ECMS Highway Construction

Contract: 94915

New Enterprise Stone & Lime Co., Inc. XX-XXXXXXX

New Enterprise

814-766-2211 Ext: 3248 (phone)

814-766-4401 (fax)

bidding@nesl.com

Prime Business Partner

JeffersonCounty

SR 80, Section 540

I-80 Jeffersn Concrete WB

Location

T105-215-L01E

Federal Project

P-100080T7540-1050-373-1

WBS Element

August 31, 2012

Bid Opening

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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 08/21/2012
Addendum No. 2,	**A2,**	dated 08/27/2012
Addendum No. 3,	**A3,**	dated 08/28/2012
Addendum No. 4,	**A4,**	dated 08/28/2012

THIS AGREEMENT, Made this *16* day of *October* A.D. *2012*, between the Commonwealth of Pennsylvania by the Secretary of Transportation, hereinafter called the Commonwealth and *New Enterprise Stone & Lime Co., Inc.* 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 *$32,676,531.11* 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 description and location of the project is as follows: For the Design/Build of the highway reconstruction, including the complete removal and replacement of the pavement structure, drainage, delineation, signage, and guide rail along Interstate 80 Westbound. Also, the pavement overlay along Interstate 80 Eastbound. Also, bridge preservation activites on five structures along I-80 and other miscellaneous construction, as indicated on the approved drawings included in the bid package for STATE ROUTE 80, SECTION 540, in JEFFERSON COUNTY, WASHINGTON TOWNSHIP from approximately 0.57 mile west of the SR 1005 (Laurel Run Road) overpass at segment 0881 offset 1640 to approximately the Jefferson/Clearfield County line at segment 0961 offset 0876.

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 *10/06/2015*. 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:	94915
Certified Fund Available Under Activity Program:	373
Symbol:	010-008-10581-12/13/14/15-1
Amount:	$32,676,531.11

Contract Workflow Status

Status	Name	Disposition	Date/Time
Draft	Delores A Ritzman/PennDOT	Award	10/01/2012 12:47:31 PM
Contractor Review	Geoffrey W Clarke/PennDOT BP-001149	Sign	10/03/2012 02:03:47 PM
BOD CMD Review	Roland L Rode/PennDOT	Accept	10/10/2012 08:31:36 AM
BOD Director Review	R. Wayne Willey/PennDOT	Sign	10/11/2012 06:51:12 AM
Chief Counsel Preliminary Review	Bradley J Billet/PennDOT	Accept	10/11/2012 10:55:31 AM
Chief Counsel Final Review	Michael H Kline/PennDOT	Accept	10/12/2012 05:43:55 PM
Comptroller Review	John D Gebhard/PennDOT	Accept	10/16/2012 11:06:54 AM
CMD Execute	Douglas A Nace/PennDOT	Submit	10/16/2012 12:56:25 PM

Addenda

Addendum: 1

Description:

The description and location of the project is as follows: For the Design/Build of the highway reconstruction, including the complete removal and replacement of the pavement structure, drainage, delineation, signage, and guide rail along Interstate 80 Westbound. Also, the pavement overlay along Interstate 80 Eastbound. Also, bridge preservation activites on five structures along I-80 and other miscellaneous construction, as indicated on the approved drawings included in the bid package for STATE ROUTE 80, SECTION 540, in JEFFERSON COUNTY, WASHINGTON TOWNSHIP from approximately 0.57 mile west of the SR 1005 (Laurel Run Road) overpass at segment 0881 offset 1640 to approximately the Jefferson/Clearfield County line at segment 0961 offset 0876.

Estimated Project:	$36,285,372.00
Federal Project Status:	Federal Oversight
DBE:	4.00%
Structure Work:	8.00%
Wage Rates:	Yes
Project Type:	Standard
State Type of Work:	MISCELLANEOUS REHABILITATION WORK
Prequalification Required:	Yes
Pre-Bid Meeting:	Mandatory
Scheduled Let:	08/30/2012 11:00:00 AM
New Let:	
Let Date Move:	
Anticipated NTP:	10/15/2012
Required Completion:	10/06/2015

Additional Information

This is an ECMS project. All Addenda will be electronically posted. Place for delivery of diskette bid before 11:00 a.m. prevailing local time on the scheduled let date: PENNDOT CONTRACT AWARDS ROOM, 7TH FLOOR; COMMONWEALTH KEYSTONE BUILDING; 400 NORTH STREET; HARRISBURG PA 17120

Item and Quantity

Added the following item: 0609-0002
Modified the following items: 0203-0001, 9205-0200
Removed the following item: 0609-0003

Special Provision

Added the following special provision:
G7038B - a07038 Changes to Specifications: Sections 101, 103, 110, 419, 695, 930, 931, 932, 934, 935, 938,
Notice to Contractor
00 - b0506 Section 506 (provide SRL-H or better aggregate)
00 - bSection 703.2 Coarse Aggregate
Modified the following special provisions:
N29890C - a29890 SPECIAL BIDDING – DESIGN-BUILD
00 - aRECLAIMED PORTLAND CEMENT CONCRETE (RPCC) AGGREGATE FOR ROCK LINING, CLASS R MODIFIED
00 - bRock Cap for Pavement Subgrade Undercut
I6091F - c06091 ITEM 0609-0009 EQUIPMENT PACKAGE
I29903A - c4901-0001 MAINTENANCE AND PROTECTION OF TRAFFIC DURING CONSTRUCTION
I29900B - c9000-6001/6002 - DESIGN ROADWAY
00 - c9205-0200 SELECTED BORROW EXCAVATION, 206 ROCK
I29902A - c9901-0001 DESIGN TRAFFIC CONTROL PLAN

Removed the following special provisions:
G7038A - a07038 Changes to Specifications: Sections 103, 695, 930, 931, 932, 934, 935, 938, 1012, 1015, and
00 - aCORROSION RESISTANT GABIONS
00 - aRECLAIMED PORTLAND CEMENT CONCRETE (RPCC) AGGREGATE FOR MISCELLANEOUS DRAINAGE
00 - aUSE GUIDELINES FOR CORROSION RESISTANT GABIONS
00 - aUSE GUIDELINES FOR RPCC AGGREGATE FOR MISCELLANEOUS DRAINAGE

Other

Revised the following Roadway Plan sheets: Sheets 2 and 3 of 3 to reflect revised quantities and item added and item removed.

Revised the following Roadway Plan sheets: Sheets 6, 7, 9, 10, 12, 18, 22, 24, 25 and 42 of 70 to reflect revised quantities, change in rock cap depth and answers to contractor questions.

Revised the following Cross Section sheets: Sheets 9, 29, 89, 115, 116, 117, 118, 119, 126, 127, 129, 130, 131, 132, 133, 186, 187, 226, 227, 229 thru 238, 245, 246, 341 and 342 of 407 to reflect the change in rock cap depth, drainage clarification, contractor questions.

Attached ITS Plans 1 thru 3 of 3 as requested by contractors and shown on title sheet.

Addendum: 2

Description:

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DBE:	4.00%
Structure Work:	8.00%
Wage Rates:	Yes
Project Type:	Standard
State Type of Work:	MISCELLANEOUS REHABILITATION WORK
Prequalification Required:	Yes
Pre-Bid Meeting:	Mandatory
Scheduled Let:	08/30/2012 11:00:00 AM
New Let:	
Let Date Move:	
Anticipated NTP:	10/15/2012
Required Completion:	10/06/2015

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Item and Quantity

Modified the following item: 9000-6011

Special Provision

Added the following special provisions:
G1901A - a01901 INSURANCE--GENERAL APPLICATION
G2201A - a02201 RAILROAD COMPANY CONTACT PERSON
G2301A - a02301 MAINTENANCE AND PROTECTION OF RAILROAD TRAFFIC
G2401A - a02401 RAILROAD PROTECTIVE SERVICES COSTS
Modified the following special provision:
00 - aNotice to Contractor

Other

Attached the following revised sheets: Roadway sheets 6 and 7 of 70, traffic Control sheets 2 and 3 of 5
Attached revised D4279A
Attached Roadway Design Guidance Report

Addendum: 3

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Project Type:	Standard
State Type of Work:	MISCELLANEOUS REHABILITATION WORK
Prequalification Required:	Yes
Pre-Bid Meeting:	Mandatory
Scheduled Let:	08/31/2012 11:00:00 AM
New Let:	08/31/2012 11:00:00 AM
Let Date Move:	PENNDOT has moved the let date. Submitted bid files have been deleted. PENNDOT may publish further changes via addenda, resulting in the need to withdraw and resubmit bids.
Anticipated NTP:	10/15/2012
Required Completion:	10/06/2015

Additional Information

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Item and Quantity

Special Provision

Other

Addendum: 4

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Item and Quantity

Special Provision

Modified the following special provision:
00 - aNotice to Contractor

Other

Bid Items

Item	Description	Quantity	Unit Price	Item Total	Addendum
0203-0001	CLASS 1 EXCAVATION	115,932.000	$4.87	$564,588.84	1
0204-0100	CLASS 3 EXCAVATION	1,169.000	$51.32	$59,993.08	
0205-0100	FOREIGN BORROW EXCAVATION	200.000	$20.92	$4,184.00	
0212-0014	GEOTEXTILE, CLASS 4, TYPE A	173,715.000	$1.83	$317,898.45	
0212-0015	GEOTEXTILE, CLASS 4, TYPE B	173,715.000	$2.39	$415,178.85	
0213-0002	TEMPORARY PROJECT AIR POLLUTION CONTROL	1,000.000	$1.00	$1,000.00	
0309-0522	SUPERPAVE ASPHALT MIXTURE DESIGN, HMA BASE COURSE, PG 64-22, 3 TO < 10 MILLION ESALs, 25.0 MM MIX, 4" DEPTH	447.000	$31.95	$14,281.65	
0350-0104	SUBBASE 4" DEPTH (NO. 2A)	224.000	$14.17	$3,174.08	
0350-0121	SUBBASE (NO. 2A)	4,166.000	$35.73	$148,851.18	
4409-0881	SUPERPAVE ASPHALT MIXTURE DESIGN, HMA WEARING COURSE, PG 76-22, >/= 30 MILLION ESALS, 9.5 MM MIX, 1 1/2" DEPTH, SRL-E (MODIFIED)	43,899.000	$6.94	$304,659.06	
0409-1791	SUPERPAVE ASPHALT MIXTURE DESIGN, HMA WEARING COURSE (LEVELING), PG 76-22, 10 TO < 30 MILLION ESALS, 9.5 MM MIX, SRL-E	12,953.000	$77.69	$1,006,318.57	
4409-6850	SUPERPAVE ASPHALT MIXTURE DESIGN, HMA BINDER COURSE, PG 76-22, >/= 30 MILLION ESALS, 19.0 MM MIX, 2 1/2" DEPTH (MODIFIED)	61,150.000	$9.86	$602,939.00	
0409-6850	SUPERPAVE ASPHALT MIXTURE DESIGN, HMA BINDER COURSE, PG 76-22, >/= 30 MILLION ESALS, 19.0 MM MIX, 2 1/2" DEPTH	8,466.000	$13.21	$111,835.86	
0409-8850	SUPERPAVE ASPHALT MIXTURE DESIGN, HMA BINDER COURSE, RPS, PG 76-22, >/= 30 MILLION ESALS, 19.0 MM MIX, 2 1/2" DEPTH	104,744.000	$10.00	$1,047,440.00	
0419-1120	STONE MATRIX ASPHALT MIXTURE DESIGN, HMA WEARING COURSE, RPS, PG 76-22, >/= 30 MILLION ESALS, 9.5 MM MIX, 1 1/2" DEPTH, SRL-E	104,744.000	$7.01	$734,255.44	
4419-1120	STONE MATRIX ASPHALT MIXTURE DESIGN, HMA WEARING COURSE, RPS, PG 76-22, >/= 30 MILLION ESALS, 9.5 MM MIX, 1 1/2" DEPTH, SRL-E (MODIFIED)	25,941.000	$7.78	$201,820.98	
4422-0130	BITUMINOUS WEARING COURSE, FJ-1, SRL - H (MODIFIED)	33.000	$1,761.16	$58,118.28	
0460-0001	BITUMINOUS TACK COAT	543,377.000	$0.11	$59,771.47	
4461-0001	BITUMINOUS PRIME COAT (MODIFIED)	18,000.000	$1.10	$19,800.00	
0467-0001	HEAVY DUTY MEMBRANES	1,143.000	$6.88	$7,863.84	
0491-0019	MILLING OF BITUMINOUS PAVEMENT SURFACE, VARIABLE DEPTH, MILLED MATERIAL RETAINED BY CONTRACTOR	1,247.000	$10.79	$13,455.13	
0512-0001	LONGITUDINAL JOINT CLEANING AND SEALING	121,770.000	$0.88	$107,157.60	
4515-0001	SAWING AND SEALING OF BITUMINOUS OVERLAYS (MODIFIED)	87,932.000	$1.82	$160,036.24	
0516-2007	PATCHING JOINT	888.000	$24.39	$21,658.32	
0516-2008	NEW PAVEMENT JOINT	36.000	$24.02	$864.72	
0516-2034	CONCRETE PAVEMENT PATCHING, TYPE A, 10" DEPTH	500.000	$128.31	$64,155.00	
0521-0001	TRANSVERSE JOINT CLEANING AND SEALING	192,000.000	$1.32	$253,440.00	
0591-0001	MILLING OF CEMENT CONCRETE PAVEMENT SURFACE	10,120.000	$2.72	$27,526.40	
0608-0001	MOBILIZATION	1.000	$1,840,000.00	$1,840,000.00	
0609-0002	INSPECTOR'S FIELD OFFICE AND INSPECTION FACILITIES, TYPE A	1.000	$63,773.73	$63,773.73	1
0609-0009	EQUIPMENT PACKAGE	1.000	$19,813.50	$19,813.50	

