtrak Contractor Safety & Security Awareness Training.**

MEASUREMENT AND PAYMENT - Dollar. The proposal will include a predetermined amount of money for Amtrak Permit to Enter. The contract item will have a unit of measure of Dollar, a unit price of \$1.00, and a quantity equal to the predetermined amount.

Due to the contingent or unpredictable nature of the work being performed and/or the incentive or bonus status of the payment being made, the provisions of Section 110.02(d) are not applicable to this item.

Measured and paid for, under this item as follows:

- (a) Contract Price.
- (b) Negotiated Price. At price agreed upon with the Department before performing the work. If applicable, agreement is also required with FHWA.
- (c) Force Account Basis. Section 110.03(d).

The reimbursement is only for the actual cost paid to Amtrak for the permit **and the training**. A copy of the canceled **check(s)** (to Amtrak) will be required as proof of payment to be eligible for the reimbursement.

Performance Bonds

Surety Company: The Fidelity and Deposit Company of Maryland
Bonding Agency: Willis of Pennsylvania, Inc.
Producer: Susan C Caputy/PennDOT BP-002066
Co-Insurer: Yes

Status: Accepted
Bond Number: 8214676
Bond Amount: \$3,144,511.70
NAIC: 39306

KNOW ALL MEN BY THESE PRESENTS, That we, *Trumbull Corporation of P.O. Box 6774, Pittsburgh, PA 15212* as PRINCIPAL, and The Fidelity and Deposit Company of Maryland a corporation, as SURETY, are held and firmly bound unto the Commonwealth of Pennsylvania in the full and just sum of \$3,144,511.70, lawful money of the United States of America, to be paid to the said Commonwealth of Pennsylvania, or it assigns, to which payment well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

Sealed with our respective seals and dated this 27 day of September A.D. 2012.

Whereas, the above bounden PRINCIPAL has undertaken to contract with the said Commonwealth of Pennsylvania, by and through the Secretary of Transportation covering the work identified below for approximately the sum of the bond amount defined above.

The project is construction of a new bridge over Amtrak on a new state route alignment which will be named SR 4062. SR 4062 intersects SR 0230 just east of Eby Chiques Road (T-347) in Rapho Township. The project work includes: construction of a new bridge over two tracks of Amtrak and one track of Norfolk Southern. The alignment will extend SR 4062 south from the intersection with SR 0230 to the railroad tracks continuing south to the terminus at existing Eby Chiques Road. The project plans include a new catenary and railroad electric traction (ET Plan) system to be constructed by the contractor. Amtrak forces will only perform work necessary to tie-in the existing ET system with the new ET system. Once the new bridge is constructed; the existing at-grade rail-highway crossings on both Eby Chiques Road and Newcomer Road will be closed and cul-de-sacs constructed to permanently close the crossings. The structures consists of one single-span prestressed concrete I-beam bridge and the approaches consist of four mechanically stabilized earth walls (MSE). Other items of work include: subbase (No. 2A), Superpave asphalt paving, guide rail, drainage, signing, pavement markings, and other miscellaneous construction, all as indicated on the approved drawings included in the Bid Package for STATE ROUTE 4062, SECTION 001, in LANCASTER COUNTY, RAPHO TOWNSHIP and MT. JOY BOROUGH.

and

WHEREAS, it was one of the conditions of the award of the Secretary of Transportation, acting for and on behalf of the Commonwealth of Pennsylvania, pursuant to which said contract was undertaken by the PRINCIPAL that these presents should be executed, to become binding upon the date the said contract is approved for the office of Budget, by the Comptroller.

NOW, THEREFORE, The conditions of this obligation is such that if the above bounden PRINCIPAL, as Contractor, shall in all respects comply with and faithfully perform the terms and conditions of said contract, and his, their, or its obligations thereunder, including the plans, specifications, and conditions therein referred to and made a part thereof, and such alterations as may be made in said specifications as therein provided for, and shall well and truly, and in a manner satisfactory to the Commonwealth of Pennsylvania, complete the work contracted for, and shall save harmless the Commonwealth of Pennsylvania from any expense incurred through the failure of said contractor to complete the work as specified, or for any damages growing out of the carelessness and/or negligence of said contractor or his, their, or its servants.

And shall save and keep harmless the said Commonwealth of Pennsylvania against and from all losses to it from any cause whatsoever, including patent, trademark, and copyright infringements, in the manner of constructing said section of roadway; then this obligation to be void or otherwise to be and remain in full force and virtue.

It is further provided that any alteration which may be made in the terms of the contract or in the work to be done under it or the giving by the Commonwealth of any extension of time for the performance of the contract or any other forbearance on the part of either the Commonwealth or the PRINCIPAL to the other shall not in any way release the PRINCIPAL and the SURETY or SURETIES or either or any of them, their heirs, executors, administrators, successors or assigns, from their liability hereunder, notice to the SURETY or SURETIES of any such alteration, extension, or forbearance being hereby waived.

IN WITNESS WHEREOF, the said PRINCIPAL and SURETY have duly executed this Bond under seal the day and year first above written.

Attorney-in-Fact Certification

*The undersigned attorney-in-fact by executing this Performance Bond certifies that he/she is licensed with the company named as surety for this bond and that to the best of his/her knowledge the said surety is licensed with the Pennsylvania Insurance Department.

Bond Workflow Status

Status	Name	Disposition	Date/Time
Draft	William D Woodford/ PennDOT BP-000030	Submit	09/27/2012 08:54:14 AM
Producer Review	Susan C Caputy/PennDOT BP-002066	Sign	09/27/2012 09:07:54 AM
Contractor Review	John Maffeo/PennDOT BP-000030	Sign	09/27/2012 02:22:13 PM
BOD CMD Review	Roland L Rode/PennDOT	Accept	10/01/2012 04:19:40 PM

Surety Company: Travelers Casualty and Surety Company of America
Bonding Agency: Willis of Pennsylvania, Inc.
Producer: Susan C Caputy/PennDOT BP-002066
Co-Insurer: Yes

Status: Accepted
Bond Number: 105818205
Bond Amount: \$4,716,767.56
NAIC: 31194

KNOW ALL MEN BY THESE PRESENTS, That we, *Trumbull Corporation of P.O. Box 6774, Pittsburgh, PA 15212* as PRINCIPAL, and Travelers Casualty and Surety Company of America a corporation, as SURETY, are held and firmly bound unto the *Commonwealth of Pennsylvania* in the full and just sum of \$4,716,767.56, lawful money of the United States of America, to be paid to the said Commonwealth of Pennsylvania, or it assigns, to which payment well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

Sealed with our respective seals and dated this 27 day of September A.D. 2012.

Whereas, the above bounden PRINCIPAL has undertaken to contract with the said Commonwealth of Pennsylvania, by and through the Secretary of Transportation covering the work identified below for approximately the sum of the bond amount defined above.

The project is construction of a new bridge over Amtrak on a new state route alignment which will be named SR 4062. SR 4062 intersects SR 0230 just east of Eby Chiques Road (T-347) in Rapho Township. The project work includes: construction of a new bridge over two tracks of Amtrak and one track of Norfolk Southern. The alignment will extend SR 4062 south from the intersection with SR 0230 to the railroad tracks continuing south to the terminus at existing Eby Chiques Road. The project plans include a new catenary and railroad electric traction (ET Plan) system to be constructed by the contractor. Amtrak forces will only perform work necessary to tie-in the existing ET system with the new ET system. Once the new bridge is constructed; the existing at-grade rail-highway crossings on both Eby Chiques Road and Newcomer Road will be closed and cul-de-sacs constructed to permanently close the crossings. The structure consists of one single-span prestressed concrete I-beam bridge and the approaches consist of four mechanically stabilized earth walls (MSE). Other items of work include: subbase (No. 2A), Superpave asphalt paving, guide rail, drainage, signing, pavement markings, and other miscellaneous construction, all as indicated on the approved drawings included in the Bid Package for STATE ROUTE 4062, SECTION 001, in LANCASTER COUNTY, RAPHO TOWNSHIP and MT. JOY BOROUGH.

and

WHEREAS, it was one of the conditions of the award of the Secretary of Transportation, acting for and on behalf of the Commonwealth of Pennsylvania, pursuant to which said contract was undertaken by the PRINCIPAL that these presents should be executed, to become binding upon the date the said contract is approved for the office of Budget, by the Comptroller.