0609-0011	FIELD LABORATORY	1.000	$7,770.00	$7,770.00
0615-0050	SUBSURFACE DRAIN OUTLET ENDWALL (SLOPED)	18.000	$582.08	$10,477.44
0619-0470	PERMANENT IMPACT ATTENUATING DEVICE, TYPE II, TEST LEVEL 3 (ENERGY ABSORBING TERMINALS, TANGENT)	10.000	$1,665.00	$16,650.00
0620-0500	RESET GUIDE RAIL	22,775.000	$3.33	$75,840.75
0620-0503	REMOVE EXISTING GUIDE RAIL (CONTRACTOR'S PROPERTY)	10,292.000	$1.11	$11,424.12
0620-0575	GUIDE RAIL ELEMENT	25.000	$11.10	$277.50
0620-0862	TYPE 2-S POST ANCHORAGE	11.000	$499.50	$5,494.50
0620-0863	ANCHOR TERMINAL, BACKSLOPE	1.000	$555.00	$555.00
0620-0900	REMOVE CONCRETE ANCHORAGE	1.000	$11.10	$11.10
0620-1075	TYPE 2-S GUIDE RAIL	9,963.000	$14.65	$145,957.95
0620-1100	TYPE 2-SC GUIDE RAIL	38.000	$22.20	$843.60
0660-0030	BITUMINOUS SHOULDER RUMBLE STRIPS	78,558.000	$0.14	$10,998.12
0680-0121	MEMBRANE WATERPROOFING SYSTEM INSTALLED ON OTHER SURFACES	206.000	$258.02	$53,152.12
0686-0030	CONSTRUCTION SURVEYING, TYPE B, MODIFIED	1.000	$100,000.00	$100,000.00
0686-0040	CONSTRUCTION SURVEYING, TYPE C	1.000	$7,526.78	$7,526.78
0686-0060	CONSTRUCTION SURVEYING, TYPE D, MODIFIED	1.000	$23,834.81	$23,834.81
0689-0003	CPM SCHEDULE	1.000	$1.00	$1.00
0845-0001	UNFORESEEN WATER POLLUTION CONTROL	1,000.000	$1.00	$1,000.00
4901-0001	MAINTENANCE AND PROTECTION OF TRAFFIC DURING CONSTRUCTION (MODIFIED)	1.000	$1,480,000.00	$1,480,000.00
0901-0001	MAINTENANCE AND PROTECTION OF TRAFFIC DURING CONSTRUCTION	1.000	$175,594.43	$175,594.43
0901-0120	SPEED DISPLAY SIGN	2.000	$8,471.52	$16,943.04
0901-0203	ARROW PANEL	1.000	$4,235.76	$4,235.76
0901-0231	ADDITIONAL WARNING LIGHTS, TYPE B	125.000	$1.05	$131.25
0901-0232	ADDITIONAL WARNING LIGHTS, TYPE C	125.000	$0.33	$41.25
0901-0240	ADDITIONAL TRAFFIC CONTROL SIGNS	700.000	$8.88	$6,216.00
0901-0461	FULL-MATRIX CHANGEABLE MESSAGE SIGN WITHOUT TELECOMMUNICATIONS	1.000	$9,118.65	$9,118.65
0937-0104	GUIDE RAIL MOUNTED DELINEATOR TYPE B, (Y/B)	220.000	$9.44	$2,076.80
0937-0106	GUIDE RAIL MOUNTED DELINEATOR TYPE B, (W/B)	220.000	$9.44	$2,076.80
0937-0202	BARRIER MOUNTED DELINEATOR, SIDE-MOUNT TYPE O, (Y/B)	22.000	$17.66	$388.52
0937-0203	BARRIER MOUNTED DELINEATOR, SIDE-MOUNT TYPE O, (W/B)	22.000	$18.79	$413.38
0937-0207	BARRIER MOUNTED DELINEATOR, TOP AND SIDE-MOUNT TYPE R, (Y/B)	22.000	$25.97	$571.34
0937-0208	BARRIER MOUNTED DELINEATOR, TOP AND SIDE-MOUNT TYPE R, (W/B)	22.000	$25.97	$571.34
0937-0330	FLEXIBLE DELINEATOR POST, GROUND-MOUNT TYPE GM-2, WHITE POST WITH WHITE/ BLANK SHEETING	130.000	$27.75	$3,607.50
0937-0333	FLEXIBLE DELINEATOR POST, GROUND-MOUNT TYPE GM-2, YELLOW POST WITH YELLOW/BLANK SHEETING	200.000	$27.75	$5,550.00
0962-1000	4" WHITE WATERBORNE PAVEMENT MARKINGS	79,000.000	$0.16	$12,640.00
4962-1000	4" WHITE WATERBORNE PAVEMENT MARKINGS (MODIFIED)	39,500.000	$0.16	$6,320.00
4962-1001	6" WHITE WATERBORNE PAVEMENT MARKINGS (MODIFIED)	10,400.000	$0.19	$1,976.00
0962-1001	6" WHITE WATERBORNE PAVEMENT MARKINGS	20,800.000	$0.19	$3,952.00

0962-1002	8" WHITE WATERBORNE PAVEMENT MARKINGS	3,800.000	$0.28	$1,064.00	
4962-1002	8" WHITE WATERBORNE PAVEMENT MARKINGS (MODIFIED)	1,900.000	$1.11	$2,109.00	
4962-1005	4" YELLOW WATERBORNE PAVEMENT MARKINGS (MODIFIED)	41,200.000	$0.16	$6,592.00	
0962-1005	4" YELLOW WATERBORNE PAVEMENT MARKINGS	82,400.000	$0.16	$13,184.00	
0963-0006	6" PAVEMENT MARKING REMOVAL	200.000	$0.50	$100.00	
0964-0001	4" WHITE EPOXY PAVEMENT MARKINGS	39,500.000	$0.58	$22,910.00	
0964-0002	4" YELLOW EPOXY PAVEMENT MARKINGS	41,200.000	$0.58	$23,896.00	
0964-0005	6" WHITE EPOXY PAVEMENT MARKINGS	10,400.000	$0.72	$7,488.00	
0964-0008	8" WHITE EPOXY PAVEMENT MARKINGS	1,900.000	$1.11	$2,109.00	
0964-0011	12" WHITE EPOXY PAVEMENT MARKINGS	140.000	$9.99	$1,398.60	
0966-0018	SNOWPLOWABLE RAISED PAVEMENT MARKER TWO WAY HOLDER WITH REFLECTOR (W/B)	520.000	$29.42	$15,298.40	
0966-0104	SNOWPLOWABLE RAISED PAVEMENT MARKER, TWO WAY BRIDGE DECK HOLDER WITH REFLECTOR (W/B)	20.000	$48.84	$976.80	
1001-0001	CLASS AA CEMENT CONCRETE	107.000	$465.97	$49,858.79	
1001-0611	6" STRUCTURE FOUNDATION DRAIN	808.000	$23.56	$19,036.48	
1001-0730	SELECTED BORROW EXCAVATION, STRUCTURE BACKFILL	94.000	$216.85	$20,383.90	
1001-0960	CLASS AAAP CEMENT CONCRETE	591.000	$398.01	$235,223.91	
1002-0053	REINFORCEMENT BARS, EPOXY COATED	154,386.000	$1.68	$259,368.48	
1002-0152	MECHANICAL SPLICE SYSTEM FOR NO. 5 REINFORCEMENT BARS, EPOXY COATED	170.000	$35.56	$6,045.20	
1002-0153	MECHANICAL SPLICE SYSTEM FOR NO. 6 REINFORCEMENT BARS, EPOXY COATED	180.000	$41.44	$7,459.20	
1008-0001	PREFORMED NEOPRENE COMPRESSION JOINT SEAL, 1/2" MOVEMENT	87.000	$66.54	$5,788.98	
1018-0050	REMOVAL OF PORTION OF EXISTING BRIDGE	1.000	$8,171.39	$8,171.39	
1018-0051	REMOVAL OF PORTION OF EXISTING BRIDGE	1.000	$9,969.59	$9,969.59	
1018-0052	REMOVAL OF PORTION OF EXISTING BRIDGE	1.000	$8,304.59	$8,304.59	
1018-0053	REMOVAL OF PORTION OF EXISTING BRIDGE	1.000	$99,958.33	$99,958.33	
1018-0054	REMOVAL OF PORTION OF EXISTING BRIDGE	1.000	$54,067.61	$54,067.61	
1026-0015	NEOPRENE STRIP SEAL DAM, (3" MOVEMENT)	289.000	$302.31	$87,367.59	
1040-0002	CONCRETE BRIDGE DECK REPAIR, TYPE 2	623.000	$82.56	$51,434.88	
1090-0600	CLASS AA CEMENT CONCRETE REPAIRS	24.000	$732.60	$17,582.40	
1090-0610	CLASS A CEMENT CONCRETE REPAIRS	307.000	$427.35	$131,196.45	
1999-9999	TRAINEES	4,000.000	$1.00	$4,000.00	
9000-0002	CONCRETE BEAM SPALL REPAIR	22.000	$249.75	$5,494.50	
9000-0003	PERMITS FOR DESIGN BUILD PROJECT	1.000	$202,257.92	$202,257.92	
9000-0004	UTILITY RELOCATION INFORMATION FOR DESIGN/BUILD	1.000	$8,730.76	$8,730.76	
9000-6001	DESIGN ROADWAY, CONCRETE PAVEMENT	1.000	$1,250,233.51	$1,250,233.51	
9000-6011	CONSTRUCT ROADWAY	1.000	$17,938,068.53	$17,938,068.53	2
9001-0001	CLASS AA CEMENT CONCRETE, MODIFIED	52.000	$1,033.82	$53,758.64	
9008-0001	PREFORMED NEOPRENE COMPRESSION JOINT SEAL, 3/4" MOVEMENT	356.000	$66.54	$23,688.24	
9019-0152	PROTECTIVE COATING FOR REINFORCED CONCRETE SURFACES	1,689.000	$7.49	$12,650.61	
9043-0101	EPOXY BASED SURFACE TREATMENT FOR BRIDGE DECKS	6,902.000	$69.88	$482,311.76	
9205-0200	SELECTED BORROW EXCAVATION, 206 ROCK	115,810.000	$6.75	$781,717.50	1
9619-0470	RESET PERMANENT IMPACT ATTENUATING DEVICE	8.000	$444.00	$3,552.00	
9620-0001	REPAIR GUIDE RAIL	150,000.000	$1.00	$150,000.00	
9901-0001	DESIGN TRAFFIC CONTROL PLAN	1.000	$79,411.45	$79,411.45	
9901-0002	REPLACEMENT OF ANTI-GLARE SCREEN MOUNTED ON TEMPORARY CONCRETE BARRIER	50,000.000	$1.00	$50,000.00	

9957-0001	MARKER, TEMPORARY NON-PLOWABLE CHIP, W/B	200.000	$5.55	$1,110.00
9957-0002	MARKER, TEMPORARY NON-PLOWABLE, Y/B	200.000	$5.55	$1,110.00
9999-9901	A+B(x) Item Life Cycle Cost Analysis, C-Factor	4,845,120.000	$1.00	$4,845,120.00

Contract Total: $32,676,531.11

Innovative Bid Total: $4,845,120.00

Bid Total: $37,521,651.11

Special Provisions

G2A - a00002 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:

(X) DSP1. Offset Provision for Commonwealth Contracts.