NOW, THEREFORE, The conditions of this obligation is such that if the above bounden PRINCIPAL, as Contractor, shall in all respects comply with and faithfully perform the terms and conditions of said contract, and his, their, or its obligations thereunder, including the plans, specifications, and conditions therein referred to and made a part thereof, and such alterations as may be made in said specifications as therein provided for, and shall well and truly, and in a manner satisfactory to the Commonwealth of Pennsylvania, complete the work contracted for, and shall save harmless the Commonwealth of Pennsylvania from any expense incurred through the failure of said contractor to complete the work as specified, or for any damages growing out of the carelessness and/or negligence of said contractor or his, their, or its servants.

And shall save and keep harmless the said Commonwealth of Pennsylvania against and from all losses to it from any cause whatsoever, including patent, trademark, and copyright infringements, in the manner of constructing said section of roadway; then this obligation to be void or otherwise to be and remain in full force and virtue.

It is further provided that any alteration which may be made in the terms of the contract or in the work to be done under it or the giving by the Commonwealth of any extension of time for the performance of the contract or any other forbearance on the part of either the Commonwealth or the PRINCIPAL to the other shall not in any way release the PRINCIPAL and the SURETY or SURETIES or either or any of them, their heirs, executors, administrators, successors or assigns, from their liability hereunder, notice to the SURETY or SURETIES of any such alteration, extension, or forbearance being hereby waived.

IN WITNESS WHEREOF, the said PRINCIPAL and SURETY have duly executed this Bond under seal the day and year first above written.

Attorney-in-Fact Certification

*The undersigned attorney-in-fact by executing this Performance Bond certifies that he/she is licensed with the company named as surety for this bond and that to the best of his/her knowledge the said surety is licensed with the Pennsylvania Insurance Department.

Bond Workflow Status

Status	Name	Disposition	Date/Time
Draft	William D Woodford/ PennDOT BP-000030	Submit	09/27/2012 08:55:19 AM
Producer Review	Susan C Caputy/PennDOT BP-002066	Sign	09/27/2012 09:05:32 AM
Contractor Review	John Maffeo/PennDOT BP-000030	Sign	09/27/2012 02:19:20 PM
BOD CMD Review	Roland L Rode/PennDOT	Accept	10/01/2012 04:20:28 PM

Payment Bonds

Surety Company: The Fidelity and Deposit Company of Maryland
Bonding Agency: Willis of Pennsylvania, Inc.
Producer: Susan C Caputy/PennDOT BP-002066
Co-Insurer: Yes

Status: Accepted
Bond Number: 8214676
Bond Amount: \$3,144,511.70
NAIC: 39306

KNOW ALL MEN BY THESE PRESENTS, That we, *Trumbull Corporation of P.O. Box 6774, Pittsburgh, PA 15212* as PRINCIPAL, and The Fidelity and Deposit Company of Maryland a corporation, as SURETY, are held and firmly bound unto the Commonwealth of Pennsylvania in the full and just sum of \$3,144,511.70, lawful money of the United States of America, to be paid to the said Commonwealth of Pennsylvania, or it assigns, to which payment well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

Sealed with our respective seals and dated this 27 day of September A.D. 2012.

Whereas, the above bounden PRINCIPAL has undertaken to contract with the said Commonwealth of Pennsylvania, by and through the Secretary of Transportation covering the work identified below for approximately the sum of the bond amount defined above.

The project is construction of a new bridge over Amtrak on a new state route alignment which will be named SR 4062. SR 4062 intersects SR 0230 just east of Eby Chiques Road (T-347) in Rapho Township. The project work includes: construction of a new bridge over two tracks of Amtrak and one track of Norfolk Southern. The alignment will extend SR 4062 south from the intersection with SR 0230 to the railroad tracks continuing south to the terminus at existing Eby Chiques Road. The project plans include a new catenary and railroad electric traction (ET Plan) system to be constructed by the contractor. Amtrak forces will only perform work necessary to tie-in the existing ET system with the new ET system. Once the new bridge is constructed; the existing at-grade rail-highway crossings on both Eby Chiques Road and Newcomer Road will be closed and cul-de-sacs constructed to permanently close the crossings. The structures consists of one single-span prestressed concrete I-beam bridge and the approaches consist of four mechanically stabilized earth walls (MSE). Other items of work include: subbase (No. 2A), Superpave asphalt paving, guide rail, drainage, signing, pavement markings, and other miscellaneous construction, all as indicated on the approved drawings included in the Bid Package for STATE ROUTE 4062, SECTION 001, in LANCASTER COUNTY, RAPHO TOWNSHIP and MT. JOY BOROUGH.

and

WHEREAS, it was one of the conditions of the award of the Secretary of Transportation, acting for and on behalf of the Commonwealth of Pennsylvania, pursuant to which said contract was undertaken by the PRINCIPAL that these presents should be executed, to become binding upon the date the said contract is approved for the office of Budget, by the Comptroller.

NOW, THEREFORE, The conditions of this obligation is such that if the above bounden PRINCIPAL shall and will promptly or cause to be paid in full all sums of money which may be due by contractor or corporation, for all materials furnished or labor supplied or performed in the prosecution of the work, whether or not the said material or labor entered into and became component parts of the work or improvement contemplated, and for rental of the equipment used and services rendered by public utilities in, or in connection with, the prosecution of such work, then this obligation to be void, otherwise to remain in full force and effect.

The PRINCIPAL and SURETY hereby, jointly and severally, agree with the obligee herein that any individual, firm, partnership, association or corporation, which has performed labor or furnished material in the prosecution of the work as provided, and any public utility which has rendered services in, or in connection with, the prosecution of such work, and which has not been paid in full therefor, may sue *assumpsit* on this Payment Bond in his, their, or its own name and may prosecute the same to final judgement for such sum or sums as may be justly due to him, them, or it, and have execution thereon. Provided, however, that the Commonwealth shall not be liable for the payment of any costs or expenses of such suit.

Recovery by any individual, firm, partnership, association or corporation hereunder shall be subject to the provisions of the "Public Works Contractors' Bond Law of 1967", Act No. 385, approved December 20, 1967, P.L. 869, which Act shall be incorporated herein and made a part hereof, as fully and completely as though its provisions were fully and at length herein recited.

It is further provided that any alteration which may be made in the terms of the contract or in the work to be done or materials to be furnished or labor to be supplied or performed under it or the giving by the Commonwealth of any extension of time for the performance of the contract or any other forbearance on the part of either the Commonwealth or the Principal to the other

shall not in any way release the PRINCIPAL and the SURETY or SURETIES or either or any of them, their heirs, executors, administrators, successors or assigns, from their liability hereunder, notice to the SURETY or SURETIES of any such alteration, extension, or forbearance being hereby waived.

IN WITNESS WHEREOF, the said PRINCIPAL and SURETY have duly executed this Bond under seal the day and year first above written.

Attorney-in-Fact Certification

*The undersigned attorney-in-fact by executing this Payment Bond certifies that he/she is licensed with the company named as surety for this bond and that to the best of his/her knowledge the said surety is licensed with the Pennsylvania Insurance Department.

Bond Workflow Status

Status	Name	Disposition	Date/Time
Draft	William D Woodford/ PennDOT BP-000030	Submit	09/27/2012 08:53:14 AM
Producer Review	Susan C Caputy/PennDOT BP-002066	Sign	09/27/2012 09:08:45 AM
Contractor Review	John Maffeo/PennDOT BP-000030	Sign	09/27/2012 02:20:41 PM
BOD CMD Review	Roland L Rode/PennDOT	Accept	10/01/2012 04:19:26 PM

Surety Company: Travelers Casualty and Surety Company of America
Bonding Agency: Willis of Pennsylvania, Inc.
Producer: Susan C Caputy/PennDOT BP-002066
Co-Insurer: Yes

Status: Accepted
Bond Number: 105818205
Bond Amount: \$4,716,767.56
NAIC: 31194

KNOW ALL MEN BY THESE PRESENTS, That we, *Trumbull Corporation of P.O. Box 6774, Pittsburgh, PA 15212* as PRINCIPAL, and Travelers Casualty and Surety Company of America a corporation, as SURETY, are held and firmly bound unto the *Commonwealth of Pennsylvania* in the full and just sum of \$4,716,767.56, lawful money of the United States of America, to be paid to the said Commonwealth of Pennsylvania, or it assigns, to which payment well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

Sealed with our respective seals and dated this 27 day of September A.D. 2012.