(X) DSP2. Contractor Responsibility Provisions.

(X) 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.

(X) DSP7. Disadvantaged Business Enterprise Requirements. This is used on Federal - aid projects only. In conjunction with this contract a goal of 4 % of the original contract amount has been established.

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

(X) DSP10. Nondiscrimination/Sexual Harassment Clause.

(X) DSP11. Contractor Integrity Provisions.

(X) 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.

G211A - a00211 MANDATORY PRE-BID CONFERENCE

Addendum:

Associated Item(s):

Header:
MANDATORY PRE-BID CONFERENCE

Provision Body:

A mandatory pre-bid conference, with Department of Transportation personnel and all prospective bidders, will be held on August 2, 2012 at 10:00 Local Time, at the PennDOT Engineering District 10-0, 2550 Oakland Ave., Indiana, PA 15701, telephone number (724) 357-2810. The purpose of this meeting is to identify and discuss certain aspects of the project which can and will impact on the bidder's ability to submit an informed bid.

The bidder's attendance at this pre-bid conference is MANDATORY. If unable to attend the meeting in person, the bidder must send a duly authorized personal representative.

Failure of the bidder, or the bidder's accredited personal representative, to attend this pre-bid conference, and register with the Department official in charge of the meeting, will be cause for rejection of the bid proposal.

In compliance with the Americans with Disabilities Act of 1990, the Department has scheduled the pre-bid conference at a facility which is accessible to persons having disabilities. Any person having special needs or requiring special assistance is requested to contact Dave Layman at (724) 357-2810 by July 26, 2012, in order that special needs may be accommodated and/or assistance provided.

Direct any questions regarding the pre-bid conference to David Layman at (724) 357-2810.

G311A - a00311 ROAD USER LIQUIDATED DAMAGES (RULD)

Addendum:

Associated Item(s):

Header:

ROAD USER LIQUIDATED DAMAGES (RULD)

Provision Body:

Road User Liquidated Damages (RULDs) will be assessed as specified in Section 108.07(b) and as follows:

Unrestricted traffic is defined as opening the roadway/ structure full width including shoulders and ramps as approved by the Representative with no further need for traffic restrictive devices.

24 hours in advance of the completion of portions of the work which control the assessment of liquidated damages, notify the Representative so that a mutual inspection can be performed. If the Representative determines that the work is completed satisfactorily, the travel lanes will be opened to unrestricted traffic and no further liquidated damages will be assessed for that portion of work.

Damage charges as outlined below will be assessed independent of and concurrent with, as appropriate, Construction Engineering Liquidated Damages (CELD) as specified in Section 108.07(a).

RULDs as specified will be deducted from money due or to become due.

Milestone Compliance (Westbound Reconstruction- Westbound Single Lane Closure- Westbound Closure With Crossovers)

RULDs in the amount of $8,800/ Day will be assessed for each day or portion of day that I-80 Westbound is not open to unrestricted traffic on all lanes on or after September 13, 2014.

Milestone Compliance (Westbound Reconstruction-Westbound Single Lane Closures-Half-Width)

RULDs in the amount of $1,100/ Day will be assessed for each day or portion of day that I-80 Westbound is not open to unrestricted traffic on all lanes on or after July 15, 2015.

Milestone Compliance (Westbound Reconstruction-Eastbound Single Lane Closures)

RULDs in the amount of $9,000/Day will be assessed for each day or portion of day that I-80 Eastbound is not open to unrestricted traffic on all lanes on or after September 21, 2015

Detour (Ramp B)

RULDs in the amount of $900/Day will be assessed for each day/or portion of day that the detour for I-80 Ramp B is not removed and traffic is open to unrestricted traffic in all lanes on or after September 13, 2014.

Detour (Ramp C)

RULDs in the amount of $1700/Day will be assessed for each day/or portion of day that the detour for I-80 Ramp C is not removed and traffic is open to unrestricted traffic in all lanes on or after September 13, 2014.

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 Jefferson County, which is within the Economic Area of Williamsport, PA 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.

G1901A - a01901 INSURANCE--GENERAL APPLICATION

Addendum: 2

Associated Item(s):

Header:
INSURANCE--GENERAL APPLICATION

Provision Body:

I. Name and Address of the Railroad as found in the Project Specific Details,
Detail 1(***see below***).

II. GENERAL.

(a) In addition to any other forms of insurance or bonds required under the terms of the contract and specifications, provide and carry Railroad's Protective Public Liability Insurance in the specified amounts. Also, submit a properly executed Insurance Certificate evidencing the issuance of adequate Contractor's Public Liability and Property Damage Insurance with the executed contract when it is returned to the Department.

(b) Carry the specified insurance from the time physical work is started until all physical work required to be performed under the terms of the contract is substantially completed. Failure to carry or keep such insurance in force until all work is substantially completed will constitute a violation of the contract and in such event, the Secretary may avail himself of the remedies provided under Section 108.08.

(c) Furnish to the railroad company a signed copy of the policy for Contractor's Public Liability and Property Damage Insurance and the signed original policy for Railroad's Protective Public Liability Insurance prior to entry upon railroad right-of-way. If any work is subcontracted, also furnish to the railroad a signed copy of the policy for Contractor's Protective Public Liability and Property Damage Insurance.

III. RAILROAD'S PROTECTIVE PUBLIC LIABILITY INSURANCE.

Furnish the Department evidence that, with respect to the operations the Contractor or any subcontractors perform, provide Railroad Protective Public Liability Insurance in the name of the Railroad found in the Project Specific Details, Detail 1 providing

coverage for bodily injury, death, and property damage limited to a combined single limit of not less than two million dollars ($2,000,000) per occurrence with an aggregate limit of not less than six million dollars ($6,000,000) for the term of the policy.

IV. CONTRACTOR'S PUBLIC LIABILITY AND PROPERTY DAMAGE INSURANCE.

In accordance with Sections 103.06 and 107.14, carry regular Contractor's Public Liability and Property Damage Insurance of not less than two million dollars ($2,000,000).

V. CONTRACTOR'S PROTECTIVE PUBLIC LIABILITY AND PROPERTY DAMAGE

If any work is subcontracted, furnish evidence to the Department that regular Contractor's Protective Public Liability and Property Damage Insurance of not less than two million dollars ($2,000,000) is carried, in the Contractor's behalf.

Project Specific Details:

1. The Proper Name and Address of the Railroad as referred to in Para I is:
Buffalo & Pittsburgh Railroad, Inc.
201 North Penn Street, PO Box 477
Punxsutawney, PA 15767
814-726-3552
William V. Gentilman, Property Manager

G2201A - a02201 RAILROAD COMPANY CONTACT PERSON

Addendum: 2

Associated Item(s):

Header:
RAILROAD COMPANY CONTACT PERSON

Provision Body:

Contact the following railroad company representative to request protective services required by the special provision entitled "Maintenance and Protection of Railroad Traffic":

Michael Yaros, Roadmaster

Buffalo & Pittsburgh Railroad, Inc.

201 North Penn Street, PO Box 477

Punxsutawney, PA 15767

814-726-3552

G2301A - a02301 MAINTENANCE AND PROTECTION OF RAILROAD TRAFFIC

Addendum: 2

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

Addendum: 2

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.

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 $2.76/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 $587.00/ 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.

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.

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.

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:

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.

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, HP12x74", the unit weight of the steel is 74 pounds per foot).

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

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.

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:

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:

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:

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.

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**

≤1 1/2	1/2 deep by 1/2 wide
>1 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% ± 1.5% for traditional mixes and 7% ± 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: 1

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:**

103.03CANCELLATION 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.aGradation. 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 Gyrations (N_{design})	100	
Voids in Mineral Aggregate	18.0 % Minimum	
Voids in Course Aggregate (VCA)	$VCA_{mix} < VCA_{dry\ rodded}$	
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:**

935.2MATERIAL—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:**

938.2MATERIAL—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.

N10561A - a10561 ENVIRONMENTAL COMMITMENTS and MITIGATION TRACKING SYSTEM (ECMTS) REPORT

Addendum:

Associated Item(s):

Header:
ENVIRONMENTAL COMMITMENTS and MITIGATION TRACKING SYSTEM (ECMTS) REPORT

Provision Body:

I.DESCRIPTION - This work is the review and reevaluation of the environmental documents and the updating, documentation, and implementation of the environmental commitments identified in the project Environmental Commitments and Mitigation Tracking System (ECMTS) report.

a) Compliance with Environmental Documents

Develop Final Design and complete construction activities in compliance with the mitigation and commitments detailed in the approved Environmental Documents. The Department has obtained environmental clearance for this project in the form of a Level 1b Categorical Exclusion Evaluation (CEE). The complete environmental document can be obtained online through the CEE Expert System's Approved Document Archive at the following web address: http://dotdom2.state.pa.us/ceea/ceeamain01.nsf by entering Package Number 14875 into the search tool and select the returned document link.

Reevaluate the Environmental Document if the design does not conform to the environmental impacts described in the approved Environmental Document, or if any anticipated impacts to natural or cultural resources are different from the anticipated impacts evaluated in the approved Environmental Document. Reevaluation must be approved before the start of construction activities. Coordinate as needed with the District Environmental Manager to obtain approval of the reevaluations. No extension of the project completion date will be granted.

b)Mitigation Tracking

Refer to the Environmental Commitments and Mitigation Tracking System Report for information related to the mitigation commitments and tracking documents for the project. The following is a list of the commitments to be tracked:

1. Un-impacted wetlands within the project area are to be protected with temporary fencing during construction.
2. A 2:1 ratio of impacted wetlands (0.078 acres) will be mitigated for (0.156 acres mitigated) in the Dubois/Jefferson Wetland Bank.
3. An ECMTS Matrix will be created to track mitigation commitments through the final design and construction phases. The Matrix should be accompanied by the recommended design/build special provision in the contract in accordance with PennDOT Publication 10X, Appendix T.

Designate a responsible individual (Project Manager or Site Superintendent) to maintain the ECMTS Report during construction. Identify the designated individual's name in a note at the bottom of the matrix. Include additional names if responsible individuals change during the construction of the project.

Review each Mitigation Category and associated mitigation or commitment identified in the ECMTS Report with the Department Construction Project Manager, Inspector- In- Charge, and District Environmental Manager (or Environmental Monitor if one is assigned to the project). As each mitigation or commitment is completed, initial and date the appropriate block. By initialing and dating the block, the designated individual confirms the mitigation or commitment has been reviewed, understood, and has been or will be incorporated in the design and construction of the project, as appropriate.

Ensure that the mitigation commitments are completed at earliest possible stage of the project. Review the ECMTS Report with the Department Construction Project Manager, Inspector-In-Charge, and District Environmental Manager (or Environmental Monitor if one is assigned to the project) at each status meeting. The Department Construction Project Manager (or Environmental Monitor) will verify, date, and initial each mitigation commitment as it is completed.

Direct questions regarding the mitigation and commitments to the District Environmental Manager (or Environmental Monitor). Notify the District Environmental Manager of any problems with implementing the commitments. Changes to mitigation or commitments will be reviewed and approved by the Environmental Manager in coordination with the relevant resource agencies. Notify the Construction Services Engineer of any problems encountered during the implementation of the commitments and mitigation measures.

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.

Submit one (1) copy of the completed ECMTS Report to the Department Construction Project Manager, one (1) copy to the District Construction Services Engineer, and one (1) copy to the District Environmental Manager upon completion of the project.

II. MEASUREMENT AND PAYMENT – Incidental to the design activities listed in Section IV of the Special Provision titled SPECIAL BIDDING – DESIGN-BUILD.

N29890C - a29890 SPECIAL BIDDING – DESIGN-BUILD

Addendum: 1

Associated Item(s):

Header:

SPECIAL BIDDING – DESIGN-BUILD

Provision Body:

This project will utilize the Low Bid Design- Build method of contracting. The contract for this project will be between the Department and the successful Bidder.