Whereas, the above bounden PRINCIPAL has undertaken to contract with the said Commonwealth of Pennsylvania, by and through the Secretary of Transportation covering the work identified below for approximately the sum of the bond amount defined above.

The project is construction of a new bridge over Amtrak on a new state route alignment which will be named SR 4062. SR 4062 intersects SR 0230 just east of Eby Chiques Road (T-347) in Rapho Township. The project work includes: construction of a new bridge over two tracks of Amtrak and one track of Norfolk Southern. The alignment will extend SR 4062 south from the intersection with SR 0230 to the railroad tracks continuing south to the terminus at existing Eby Chiques Road. The project plans include a new catenary and railroad electric traction (ET Plan) system to be constructed by the contractor. Amtrak forces will only perform work necessary to tie-in the existing ET system with the new ET system. Once the new bridge is constructed; the existing at-grade rail-highway crossings on both Eby Chiques Road and Newcomer Road will be closed and cul-de-sacs constructed to permanently close the crossings. The structures consists of one single-span prestressed concrete I-beam bridge and the approaches consist of four mechanically stabilized earth walls (MSE). Other items of work include: subbase (No. 2A), Superpave asphalt paving, guide rail, drainage, signing, pavement markings, and other miscellaneous construction, all as indicated on the approved drawings included in the Bid Package for STATE ROUTE 4062, SECTION 001, in LANCASTER COUNTY, RAPHO TOWNSHIP and MT. JOY BOROUGH.

and

WHEREAS, it was one of the conditions of the award of the Secretary of Transportation, acting for and on behalf of the Commonwealth of Pennsylvania, pursuant to which said contract was undertaken by the PRINCIPAL that these presents should be executed, to become binding upon the date the said contract is approved for the office of Budget, by the Comptroller.

NOW, THEREFORE, The conditions of this obligation is such that if the above bounden PRINCIPAL shall and will promptly or cause to be paid in full all sums of money which may be due by contractor or corporation, for all materials furnished or labor supplied or performed in the prosecution of the work, whether or not the said material or labor entered into and became component parts of the work or improvement contemplated, and for rental of the equipment used and services rendered by public utilities in, or in connection with, the prosecution of such work, then this obligation to be void, otherwise to remain in full force and effect.

The PRINCIPAL and SURETY hereby, jointly and severally, agree with the obligee herein that any individual, firm, partnership, association or corporation, which has performed labor or furnished material in the prosecution of the work as provided, and any public utility which has rendered services in, or in connection with, the prosecution of such work, and which has not been paid in full therefor, may sue *assumpsit* on this Payment Bond in his, their, or its own name and may prosecute the same to final judgement for such sum or sums as may be justly due to him, them, or it, and have execution thereon. Provided, however, that the Commonwealth shall not be liable for the payment of any costs or expenses of such suit.

Recovery by any individual, firm, partnership, association or corporation hereunder shall be subject to the provisions of the "Public Works Contractors' Bond Law of 1967", Act No. 385, approved December 20, 1967, P.L. 869, which Act shall be incorporated herein and made a part hereof, as fully and completely as though its provisions were fully and at length herein recited.

It is further provided that any alteration which may be made in the terms of the contract or in the work to be done or materials to be furnished or labor to be supplied or performed under it or the giving by the Commonwealth of any extension of time for the performance of the contract or any other forbearance on the part of either the Commonwealth or the Principal to the other shall not in any way release the PRINCIPAL and the SURETY or SURETIES or either or any of them, their heirs, executors, administrators, successors or assigns, from their liability hereunder, notice to the SURETY or SURETIES of any such alteration, extension, or forbearance being hereby waived.

IN WITNESS WHEREOF, the said PRINCIPAL and SURETY have duly executed this Bond under seal the day and year firstabove written.