I. ACTIONS REQUIRED BY THE BIDDER AT THE BIDDING STAGE AND BEFORE AWARD

When signing and submitting the bid, the Bidder is required to certify the following for all professional service firms (firms) performing activities listed in Section IV – Design Activities:

- that, if applicable, the Bidder either (a) has obtained assurance that all firms being used have no adverse interests as defined in the State Adverse Interest Act and fully comply with this Special Provision or (b) has transmitted a letter to the Contract Awards Officer disclosing any potential conflicts;
- that, if applicable, the Bidder (a) has obtained assurance that all firms being used have no organizational conflicts of interests and fully comply with this Special Provision or (b) has transmitted a letter to the Contract Awards Officer disclosing any potential conflicts;
- that, if applicable, the Bidder (a) has obtained assurance that all firms being used have fully complied with Section III of this special provision or (b) will email or fax a completed "Request for Consideration of Professional Services Involvement Restrictions" form to the District Project Manager; and
- that, if applicable, the Bidder has obtained assurance that all firms being used are familiar with the necessary AASHTO, PENNDOT, and other applicable design criteria, standards, and construction specifications required to complete the related portion of their associated work.

Contact the Contract Awards office at (717) 783-9690 to determine acceptable method of transmission of any aforementioned letters, and correct email address or fax number.

State Adverse Interest Act – Where required, fully disclose any potential conflict with the State Adverse Interest Act as State Advisor or State Consultant. If there is no adverse interest, certify as such.

Organizational Conflict of Interest – Where required, fully disclose all relevant facts concerning any past, present, or currently planned interests that may present an Organizational Conflict of Interest. This disclosure must state how their interests or those of their chief executives, directors, key project personnel, or any proposed firm could be viewed as, an Organizational Conflict of Interest. If there is no Organizational Conflict of Interest, certify as such. Note: An Organizational Conflict of Interest is defined in *23 CFR 636* as a conflict “that because of other activities or relationships with other persons, a person is unable or potentially unable to render impartial assistance or advice to the owner, or the person’s objectivity in performing the contract work is or might be otherwise impaired, or a person has an unfair competitive advantage.”

Professional Services Involvement Restrictions – Where required, indicate that involvement in such firms can be avoided, neutralized, or mitigated by completing the following:

- present these involvements on the "Request for Consideration for Professional Services Involvement Restrictions" form, located in ECMS File Cabinet (in the References Tab); and
- email or fax this form immediately upon ECMS email notification of apparent low bidder status to the District Project Manager indicated in Section V – Review Submission Contacts of this Special Provision.

The District Project Manager will notify the apparent low bidder of the result.

II. ACTION TO BE TAKEN BY THE BIDDER AFTER AWARD

Design Activity Firm Identification and Qualifications

The awarded bidder is required to complete the form, “Design-Build Design Activities Firm Identification and Qualifications”. This form is located in ECMS File Cabinet (in the References Tab).

Email or fax the completed form to the District Project Manager indicated in the Section V of this Special Provision within three calendar days after the award of the contract.

Include on this form the name and design activity performed by each firm performing activities listed in Section IV of this special provision. Include with this form resumes for the:

- Lead Design Engineer Project Manager;
- Quality Control (QC) Manager and Alternate QC Manager;
- Quality Assurance (QA) Manager (if applicable) and Alternate QA Manager; and
- Secondary Design Services Professionals (if applicable) Project Manager.

These resumes should show the experience and expertise required by the project special provisions for the applicable design activities listed in Section IV – Design Activities of this Special Provision. At a minimum, these resumes should show experience and expertise during the last 7 years, of two similar projects of comparable complexity on Pennsylvania's State Highway, Pennsylvania Turnpike, or local system. Non-Turnpike projects must have been funded with Federal Aid Highway Funds. Also, include an affidavit stating that the Lead Design Engineer is familiar with AASHTO, the Department, and other applicable design criteria, standards, and construction specifications. Additional design qualifications may be listed in other Design-Build Special Provisions included in this Contract.

All engineering firms must have a current Annual Qualification Package on file with the Bureau of Design's Consultant Agreement Section and be registered business partners in ECMS. In addition, engineering firms' business partner relationship in ECMS must include both Consultant and Construction Contractor relationships. The ECMS USER ID security must include Construction Contractor security groups such as "Contractor Principal." Firms must be listed as a Prequalification Exempt Service Provider in the subcontractor database with the Department's Prequalification Office. These requirements also apply to all subconsultants, including Disadvantaged Business Enterprises, Minority Business Enterprises, and Women-Owned Business Enterprises.

For projects that include Right-of-Way Acquisition services, the right-of-way firm must be pre-approved to provide of Right-of-Way Acquisition Services through ECMS

All firms must comply with the restrictions listed in 23 CFR 636.116 titled *What organizational conflict of interest requirements apply to design-build projects?*

If a firm included in the submission does not meet the necessary requirements indicated in this Special Provision and in the project special provisions for the applicable design activities listed in Section IV – Design Activities, the Department reserves the right to disallow the firm for this contract. Firms identified on a "Request for Consideration for Professional Services Involvement Restrictions" form that has been submitted but not approved will be disallowed.A notification will be given to the Contractor within 8 calendar days from the time and date of submission indicating the Department approval or disallowance, and justification thereof, of each firm listed on the "Design-Build Design Activities Firm Identification and Qualifications" form. A firm cannot begin work on this contract until approval is received from the Department. Unless indicated otherwise by the Department in writing, the disapproval of any firm will not allow the extension of the contract completion date or price adjustments to any items in the contract.

III. PROFESSIONAL SERVICES INVOLVEMENT RESTRICTIONS

All firms performing activities listed in Section IV – Design Activities must be in compliance with the following paragraphs and the Professional Services Involvement Restrictions – Design Activities of this Special Provision for Design-Build Contracts charts [Table A and Table B].

- Any Consultant that provided or is providing any design work and services to the Department for the preparation of this design-build bid package will not be eligible to provide any design work and services to the Contractor for the design-build contract.
- Any Consultant performing design work or services to the Contractor for this design-build contract, such as Lead Design Engineer, Quality Control Reviewer, Secondary Design Service Professionals, or Quality Assurance Reviewer (if applicable), is not eligible for any involvement under a Department Agreement on that contract.

DEFINITIONS:

PRIME CONSULTANT (Department agreement) – The contractual party providing design consultant work and services pursuant to an Agreement with the Department. The Consultant may be an individual, partnership, corporation, or joint venture.

SUB-CONSULTANT (Department agreement) - The party providing design work and services to the Prime Consultant (which is providing consultant work and services pursuant to an agreement with the Commonwealth) pursuant to an agreement with the Prime Consultant to which the Department is not a party.

LEAD DESIGN ENGINEER (LDE) (design-build contract) – The design consultant engineering firm or Contractor's personnel that are responsible for the design portion of the design-build contract.

QUALITY CONTROL REVIEWER (QC-R) (design-build contract) - The design consultant engineering firm or individuals that are responsible to manage the quality control of the design-build contract, including the Quality Control Manager and the Alternate Quality Control Manager. The design Quality Control Reviewer is allowed to be the same firm as the Lead Design Engineer.

QUALITY ASSURANCE REVIEWER (QA- R) (Department agreement or design- build contract, if applicable)– The design consultant engineering firm or individuals functioning as Department and FHWA (as appropriate) representatives who check the validity of the Contractor's Quality Plan to ensure all work is done in accordance with the contract documents. Quality Assurance Reviewer may be Department and/or FHWA personnel, consultants under a Department agreement, or a firm providing design services to the design- build Contractor (if included as a design activity in Section IV of this Special Provision, as "Quality Assurance by Peer Review). The Quality Assurance Reviewer may not be the same firm as the Contractor, the Lead Design Engineer, or the Quality Control Reviewer.

SECONDARY DESIGN SERVICE PROFESSIONALS (SDSP) (design-build contract)– Other design consultant engineering firms or professional service firms providing professional services to the design-build Contractor beyond roles of Lead Design Engineer or design Quality Control Reviewer.

PROFESSIONAL SERVICES INVOLVEMENT RESTRICTIONS - DESIGN ACTIVITIES FOR DESIGN-BUILD CONTRACTS:

TABLE A: INVOLVEMENT AS PRIME OR SUB CONSULTANT TO THE DEPARTMENT

PROJECT INVOLVEMENT **(Prime Consultant/ Sub- consultant in Department Agreement)**	**DESIGN ACTIVITY RESTRICTIONS**
Feasibility Studies, Traffic Studies, Mapping Services	No restrictions if no recommendations to the Department made by the Consultant
Preliminary Engineering, Preliminary Engineering Constructability Reviews, and Environmental Studies Anticipating a CEE	Not eligible to perform any design work or services to the Contractor for the design-build contract. Exception (1) – See "Sub-consultant Exception" below.
Preliminary Engineering, Preliminary Engineering Constructability Reviews, and Environmental Studies Anticipating an EA/ EIS	Not eligible to perform any design work or services to the Contractor for the design-build contract. Exception (1) – See "Sub-consultant Exception" below.
Conceptual Design / Bid Package Preparation for Design-Build Project	Not eligible to perform any design work or services to the Contractor for the design-build contract. Exception (1) – See "Sub-consultant Exception" below.
Final Design	Not eligible to perform any design work or services to the Contractor for the design-build contract.
Preliminary Engineering-Design Management, Review Note: This includes consultants performing reviews for a District or Central Office Agreement, including an Open End Agreement.	Not eligible to perform any design work or services to the Contractor for the design-build contract. Exception (1) – See "Sub-consultant Exception" below.
Final Design Management, Review Note: This includes consultants performing reviews for a District or Central Office Agreement, including an open-end agreement.	Not eligible to perform any design work or services to the Contractor for the design-build contract.

Department Review (Any design review completed as a representative of the Department, including Quality Assurance Reviews)	Not eligible to perform any design work or services to the Contractor for the design-build contract.
Construction Management Support (Any construction activity completed as a representative of the Department other than construction inspection, or services during construction)	Not eligible to perform any design work or services to the Contractor for the design-build contract
Services during Construction (Any design support services/ reviews conducted during construction)	Not eligible to perform any design work or services to the Contractor for the design-build contract.
Construction Inspection	Not eligible to perform any design work or services to the Contractor for the design-build contract.

(1) Sub-consultant Exception –A Sub-consultant performing certain activities under a Department agreement containing multiple "projects," which are let under separate construction contracts, can perform design activities as part of the design-build contract provided that the design activities for the design-build contract is for a "project" in which the sub-consultant did not participate in ANY work for the Department.

See Table A.1: Department Agreement Containing Multiple Projects – Sub-consultant Eligibility.

TABLE A.1: DEPARTMENT AGREEMENT CONTAINING MULTIPLE PROJECTS – SUB-CONSULTANT ELIGIBILITY

Sub- consultant Performed Work Only on Project A (under Department Agreement)	**Design Activities for Design-Build Contract (under Design-Build Contract)**			
	Project A		**Project B**	
	LDE, QC-R, or SDSP	**QA-R[1]**	**LDE, QC-R, or SDSP**	**QA-R[1]**
Preliminary Engineering Activities (Does not include Bid Package Prep)	N	N	Y*	Y*
Conceptual Design/Bid Package Preparation	N	N	Y*	Y*
Department Review (includes Quality Assurance Review)	N	N	N	N
Construction Management or Construction Inspection	N	N	N	N

Note: Project A and Project B represent multiple projects under one engineering agreement that are bid under separate construction contracts.

N - Sub-consultant is not eligible to perform service.

Y*- A sub-consultant firm, that worked on the preliminary design or the Conceptual Design/Bid Package Prep for Project A, can function as EITHER a Quality Assurance Reviewer (if applicable) OR function as a Lead Design Engineer, Quality Control Reviewer, or Secondary Design Service Provider on Project B.

[1] If applicable

TABLE B: INVOLVEMENT INCLUDES PERFORMING DESIGN ACTIVITIES FOR DESIGN-BUILD CONTRACT

PROJECT INVOLVEMENT (Performance of Design Activities in Design-Build Contract)	RESTRICTIONS
LDE	Not eligible for any future involvement under a Department Agreement for project (s) included in design- build contract, including Department Review, Quality Assurance Review, Construction Management, and Construction Inspection services. Not eligible to perform Quality Assurance Reviews (if applicable).
QC-R	Not eligible for any future involvement under a Department Agreement for project (s) included in design- build contract, including Department Review, Quality Assurance Review, Construction Management, and Construction Inspection services. Not eligible to perform Quality Assurance Reviews (if applicable)
SDSP	Not eligible for any future involvement under a Department Agreement for project (s) included in design- build contract, including Department Review, Quality Assurance Review, Construction Management, and Construction Inspection services. Not eligible to perform Quality Assurance Reviews (if applicable).
QA-R (if applicable)	Not eligible to function as Lead Design Engineer, Quality Control Reviewer, or Secondary Design Services Professionals. Not eligible for any future involvement under a Department Agreement for project (s) included in design- build contract, including Department Review, Construction Management, and Construction Inspection services.

IV. DESIGN ACTIVITIES

Design activities include:

- Roadway Design,
- Maintenance and Protection of Traffic Design,
- Utility Coordination,
- Permitting,
- Other Design Activities required to satisfactorily complete the project. (Incident Management Plan, Erosion and Sediment Pollution Control, Post Construction Stormwater Management, and Signing and Pavement Marking Design)

V. REVIEW SUBMISSION CONTACTS

Include all design activities, submission dates, and review periods in the construction schedule.Include the submission schedule in the Quality Plan.

Make all required submissions for each design activity to the Department's Project Manager.

- Department Project Manager

  Dave Meagher

  Phone number: (724) 357-2880

  Fax number: (724) 357-5951

  Email address: dmeagher@pa.gov

  Interim (partial) submissions: District 10-0 Office – see address below

  Address for final submissions:District Office – see location information below

VI. LOCATION INFORMATION:

Pennsylvania Department of Transportation

District 10-0 Office

Mailing Address: PO Box 429, Indiana, PA 15701

Street Address: 2550 Oakland Ave. Indiana, PA 15701

Jefferson County Conservation District

1514 Pennsylvania 28, Brookville, PA 15825

Department of Environmental Protection – Northeast Regional Office

2 Public Square

Wilkes-Barre, PA 18711-0790

File Transfer Protocol (FTP) Site: Provide a password protected FTP site with a specific folder for this Contract, for the purposes of distributing electronic plan submissions to and from reviewing parties. The Department will determine the organization of the subfolders within the folder for the Contract.

VII. SUBMISSION REQUIREMENTS/REVIEW TIMES:

The following table provides the required number of plans and/ or documents and the schedule of review times for complete submissions. Partial submissions, where specified, will be reviewed in the time specified below **for each submission.** Partial submissions will require the submission of the number of plan sets and calculations specified below for the applicable design activity.Be responsible for reproduction costs for submissions and final drawings, including providing the Department with onefull - size sets on Mylar of all final drawings for use during construction, in addition to any copies specified below.

This project will require additional reviews by Central Office and Federal Highway Administration.Additional review times will apply. See table notation below.

Item	Plan Sets	Setsof Calculations	Initial Submission Review Time (working days)	Subsequent Submission Review Time (working days)
Roadway Design				

Environmental/ Permits (PennDOT review)	ftp	N/A	10	5
Permit Review - DEP	ftp	N/A	**	**
Erosion and Sediment Pollution Control Plan (PennDOT review)	ftp & 3	N/A	10*	5*
Erosion and Sediment Pollution Control Plan (County Conservation District Review)	ftp & 3	N/A	**	**
Erosion and Sediment Pollution Control Plan (DEP Review)	ftp & 3	N/A	**	**
NPDES Permit (PennDOT review)	ftp	N/A	10	5
NPDES Review (County Conservation District Review)	ftp	N/A	**	**
NPDES Review (DEP Review)	ftp	N/A	**	**
Draft Exploration Plan and Schedule of Borings			**10**	**5**
Geotechnical Design			**10**	**5**
Pavement Marking Design and Signing	ftp & 2	N/A	10	5
Pre-Final Plans	ftp	ftp	10*	5*
Final Roadway Plans	ftp & 7	2	10*	5*
As-Built RoadwayPlans	1	N/A	10	5
Maintenance and Protection of Traffic Design				
Incident Management Plan	ftp & 5	N/A	10*	5*
Preliminary Plan	ftp & 3	N/A	10*	5*
Final Plan	7	N/A	10*	5*

Utility Coordination				
Utility Relocation Highway Occupancy Permits	1	N/A	30	15

* - Additional review times are required if project requires additional reviews by Central Office, or Central Office and Federal Highway Administration. Identified items will require an additional 10 working days of review time (both initial and subsequent submissions) if Central Office review is required or an additional 20 days of review time if Central Office and Federal Highway Administration review is required.

** - Review times will be in accordance with the regulations of the reviewing agency.

Review times begin and end when a submission is logged in and out, respectively, by all designated reviewers. The login time will be taken as the latest date in which the submission is received by the reviewers. Submittals received after 11:00 a.m. will be logged in as the next working day following receipt of the submission. For electronic submissions, the login time will be taken when the appropriate reviewer and District Project Manager receive an email stating a submission is ready for review. Logout time occurs when the reviewer sends an email to the Contractor with an approval and/or comments. If a submission is incomplete or otherwise requires additional information or data to complete the review properly, the review time will begin as specified for the submission when all required information is received.

Additional contract time or price adjustment to any contract items will not be considered due to failure to obtain approvals within the specified review times resulting from incomplete or non- conforming submissions. Working days are weekdays, Monday through Friday, excluding official Department holidays.

Include all review periods identified above as activities in the project schedule.

VIII. GENERAL DESIGN REQUIREMENTS

Have the design completed by a Professional Engineer licensed in the State. Have all surveys completed by a Professional Land Surveyor licensed in the State.

Provide the Design Engineer's P.E. seal, the date signed, and business name and address on the first sheet of all computations, including computations for partial submissions. Provide the appropriate seal and signature on plan sheets in accordance with the Department's Design Manuals. Also, provide the Design Engineer's P.E. seal, signature, and date signed on the first sheet of all computations, including computations for partial plans submissions.

Provide all Professional Engineer’s seals in accordance with Pa. Code § 37.59.

Designs copied directly from Department Standard Drawings 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.

Experimental or demonstration-type design concepts, products, structures, or elements not pre-approved by the Department for general usage at the time of bid, will not be allowed.

If Right-of-Way Design and Acquisition Services has not been identified as Design Activity in Section IV of this Special Provision, no additional Right-of-Way may be acquired and no changes to the recorded Right-of-Way Plan will be permitted.

Value engineering construction proposals are allowed, provided that the proposal does not require approval of a Design Exception.

Designs that take advantage of any errors and/or omissions in the following requirements 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 misunderstanding, ambiguities, or other situations resulting from the error, omission, or discrepancy.

Final Plans must include a note on all tabulation of quantities sheets included therein that states “Item numbers and descriptions listed in Tabulations are solely for the purposes of identifying the specified units of work and locations, and are not to be construed as contract or pay items.”

~~Design and construct any support of excavation required by any Design Activities identified in Section IV of this Special Provision in accordance with the Special Provision titled TEMPORARY EXCAVATION SUPPORT AND PROTECTION SYSTEM FOR DESIGN-BUILD PROJECTS.~~

Design Specifications

Perform the design activities identified in Section 4, Design Activities, in accordance with the latest published edition of all Department Standards, Specifications, Regulations, Strike-off Letters, and other industry standards, at the time of advertisement, unless directed otherwise, or as identified in the bid package.These include, but are not limited to the following:

- Special Provisions;
- Publication 408, *Specifications*
- Publication 72M, *Standards for Roadway Construction*
- Publication 218M, *Standard Drawings for Bridge Design*
- Publication 219M, *Standard Drawings for Bridge Construction*
- Publication 10 Design Manual Part 1 – *Transportation Program Development and Project Delivery Process*
- Publication 10A Design Manual Part 1A – *Pre-TIP and TIP Program Development Procedures*
- Publication 10B Design Manual Part 1B – *Post-TIP NEPA Procedures*
- Publication 10C Design Manual Part 1C – *Transportation Engineering Procedures*
- Publication 10X Design Manual Part 1X – *Appendices to Design Manuals 1, 1A, 1B, and 1C*
- Publication 13M Design Manual Part 2 – *Highway Design*
- Publication 14M Design Manual Part 3 – *Plans Presentation*
- Publication 15M Design Manual Part 4 – *Structures*
- Publication 16M Design Manual Part 5 – *Utility Relocation*
- Publication 584, *Drainage Manual*
- Publication 46, *Traffic Engineering Manual*
- Publication 149, *Traffic Signal Design Handbook*
- Publication 35, *Approved Construction Materials*
- Publication 203, *Work Zone Traffic Control*
- Publication 213, *Temporary Traffic Control Guidelines*
- Publication 222, *Subsurface Boring, Sampling, and Testing Contract*
- Publication 293, *Geotechnical Engineering Manual*
- Publication 378, *Right-of-Way Manual*
- Pa Code Title 67, Chapter 204, *Guidelines to Implement Act 229 of 2002, Additional Traffic Control Devices in Highway Work Zones, Statement of Policy*
- Pa Code Title 67, Chapter 212, *Official Traffic Control Devices* (Publication 212)
- Publication 236M, *Handbook of Approved Signs*
- Publication 242, *Pavement Policy Manual*
- Publication 281, *Waste Site Evaluation Procedures for Highway Project Development Process*;
- Publication 371, *Grade Crossing Manual*
- Publication 122M, *Surveying and Mapping Manual*
- Publication 111M, *Traffic Control – Pavement Markings and Signing Standards*
- Publication 148, *Traffic Standards – Signals*
- Publication 611, *Waste Management Guidance Manual*
- *Manual on Uniform Traffic Control Devices* (FHWA)
- *A Policy on Geometric Design of Highway and Streets*, AASHTO "Green Book"
- *A Policy on Design Standards – Interstate System* (AASHTO)
- AASHTO *Guide Specifications for Horizontally Curved Highway Bridges*
- AASHTO *LRFD Bridge Design Specifications* or, when applicable, AASHTO *Standard Specifications for Highway Bridges*

In the event that a clear order of predominance cannot be established, or a difference in interpretation of the design cannot be resolved, the Assistant District Executive-Design will be the arbiter and his/her decision will be final.

For bridge/structures related design activities, refer to the "Bridge/Structures Related Effective Policy Letters" for additional design policy Strike-Off Letters that are applicable to the structure design.

In the event that certain design parameters, stresses, or specifications are in conflict regarding bridge/structures related design activities, the following order of predominance governs:

1. Design requirements listed herein and addenda (addendum) to the proposal.
2. Design related Strike-Off Letters in effect on the date of project advertisement.

3. Publication 15M Design Manual Part 4, *Structures*
4. Publications 218M and 219M *Standard Drawings for Bridge Design* and *Bridge Construction*
5. AASHTO *LRFD Bridge Design Specifications* or, when applicable, AASHTO *Standard Specifications for Highway Bridges*

In the foregoing instances, in the event that a clear order of precedence 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 the arbiter and whose decision will be final.

IX. SCHEDULE OF VALUES

Where indicated, partial payment for lump sum design-build items will be made on Current Estimate Payments in accordance with Section 110.05 based on the amount of work completed during the estimate period based on a payout schedule (Schedule of Values). The Department will base amount of the partial payments on the total value of the work performed to the date of the estimate cut-off, less payments previously made, in accordance with the approved Schedule of Values.

Prepare a Schedule of Values for each lump sum Item associated with the design or construction of the Design Activities identified in Section IV of this Special Provision, where the Special Provision for that "Design" or "Construct" Item indicates lump sum measurement and payment by Schedule of Values, using the attached Schedule of Values template as a guide. Hereinafter, Design Items are defined as the Contract Item associated with the Design Activities identified in Section IV, and Construct Items are defined as the Contract Item associated with the construction of the Design Activities identified in Section IV. Distribution of payments among Schedule of Values Components must bear a reasonable resemblance to the actual value of work.

(a) For Design items, if a Component is not applicable, indicate 0%; otherwise do not indicate values less than 5% in any Component. Include those Schedule of Values Components identified in the associated Design Item Special Provisions. Payment for Design Item Schedule of Values Components will be made in the amount of the approved percentage upon completion of the identified task. When Schedule of Values Components are identified in the Special Provisions with “Approval” in the Schedule of Values Component title, 75% of the approved percentage may be paid on the next estimate following login of that submission, and the remaining 25% of the approved percentage will be paid following approval of that submission. Otherwise, no partial payment will be made for Design Item Components.

(b) For Construct Item, include Schedule of Values Components relevant to the scope of work of the particular item, using the attached Schedule of Values template as a general guide. No partial payment will be made for Construct Item Schedule of Values Components. Accordingly, develop the Schedule of Values to include Schedule of Values Components in sufficient numbers and detail to be payable upon monthly estimates throughout the duration of the Contract.

Submit the Schedules of Values to the Department for review and approval. No estimate will be processed until all Schedules of Values are approved by the Department.

X. CONSTRUCTION CONTACT

The Department’s contact for Current Estimate Payments as defined in Section 110.05 will be:

The Project Manager identified in Section V of this Special Provision.

XI. FILES AVAILABLE AFTER AWARD

Microstation CADD files will be made available to the successful bidder. After Award, submit a request to the District Executive agreeing to the terms and conditions for the release of the electronic files.

The following information will be made available for viewing at the District Office after award:

- Photogrametry Mapping

Contact the Project Manager identified in Section V of this Special Provision to arrange for viewing the documents.

N29899A - a29899 QUALITY PLAN WITH QUALITY ASSURANCE REVIEW BY DEPARTMENT - LOW BID DESIGN

Addendum:

Associated Item(s):

Header:
Quality Plan with Quality Assurance Review by Department - Low Bid Design

Provision Body:

I. DESCRIPTION - This item consists of developing, furnishing, executing, and maintaining a Quality Plan for the Design Activities listed in Section IV of the Special Provision titled SPECIAL BIDDING – DESIGN-BUILD and establishing controls to ensure compliance with all contract documents for those design activities. The Department and FHWA (as appropriate) will provide a Quality Assurance Review.

II. DEFINITIONS.

a. Quality Plan – The plan prepared for managing quality during final plan development for Design Activities as identified in the Special Provision titled SPECIAL BIDDING – DESIGN-BUILD that addresses key staff, responsibilities, milestones, monitoring budgets and schedules, communication efforts, Quality Control/Quality Assurance efforts and tracking procedures as a minimum. It should include a detailed description of the Quality Control staff, design procedures, and design review procedures

b. Quality Control (QC) – All processes and activities performed on the Contract to assess and control the accuracy and completeness of the design, to ensure Contract compliance.

c. Quality Control Reviewer – The design consultant engineering firm or individuals that are responsible to manage the quality control of the design-build contract, including the Quality Control Manager and the Alternate Quality Control Manager.

d. Quality Control Staff – The design consultant team or individuals that are responsible to manage the quality control of the design-build Contract. The QC Staff includes the QC Manager, Alternate QC Manager, and sufficient number of qualified personnel to ensure Contract compliance. The QC Staff may include personnel from the same firm as the Lead Design Engineer, as defined in the Special Provision titled SPECIAL BIDDING – DESIGN-BUILD, but may not be involved with other design activities on the contract.

e. Quality Assurance (QA) - The planned and systematic actions that are necessary to provide adequate confidence that a product or facility complies with Federal and State requirements. QA is the performance of a high level review of each product to confirm quality, economy, and compliance with Contract requirements.

f. Quality Assurance (QA) Team - The Department and FHWA (as appropriate) representatives who check the validity of the Quality Plan to confirm that the work is done in accordance with the Contract documents.

g. Quality Assurance Review - A review of the plans, specifications, and calculations by the Department and FHWA (as appropriate) to confirm that the project's approved design criteria are being followed.

III. QUALITY PLAN

(a) Quality Plan Requirements.

1. Quality Control Requirements. Identify and discuss the procedures that will be used to review, modify, and approve plan documents and associated permits. Include methods and procedures to control, document, and accept the quality of the design activities listed in Section IV of the Special Provision titled SPECIAL BIDDING – DESIGN-BUILD. Include the following quality control items as a minimum:

a. Control.

(1) Procedures to control the quality of the final design.

(2) Methodology used to determine design criteria to be used to develop design.

(3) Proposed design criteria for design.

(4) Guidelines for submission review including approach for addressing partial submissions.

(5) A general outline of the Lead Design Engineer's document control.

(6) Copies of the Lead Design Engineer's quality control forms and/or checklists.

(7) Incorporate design submission deadlines and Department review cycle- times into the CPM Schedule.

b. Records.

(1) Method of recording stages of design development.

(2) System of maintaining a design submission/review/acceptance status log.

(3) Method for updating and tracking submission status for all aspects of the design including partial submissions and permits.

(4) Systems by which the Lead Design Engineer internally checks calculations and the Contract documents.

(5) Records of submission reviews, approvals, and permits granted.

(6) Records of design revisions during construction.

c. Acceptance.

(1) Procedures to obtain acceptance and construction release by the Department through Quality Assurance review.

(2) Method of documenting and recording acceptance and construction release by the Department.

2. Quality Control Staffing. Maintain the QC Staff at approved Quality Plan levels at all times until project completion. The Lead Design Engineer Project Manager is responsible to review all design submissions, signing and sealing as appropriate, and then submit the design to the Department as defined in the Special Provision titled SPECIAL BIDDING – DESIGN-BUILD.

Provide an organization chart showing lines of authority and contact information of the key staff of the Contractor, Lead Design Engineer, and the QC Staff.

Provide the following information in the Quality Plan:

a. Lead Design Engineer. The Lead Design Engineer (LDE) consists of a Lead Design Engineer Project Manager and sufficient design personnel to ensure contract compliance. Lead Design Engineer personnel will report directly to the Lead Design Engineer Project Manager. The Lead Design Engineer Project Manager will report directly to the contractor. The Quality Plan must include, but not be limited to, the following:

(1) Provide an organization chart showing lines of authority and contact information of the Lead Design Engineer personnel.

(2) Include resumes, qualifications, duties, responsibilities, and certifications, of all design personnel. Provide a letter from a principal of the Lead Design Engineer firm to the Lead Design Engineer Project Manager that clearly describes their responsibilities and provide delegation of authority to stop work on any elements that do not comply with the contract documents.

(3) Identify the Lead Design Engineer Project Manager. The Lead Design Engineer Project Manager must meet the minimum requirement of being a Professional Engineer (PE) registered in the State with a minimum of 7 years of experience managing and supervising the design of roadway and/or structure projects.

(4) Provide a letter from an authorized official of the Contractor to the Lead Design Engineer Project Manager that clearly describes their responsibilities and provides delegation of authority to stop work on any elements that do not comply with the Contract.

b. Quality Control Staff. The QC Staff consists of a QC Manager, Alternate QC Manager, and sufficient number of qualified personnel to ensure Contract compliance. QC Staff personnel will report directly to the QC Manager. The QC Manager will report directly to the Contractor. The Quality Plan must include, but not be limited to, the following:

(1) Provide an organization chart showing lines of authority and contact information of the Quality Control Staff personnel.

(2) Include resumes, qualifications, duties, responsibilities, authorities, and certifications of all QC Staff personnel.

(3) Identify the QC Manager and Alternate QC Manager. The Alternate QC Manager is responsible to manage the QC effort during periods when the QC Manager is absent. In no instance will the QC Manager be absent from project responsibilities and the alternate manager serve for more than a continuous 2-week period without written permission from the Department.

(4) The QC Manager and Alternate QC Manager must meet the minimum requirement of being a Professional Engineer (PE) registered in the State with a minimum of 7 years of experience managing and supervising the design of roadway and/or structure projects.

(5) Provide a letter from an authorized official of the Contractor to the QC Manager that clearly describes the responsibilities and delegates the authority to stop work on any elements that do not comply with the Contract. The QC Manager will issue a letter of direction to all other Quality Control representatives outlining duties, authorities, and responsibilities. Include copies of these letters in the Quality Plan.

(b) Quality Plan Submittal. Clearly describe the approach to quality management and development of the Quality Plan. The discussion of the Quality Plan will address all activities listed in the Special Provision titled SPECIAL BIDDING – DESIGN-BUILD. Describe in detail the plans, procedures, references, organization, and documents required to ensure that all work complies with Contract documents. Include control measures, documentation procedures, records, and forms. Where Partial Submissions are allowed, address all specified partial submission requirements, list all partial submission components, and describe the schedule of partial submissions.

Submit the Quality Plan to the Department by the 5th working day after receiving approval of the QC Reviewer. The Department will provide comments on the Quality Plan at the Quality Coordination Meeting.

(c) Quality Coordination Meeting. Hold a Quality Coordination Meeting with the Department either as part of the pre-construction meeting, or as a separate meeting, and discuss the Quality Plan. Attendance by the Contractor, QC Manager, Alternate QC Manager, Lead Design Engineer, and the QA Team are mandatory at this meeting. The Department reserves the right to designate attendance by additional personnel. The meeting must be held within 10 working days following the date of the Notice to Proceed. During the meeting, a mutual agreement of the details to be included in the final Quality Plan will be developed including the forms for recording the operations, control activities, administration of the Quality Plan, and the interrelationship of the Quality Plan. Minutes of the coordination meeting must be prepared by the Lead Design Engineer, signed by the Contractor and the Department, and recorded. The Quality Coordination Meeting minutes must be incorporated as part of the final Quality Plan.

(d) Quality Plan Approval. Within 10 working days after the Quality Coordination Meeting, submit the final Quality Plan for approval based on comments received during the Quality Coordination Meeting. Include an updated CPM in the submission.

No payment will be made for design activities listed in Section IV of the Special Provision titled SPECIAL BIDDING – DESIGN-BUILD without an approved Quality Plan. Upon acceptance, the entire Quality Plan will become part of the Contract documents. Once work begins under the approved Quality Plan, continuously evaluate the work in accordance with the Quality Plan. Do not implement any changes without prior acceptance by the Department.

(e) Design Activity Submissions Monthly Report. In addition to the records required by Section III (a) 1.b of this Special Provision, maintain the status of all submissions associated with the design activities listed in Section IV of the Special Provision titled SPECIAL BIDDING – DESIGN-BUILD on the form titled "Design Activity Submissions Monthly Report." This form is located in ECMS File Cabinet (in the References Tab). Submit this form within 30 calendar days following approval of the Quality Plan, and submit an updated version every 30 calendar days thereafter until the Final Drawings have been released for construction.

(f) Quality Assurance Review. The Department and FHWA (as appropriate) will perform a QA review of the plans, specifications, and calculations to confirm that the Department's approved design criteria are being followed.

Upon successful completion of the QA review, the plans will be issued to the Contractor by letter by the Department identifying the specific plans covered by the review. Plans issued will be stamped with the following statement:

"Quality Assurance Review was conducted. Released for Construction."

Upon successful completion of QA review of partial submissions, where permitted in the Special Provisions, plans will be issued to the Contractor by letter by the Department identifying the limitations of the review, and the limitations of the work released for construction. Plans issued will be stamped with the following statement:

"Quality Assurance Review was conducted. Released for Construction."

(g) Infractions. Any infractions of the Contract requirements, which are not monitored sufficiently by the Lead Design Engineer and the QC Reviewer, will result in any and all payments related to design activities listed in the Special Provision titled SPECIAL BIDDING – DESIGN-BUILD being withheld until infractions are corrected.

Such action may result in the District Executive giving a written order for the dismissal and replacement of the Lead Design Engineer and/or the QC Reviewer. An extension of Contract time or request for additional costs will not be considered when a delay or suspension occurs due to such infractions.

Be advised that any deliberate omissions or deliberate cover-ups will be grounds for default of the Contract.

IV. MEASUREMENT AND PAYMENT

Incidental to the design activities listed in Section IV of the Special Provision titled SPECIAL BIDDING – DESIGN-BUILD.

00 - aNotice to Contractor

Addendum: 4

Associated Item(s):

Header:
NOTICE TO CONTRACTOR

Provision Body:
The 3 files on the ftp site are the .dgn, .dtm and the mapping.doc files. These files were developed from the photogrammetry within the project limits and may provide more accurate data than shown in the plans. The username and password required to access the site are:

USERNAME I-80_GUEST

PASSWORD I80GUEST

https://saiengr.filetransfers.net/

To access, copy the above link into your internet browser.

Encroachment within 25' of either rail of the Buffalo and Pittsburgh Railroad will require railroad flagging.

The binder items listed as the "OR" items are required to be RPS.

The use of OGS as a subbase material beneath concrete mainline and shoulders is prohibited as stated in Pub 242 Pavement Policy Manual.

00 - aRECLAIMED PORTLAND CEMENT CONCRETE (RPCC) AGGREGATE FOR ROCK LINING, CLASS R MODIFIED

Addendum: 1

Associated Item(s):

Header:
RECLAIMED PORTLAND CEMENT CONCRETE (RPCC) AGGREGATE FOR ROCK LINING, CLASS R MODIFIED

Provision Body:

I. DESCRIPTION – This work is the construction of rock lining using Reclaimed Portland

Cement Concrete (RPCC) aggregate.

II. MATERIAL – Section 850.2 and as follows:

• Certify RPCC aggregates meet PennDOT's Environmental Due Diligence requirements for Clean Fill.

• Provide RPCC aggregates free of exposed metal reinforcement or mesh.

Provide RPCC aggregates or blends of RPCC aggregates [minimum 50% RPCC] with conventional aggregates in proportions to meet the ~~gradation~~ requirements of Section 206.2 (a)1.d except that fines shall be limited to a maximum of 20% by weight passing the No. 4 Sieve and with a minimum specific gravity of 2.5, as determined according to AASTHO T85, bulk-saturated, surface-dry basis.

• Aggregate supplier must submit samples to MTD for petrographic examination for durability before use. Use freeze-thaw testing in accordance with ASTM D 5312 with the following modifications:

1. Dry the samples obtained in accordance with Section 8 of ASTM D 5312 in at oven to constant mass at a temperature of 60 ± 3ºC (140 ± 5 ºF).

2. Run a total of 50 freeze-thaw cycles on the samples.

3. At the end of the test, the largest remaining portion of each sample shall be considered the passing portion, and the remaining smaller portions of each sample shall be considered the failing portions.

4. The largest allowable loss for any individual sample, and the largest allowable average loss for all the samples, shall be 20.0% by mass.

• Certify RPCC aggregates with less than 5 percent by mass (by weight) of foreign materials, as specified in Section 106.03.

III. CONSTRUCTION – Section 850.3, as indicated, and as follows:

• Do not use RPCC aggregates or blends in applications with direct contact with aluminum or galvanized steel pipes to minimize potential corrosion of pipes from higher pH leachate.

• Do not place RPCC material in direct contact with perennial streams, 300 feet of Exceptional Value (EV) waters or a high quality (HQ) waters without prior approval from PADEP.

IV. MEASUREMENT AND PAYMENT – Incidental to other Construct items

00 - aSECTION 208 -SPECIAL ROLLING

Addendum:

Associated Item(s):

Header:
SECTION 208 -SPECIAL ROLLING

Provision Body:

208.1 DESCRIPTION -**This work is the special rolling of embankments as indicated or as directed.**

208.2 MATERIAL - Use acceptable pneumatic-tired equipment for special rolling, capable of varying the load from 267 kN (30 tons) to 445 kN (50 tons). Use a roller constructed to transmit the load through four wheels, equally spaced over the roller width, mounted on two or four axles in line, allowing oscillation of the individual wheels or pairs of wheels. Use a roller with tires capable of operating at inflation pressures ranging from 0.62 MPa (90 pounds per square inch) to 1.03 MPa (150 pounds per square inch). Provide charts or tabulations showing the contact areas and contact pressures for the full range of tire inflation pressures and loadings for the particular tires furnished.

208.3 CONSTRUCTION – **Adjust the roller load and tire inflation pressures for contact pressures to approximately the maximum supporting value of the layer being rolled.**When the special rolling of any layer shows an area to be unstable or non-uniform, satisfactorily stabilize the area by providing additional compaction on these areas or by removing the unsuitable material, replacing it with suitable material, and re-compacting.

Operate the roller in a systematic manner so the number of passes can be readily determined and recorded. Operate the roller at a speed of not less than 4.0 km/h (2.5 miles per hour).

Perform special rolling only in the presence of the Representative who will approve or disapprove the stability of the embankment and recommend corrective measures.

208.4 MEASUREMENT AND PAYMENT - Incidental to Item 6000-0011 Construct Roadway

00 - aUSE GUIDELINES FOR RPCC AGGREGATE FOR ROCK-LINING

Addendum:

Associated Item(s):

Header:
USE GUIDELINES FOR RPCC AGGREGATE FOR ROCK-LINING

Provision Body:

These Use Guidelines accompany Special Provision (SP) for the use of Reclaimed Portland Cement Concrete (RPCC) aggregate as an alternate material for rock lining applications. The SP allows RPCC aggregate material to be blended with conventional aggregates for rock-lining applications.

GENERAL

RPCC aggregates are generated from the crushing of concrete elements. The main sources of RPCC aggregates are concrete pavement and construction/demolition debris. This SP allows for use of RPCC aggregates from mixed sources, when the supplier/ manufacturer can demonstrate that the materials meet gradation and quality requirements.

The supplier/ manufacturer must also certify that the material meets PennDOT's Environmental Due Diligence requirements for Clean Fill. While the use of RPCC materials as clean fill does not require a permit under the Solid Waste Management Act and regulations, these materials are still subject to and must comply with all applicable requirements governing the placement or use of materials as clean fill to be protective of the Commonwealths waters, such as 25 Pa. Chapter 93 - Water Quality Standards, Chapter 102 - Erosion and Sediment Control, and Chapter 105 - Dam Safety and Waterway Management.

GRADATION REQUIREMENTS

Coarse RPCC aggregates are suitable for use in this application that meet quality performance standards of Section 850 - Rock Lining. The maximum dimension of produced RPCC aggregates is controlled by its original concrete pour dimensions. For practical purposes, RPCC aggregates fall into Rock Classes R-3 through R-5, although when blended with conventional aggregates, can meet R-3 through R-8 rock size classifications.

QUALITY REQUIREMENTS

RPCC materials typically contain reinforced steel or mesh and other deleterious materials, depending on their source. No exposed reinforcement or mesh is allowed in this application. The manufacturer must also certify that RPCC aggregates meet PennDOT's Environmental Due Diligence requirements for Clean Fill in accordance with PennDOT Publication 281, Section 4.7 – Due Diligence with Fill, for all materials proposed to be used in PennDOT's construction right-of-ways. The contractor must submit Environmental Due Diligence (EDD) Form(s) EDD-VI or VII for PennDOT approval prior to the delivery of the RPCC aggregates to the project site.

RPCC aggregates are alkaline due to remnant mortar and can produce leachate with pH values in the 5 to 10 range. Thus, RPCC aggregates should not be placed in direct contact with aluminum or galvanized steel pipes/grates of other non-corrosion resistant construction items, nor should this material be placed where leachate or direct contact with runoff from this RPCC aggregate would cause corrosion to these items. Studies indicate that pH of leachate does diminish with time and a blend of conventional aggregate and coarse RPCC aggregates if used together will proportionally diminish the impacts of pH leachate.

As RPCC aggregates are allowed from mixed sources, the durability of aggregates must be demonstrated. The soundness (durability and resistance to freeze/ thaw) of coarse RPCC aggregate materials has been reported to be comparable to the soundness of conventional aggregates. Use freeze-thaw testing in accordance with ASTM D 5312, with stipulated modifications. Additionally, the manufacturer must certify that foreign substances are limited to a maximum of 5 percent by mass (weight) for this material.

Coarse RPCC aggregates have specific gravities in the 2.2 to 2.5 range, slightly lower than natural aggregates, owing to the old mortar component still attached to the surfaces of processed RPCC aggregates. This property should not affect the performance in this application, as the RPCC aggregates usually exhibit their original bearing capacity and durability characteristics, and may exhibit better interlocking due to their greater angularity. Use AASHTO T85, bulk-saturated, but surface-dry basis test method for testing on RPCC aggregates or blends with conventional aggregates.

SOURCE APPROVAL

1) Sufficient testing must be performed to ensure that aggregates provided meet the specified gradation and quality requirements. Sources, other than listed on Bulletin 14 Aggregate Producers must demonstrate to the District that they meet Special Provision quality and gradation requirements, as stipulated in Pub. 408, Section 106 and as directed by the District Executive.

• Producer supplied test data from certified laboratory on the source material may be accepted as documentation of any test requirement.

• For aggregate produced from a controlled source, quality tests performed within the last year may be accepted. This requirement is applicable to each source of material, such as a distinguishable source of recycled material. Verification sampling and testing will be performed by the District, unless otherwise specified.

• For aggregate produced from mixed sources, quality and gradation testing will be specified by the District based on project requirements.

2) Until widespread experience is gained using RPCC aggregate in rip-rap or rock lining applications statewide, this material will retain provisional status. Provisional status also requires this application of RPCC material to be monitored by the District, limited to visual inspections over five years. Districts are requested to report on any problems encountered during construction, and on any problems observed during the life of the project to PennDOT's Pollution Prevention Section at 717-787-1024. If further experience gained by the Districts demonstrates a problem with the application, the Special Provision will be withdrawn immediately.

MEASUREMENT AND PAYMENT -Incidental to ITEM 9000-0611 Construct Roadway

00 - aWARRANTY FOR EPOXY BASED SURFACE TREATMENT FOR BRIDGE DECKS

Addendum:

Associated Item(s):

Header:

WARRANTY FOR EPOXY BASED SURFACE TREATMENT FOR BRIDGE DECKS

Provision Body:

I. BOND AND LIABILITY INSURANCE -

When awarded the contract, in addition to the required bonds specified in Section 103.05, furnish a Warranty Bond with sufficient surety or sureties, in an amount equal to 50% of the total contract amount for all Surface Treatments for Bridge Decks to be constructed under the warranty item.

Have the bond specify that the warranty work will be completed in a manner satisfactory to the Secretary. Have the bond state that the Commonwealth of Pennsylvania is to be saved harmless from any expense incurred through the failure of the Contractor to complete warranty work, as specified, or from any damages growing out of the carelessness of the Contractor or the Contractor's employees in performing warranty work.

Have a corporate surety, legally authorized to transact business in the State and satisfactory to the Secretary, execute the bond. If the Secretary decides the bond surety is unsatisfactory, promptly furnish any additional required security to protect the State's interests and the interests of all persons, firms, or corporations who/which have furnished material, provided equipment on rental, or supplied/performed labor services on, or in connection with, the performance of the warranty work for this contract.

Warranty Bond is to be effective beginning on the date of physical work completion established by the Engineer for the whole project or any substantial project section as specified in Section 110.08(a). Warranty bond is to remain in effect for a period of 60 months or until completion of all warranty work identified in the final annual performance surveys, whichever is later.

Maintain insurance to indemnify and save harmless the State, the Department, and all of its officers and employees from all suits, actions, or claims of any character, name, and description, brought forth or on account of any injuries or damages received or sustained by any person, persons, or property during the performance of any work by the Contractor throughout the warranty period, whether the same is due to the use of defective material, defective workmanship, neglect in safeguarding the work or public interests, or by or on account of any act, omission, neglect or misconduct of the Contractor.

Also indemnify and save harmless the State, the Department, and all of its officers and employees from cases arising as contemplated in Sections 105.05 and 107.16.

II. WARRANTY WORK -

Department's Responsibility.

To determine compliance with specified performance criteria, the Department will schedule and perform annual, performance surveys of the warranted surface treatment for defects. Surveys will be conducted during each year of the warranty period. The Contractor will be notified at least fourteen (14) days in advance of all scheduled surveys.

Performance survey results will be reported for each individual structure within the limits of the warranty project.

The Department reserves the right to schedule and perform additional or more frequent performance surveys if, at anytime during the warranty period evidence exists that performance criteria are not being met.

If any of the performance criteria are not met, the Department will notify the Contractor, in writing, of any required warranty work, after completion of the performance survey.

During the warranty period, the Department will not perform routine pavement maintenance, such as crack sealing and repairs, on the warranted surface treatment. The Department reserves the right to make emergency repairs to the warranted surface treatment, during the warranty period, if the condition is determined to be potentially harmful to or unsafe for motor vehicles. The Department will notify the Contractor of the location of all emergency repairs performed.

Contractor's Responsibility.

The Contractor will witness all performance surveys.

Begin warranty work, at the location(s) directed by the Department, within forty-five (45) calendar days of notification. Notify the District Executive of the tentative start date for warranty work. A $1000 per day charge will be assessed, beginning on the 46th day after the notification date, for each day that warranty work does not begin.

Furnish all materials, equipment, and labor needed to perform warranty work, including traffic control, at no additional cost to the Department.

Perform all required warranty work identified in the Department's written notification, including replacements, to meet specified construction end-result and warranty performance criteria.

Provide and maintain traffic control for warranty work operations. Use the traffic control plan (TCP) provided in the original contract plans for warranty work or submit an alternate TCP to the District Executive for approval. Submit alternate TCPs at least fourteen (14) days for approval before the desired start of warranty work. Alternate TCPs are to comply with the provisions of Publication 203.

If warranty work is directed and the Department's performance survey results are disputed, notify the Department, in writing, within thirty (30) calendar days from the date of the Department's notification of required warranty work. Base disputes on appraisals of the performance survey results supplied by the Department. If the Department and Contractor cannot resolve a dispute over warranty work within fourteen (14) calendar days from the date of Contractor's written notification, the dispute will be submitted to the Conflict Resolution Team identified in Section III.

The Contractor may monitor or test warranted surface treatment using nondestructive methods, at any time during the warranty period. Notify the District Executive at least seven (7) days in advance of performing any nondestructive testing. Provide all nondestructive test results to the Department for information. Obtain a miscellaneous permit to perform nondestructive monitoring or testing, from the Department, when these actions will impede or restrict traffic.

Do not perform any warranty work without prior written notification from the Department. Submit a written proposal, to the District Executive, setting forth the reason(s) for performing elective or preventative warranty work not directed by the Department. The Department will review and approve elective or preventative warranty work initiated by the Contractor within thirty (30) days from receipt of the written proposal.

III. CONFLICT RESOLUTION TEAM -

The Conflict Resolution Team (Team) will consist of two (2) representatives selected by the Contractor, two (2) representatives selected by the Department (District and Bureau of Construction and Materials), and a fifth person mutually agreed upon by both the Department and the Contractor. Any costs incurred for the fifth person will be shared equally by the Department and the Contractor. Team members, who will be identified at the preconstruction conference, must be knowledgeable in the terms and conditions of the warranty and the methods used in the measurement and calculation of pavement distress. Each Team member will have an equal vote and the decision of the majority will be final.

The Team will resolve disputes concerning defective work, warranted surface treatment performance test results, required warranty work, approved repair methods and material selection, and disputes over probable causes.

The Team will meet and resolve disputes within thirty (30) calendar days from the date of submission.

IV. PERFORMANCE CRITERIA -

The surface treatment performance will be evaluated for cohesive or adhesive failure of the materials supplied resulting from faulty workmanship or defective materials, material failure due to normal weathering, reduction in skid resistance due to loss of aggregate, and/or abrasion or (rupture) tear of system resulting from normal traffic exposure.

Maintain skid resistance of >40 throughout duration of warranty.

V. PROBABLE CAUSE -

The Department will furnish the results of performance surveys to the Contractor, noting those defects considered to be caused by factors beyond the control of the Contractor. The Contractor will not be held responsible for meeting specified performance criteria or performing warranty work at specified locations.

The Department may elect, or it may be necessary, to repair distresses determined to be caused by factors beyond the control of the Contractor using routine repair techniques.

Factors beyond the control of the Contractor include the following:

1. Damage caused by other parties or leakage resulting from joints or openings left open by design. The Contractor will not be responsible for repairs due to this condition.

2. Damage caused by structural elements of the structure, including cracking, structure movement, settlement, deterioration, and decomposition of existing components.

3. Routine Maintenance by the Department. During the warranty period, the Department will perform routine maintenance such as snow removal, application of anti- skid material and/ or de- icing chemicals, repairs to safety appurtenances, application and maintenance of pavement markings, mowing, and sign maintenance. Routine maintenance activities, such as crack sealing, pothole patching, or milling will not be programmed by the Department during the warranty period.

4. Destructive Procedures by the Department. The Contractor will not be held responsible for repair of distresses caused by coring, milling or other destructive procedures performed by the Department.

5. Acts of Nature. The Contractor will not be held responsible for repair of distresses caused by floods, tornadoes, brush or forest fires, landslides, or other acts of nature, as determined by the Engineer.

6. Traffic Accidents. The Contractor will not be held responsible for repair of distresses caused by traffic accident-related fuel or chemical spills, vehicle fires, and/or gouging or goring of the pavement surface.

VI. FINAL WARRANTY INSPECTION -

At the end of the warranty period, and when any warranty work, if required, is substantially complete (at least 90%), make arrangements for a mutual final warranty inspection. At the time of final warranty inspection, the Engineer, along with the Contractor, will establish the following:

• The list of all physical work items requiring completion and/or correction; and

• A list of all certificates or documents requiring submission, completion, and/or correction.

As established during the final warranty inspection, perform work as necessary for required correction or completion of all physical work items, and complete, correct, and submit all outstanding certificates and documents.

VII. RELEASE OF WARRANTY -

To be released from warranty responsibility, satisfy all of the following:

• Meet minimum requirements for each of the specified performance criteria through the end of the warranty period,

• Complete all required warranty work identified during the warranty period at no additional cost to the Department, and

• Submit all required warranty certificates and documents.

When the warranty period has expired and all physical warranty work has been satisfactorily completed, or all required warranty criteria have been met, the Engineer will establish the date of warranty work completion; the date on which the Contractor will be relieved of responsibility for further physical warranty work, maintenance, and third party liability on the project or any substantial project section.

When all physical warranty work has been satisfactorily completed and all contractually required warranty certificates and documents have been properly furnished, the date of warranty project acceptance will be established.

When the warranty period for any substantial project section expires in advance of the whole, a final warranty inspection may be made of that section, as specified for the entire project except that the date of warranty project acceptance will not be established nor will a warranty acceptance certificate be issued, and no further warranty work will be required on the section as provided for in Section 108.04(b).

VIII. WARRANTY ACCEPTANCE CERTIFICATE -

Upon completion of the requirements of Section VII, a warranty acceptance certificate will be issued, establishing the date on which the project warranty has been satisfactorily completed and certifying that the project is accepted as of that date.

IX. WARRANTY WORK DEFAULT AND TERMINATION OF CONTRACT - As specified in Section 108.08 and as follows:

• Failure of the Contractor to perform warranty work within the time specified.

S2011A - b02011 EMERALD ASH BORER QUARANTINE

Addendum:

Associated Item(s):

Header:
Emerald Ash Borer Quarantine

Provision Body:
This project contains regulated articles as defined by the Pennsylvania Department of Agriculture, Order of Quarantine that are located within the Pennsylvania Emerald Ash Borer (EAB) quarantine.

Regulated articles are:

- The EAB in any living stage of development;
- Ash trees of any size;
- Ash limbs, branches, stumps, and roots;
- Any cut, non-coniferous (hardwood) firewood:
- Non-coniferous (hardwood) bark and non-coniferous (hardwood) wood chips larger than 25.4 mm (1 inch) in two dimensions;
- Ash logs and lumber with either the bark or the outer 25.4 mm (1 inch) of sapwood, or both, attached;
- Any other article, product or means of conveyance determined by the Department to present a risk of spreading the EAB infestation.

Pennsylvania’s EAB quarantine restricts the movement from the quarantined area of any regulated articles. Regulated articles are to remain onsite and within the quarantined areas at approved stockpile areas that will not interfere with construction operations, future maintenance operations, obstruct drainage, or cause water pollution, unless indicated otherwise.

This work will be considered incidental to other items of work.

S4096B - b04096 SECTION 409.3(h)1.a PLACING

Addendum:

Associated Item(s):

Header:
SECTION 409.3(h)1.a PLACING

Provision Body:

- Section 409.3(h)1.a Placing. To add the second paragraph to read as follows:

Use a Material Transfer Vehicle (MTV) as specified in Section 108.05(c)5 on all mainline, shoulders, and ramps for binder and wearing courses except scratch and leveling courses. Any paving pass that is less than 150 m (500 feet) may be performed without the use of the MTV.

00 - b0506 Section 506 (provide SRL-H or better aggregate)

Addendum: 1

Associated Item(s):

Header:
SECTION 506

Provision Body:

Add the following to **Section 506.2 MATERIAL:**

Provide aggregate from sources listed in Bulletin 14 and conforming to the gradation for Fine Aggregate, Table A - Section 703.1 and Coarse Aggregate, Type A, No. 57, (Stone, Gravel, or Slag) - Section 703.2.

Provide pavement structure using aggregate material having an SRL-H or higher. To achieve the specified SRL, provide a blend of two aggregates if the blend has an SRL designation equal to or better than that specified. Blends are 50% by mass (weight) of each aggregate. Blend the aggregates using an approved method.

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._1_____

b._1_____

00 - bRock Cap for Pavement Subgrade Undercut

Addendum: 1

Associated Item(s):

Header:
ROCK CAP FOR PAVEMENT SUBGRADE UNDERCUT

Provision Body:

Description- This work is the placement of an ~~18~~ 24-inch thick (~~1.5~~ 2 foot) layer of rock at the top of all roadway subgrade areas within the travel and passing lanes and paved shoulders of the westbound lanes of I-80. Rock material ~~will~~ may be obtained from available quantities within the excavation of the project including reclaim ~~rubblization~~ and reuse of existing concrete pavement in accordance with the Reclaimed Portland Cement Concrete (RPCC) Aggregate for Rock Lining, Class R Modified special provision.

I. Material:

a. Selected Borrow Excavation, 206 Rock (max. stone dimension of 12 inches) must meet section 206.2 (a) l.d except that fines shall be limited to a maximum of 20% by weight passing the No. 4 Sieve. Exclude all rock types except sandstone or limestone. Rock must be able to be readily placed in a~~n~~ ~~18~~ 12-inch maximum lift thickness. For sandstone, individual grains must be visibly evident without the aid of magnification, and fines must be limited to rock fines. The 206 Rock must offer resistance to crushing. ~~Rubblized~~ Reclaimed concrete may be used provided it meets the gradation requirements for 206 Rock contained herein, and the requirements of special provision "Reclaimed Portland Cement Concrete (RPCC) Aggregate for Rock Lining, Class R Modified." ~~the length is no more than twice the width.~~ 206 Rock must be approved by the District Geotechnical Engineer.

b. Class 4, Type A Geotextile meeting Section 735 requirements

c. Class 4, Type B Geotextile meeting Section 735 requirements

d. Subbase (NO. 2A)

II. Construction:

a. Excavate and remove the existing pavement structure to the bottom of subbase elevation. Excavate and remove the existing subgrade to a depth of ~~eighteen (18)~~ twenty-four (24) inches below proposed pavement subbase within the travel and passing lanes and proposed paved shoulder areas.

a. Perform special rolling of pavement subgrade in accordance with “Special Rolling” special provision. Over excavate and remove additional unsuitable and unstable materials beyond a depth of ~~18~~ twenty-four (24) inches below proposed subgrade within the travel and passing lanes and shoulders as directed by the Engineer and per the “Selected Borrow Excavation, 206 Rock” special provision.

b. Prior to placement of rock, place a Class 4 Type B geotextile on the top of existing subgrade. Overlap and secure in accordance to Section 212. ~~If the entire fill is being constructed of rock meeting Section 206.s (a) l.d, this layer of geotextile is not required. The Project Engineer must approve the elimination of this layer of geotextile.~~

c. Place the rock layer in accordance with Section 206 and fine grade the rock cap to within 1.5 inches of final subgrade elevations using material meeting Section 703.2 requirement for Subbase (NO. 2A) to choke off the voids in the rock material until filled and to prevent rocking of individual 206 Rock pieces when compacted per the compaction requirements contained herein. Maintain moisture content of the materials within plus or minus 2% of the optimum moisture content at the time of compaction. Compact in accordance with Section 206.3 (b)1 and revise the fifth bullet to read: Compact the rock material using an initial compaction based on non- movement of the material under compaction with a vibratory padfoot soil compactor with blade and equivalent to a Caterpillar Model 815F and with final compaction and sealing with a smooth drum vibratory roller with the same centrifugal force capabilities as the Caterpillar Model 815F.

d. Prior to placement of the Subbase (NO. 2A) layer, place a Class 4 Type A geotextile on the top of the rock layer. Overlap and secure in accordance to Section 212.

III. Measurement and Payment

a. Geotextile, Class 4, Type A-Square Yards

b. Geotextile, Class 4, Type B-Square Yards

c. Class 1 Excavation-Cubic Yards

d. Selected Borrow Excavation, 206 Rock-In accordance with Section 206 Embankment – Cubic Yards

e. Subbase (NO. 2A) material is incidental to Selected Borrow Excavation, 206 Rock.

00 - bSection 703.2 Coarse Aggregate

Addendum: 1

Associated Item(s):

Header:
Section 703.2 Coarse Aggregate

Provision Body:
In accordance with Sections 350 and 703 and as follows:

Delete 703.2(a) 3, 703.2(a) 4, and 703.2(a) 5.

I6091F - c06091 ITEM 0609-0009 EQUIPMENT PACKAGE

Addendum: 1

Associated Item(s): 0609-0009

Header:
ITEM 0609-0009 EQUIPMENT PACKAGE

Provision Body:

Appendix

Table A

EQUIPMENT PACKAGE	
Equipment	**Quantity**
Communications Equipment	
Copier (1)	1
Fax Machine (1)	1
Cellular