Attorney-in-Fact Certification

*The undersigned attorney-in-fact by executing this Payment Bond certifies that he/she is licensed with the company named as surety for this bond and that to the best of his/her knowledge the said surety is licensed with the Pennsylvania Insurance Department.

Bond Workflow Status

Status	Name	Disposition	Date/Time
Draft	William D Woodford/ PennDOT BP-000030	Submit	09/27/2012 08:53:46 AM
Producer Review	Susan C Caputy/PennDOT BP-002066	Sign	09/27/2012 09:06:34 AM
Contractor Review	John Maffeo/PennDOT BP-000030	Sign	09/27/2012 02:20:04 PM
BOD CMD Review	Roland L Rode/PennDOT	Accept	10/01/2012 04:20:06 PM

Insurance

Willis of Pennsylvania, Inc.

444 Liberty Ave
Four Gateway Center
Suite 505
Pittsburgh, PA 15222

Company: Zurich American Insurance Company
Policy: GLO897858016
Expiration: 03/01/2013

DBE Commitments

DBE: 6%
Approved: 6.08%

Perform Less Than 50% of Work Items: No
Good Faith Effort Evaluation: No

Status	Business Partner	Business	% of Bid	Submitted	Acknowledged
Approved	Interlock Steelworkers, Inc.	Subcontractor	2.31%	09/19/2012	09/19/2012
Approved	Sanders Construction Co. Inc.	Subcontractor	3.77%	09/19/2012	09/18/2012

Interlock Steelworkers, Inc.

Prime

Contact:
Phone:
DBE: 6%

Status: Approved
Revision Number:

DBE

Business Partner: Interlock Steelworkers, Inc.
Type: DBE
Contact: Kevin Wynne
Phone: 301-829-7820
DBE JVT%:
Certification: 10596
Cert. Expiration: 08/31/2009

Agreement Amount: \$181,330.00
% of Bid: 2.31
Mobilization: \$0.00
Starting: 10/29/2012
Completion: 10/31/2014
Business Type: Subcontractor

Items

None

Partial Items

Item	Description	Unit of Measure	Quantity
8621-0004	MECHANICALLY STABILIZED RETAINING WALL D, AS DESIGNED S-29763	LS	1.000
8621-0003	MECHANICALLY STABILIZED RETAINING WALL C, AS DESIGNED S-29759	LS	1.000
1002-0053	REINFORCEMENT BARS, EPOXY COATED	LB	122,200.000
1002-0053	REINFORCEMENT BARS, EPOXY COATED	LB	122,200.000

Comment

None

Workflow

Status	Name	Disposition	Date/Time
Draft	Mike Siatkosky/PennDOT BP-000030	Submit	09/18/2012 04:00:43 PM
Awaiting Acknowledgement	Kevin P Wynne/PennDOT BP-000897	Acknowledge	09/19/2012 11:46:14 AM
Acknowledged	Mike Siatkosky/PennDOT BP-000030	Submit	09/19/2012 12:59:41 PM
PennDOT Review	Delores A Ritzman/PennDOT	Approve	09/20/2012 08:48:51 AM

Sanders Construction Co. Inc.

Prime

Contact:
Phone:
DBE: 6%

Status: Approved
Revision Number:

DBE

Business Partner: Sanders Construction Co. Inc.
Type: DBE
Contact: Ging Sanders
Phone: 717-486-5930
DBE JVT%:
Certification: 10806
Cert. Expiration: 08/31/2009

Agreement Amount: \$296,100.00
% of Bid: 3.77
Mobilization: \$0.00
Starting: 10/29/2012
Completion: 10/31/2014
Business Type: Subcontractor

Items

None

Partial Items

Item	Description	Unit of Measure	Quantity
8030-0001	BRIDGE STRUCTURE, AS DESIGNED S-29760	LS	1.000

Comment

None

Workflow

Status	Name	Disposition	Date/Time
Draft	Mike Siatkosky/PennDOT BP-000030	Submit	09/18/2012 03:50:49 PM
Awaiting Acknowledgement	Msanders Milagrossanders/PennDOT BP-000795	Acknowledge	09/18/2012 04:30:10 PM
Acknowledged	Mike Siatkosky/PennDOT BP-000030	Submit	09/19/2012 09:47:55 AM
PennDOT Review	Delores A Ritzman/PennDOT	Approve	09/19/2012 10:39:34 AM

Plans

Plans

Addendum

Roadway Plan - Eby Chiques

Supplemental Plans

Cross Section

Erosion and Sediment Pollution Control Plan

Other/Project-Specific Plan - Combination Title and Summary

Other/Project-Specific Plan - Amtrak Standard Track Plan Roadway Sections

Other/Project-Specific Plan - Catenary Structure Test Borings

Other/Project-Specific Plan - Existing Catenary Erection Drawings

Other/Project-Specific Plan - Post Construction Stormwater Management Plan

Other/Project-Specific Plan - ET Plans

Signing and Pavement Marking Plan

Structure Plan - S-29761 WALL A

Structure Plan - S-26759 WALL C

Structure Plan - S-29762 WALL B

Structure Plan - S-31698 BOX CULVERT

Structure Plan - S-29760 BRIDGE

Structure Plan - S-29763 WALL D

Attachments

Project-Specific Checklist Items

Addendum

- Project Specific - Amtrak Drawing ET-1447-D
- Project Specific - AED-2 CATENARY STRUCTURE LOADING, DESIGN CRITERIA, AND STANDARDS
- Project Specific - Amtrak Specification AED-1
- Project Specific - Amtrak Contractor Safety & Security Awareness Training Request
- Project Specific - Environmental Commitment and Mitigation Tracking System (ECMTS) Report – SR 4062-001
- Project Specific - Steel Escalation Option
- Project Specific - Amtrak Specification - Section 02261A - Requirements for Temporary Sheeting and Shoring to Support Amtrak Tracks
- Project Specific - Amtrak Specification - Section 01520A - Requirements for Temporary Protection Shields for Demolition and Construction of Overhead Bridges, etc.
- Project Specific - Amtrak Specification - Section 01142A Submission Documentation Required for Amtrak Review and Approval of Plan for Bridge Erection, Demolition, etc.
- Project Specific - Amtrak Track Monitoring
- Project Specific - SR 0230 AND NEWCOMER ROAD - EXISTING SIGNAL PLAN
- Project Specific - Amtrak Specification P-117 Bronze Castings Used in Catenary Construction
- Project Specific - Amtrak Specification P-116 Malleable Iron Castings Used in Catenary Construction
- Project Specific - Amtrak Specification CE565-A Non-ferrous Rods, Bolts, Tubes, Bars, and Forgings
- Project Specific - Amtrak - Indemnity From Contractors Performing Design or Engineering Functions - Eby Chiques
- Project Specific - Amtrak - Implementation of the American Recovery and Reinvestment Act of 2009
- Project Specific - FRA Flow-Down Provisions
- Project Specific - Amtrak - Standard Dwg AM70003A - Approved April 2000
- Project Specific - Amtrak Specification - Section 001141A Maintenance & Protection of RR Traffic
- Project Specific - Amtrak - Permit to Enter & Insurance Requirements
- Project Specific - Clean Fill Environmental Due Diligence (EDD) Phase 2
- Project Specific - Environmental Due Diligence (EDD) Phase 1 Visual Inspection Form - Contractor
- Project Specific - Environmental Due Diligence (EDD) Phase 1 Visual Inspection Form - PennDOT

Reviews

None

Contract Award Items

- Disclosure of Lobbying Activities - Standard Form LLL
- F.A.R. REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS
- Federal Wage Rate

Local Agreements and Coordination

None

Environmental Clearances

None

Permits

NPDES General Permit for Discharge of Storm Water - with all attachments

Right of Way

None

Survey

None

Utilities Clearance

None

Utility Engineering

None

Construction Items

Pre-Bid Construction Schedule - Eby Chiques Road

Pre-Bid Construction Schedule - Newcomer Road

Structures and Geotechnical

Structure Policy Letter

Railroad Coordination

D4279 Railroad Crossing Data for Design

D4279A Railroad Crossing Data for Contractor

Traffic

None

Construction Coordination

None

Maintenance Items

None

Estimates

None

Comments: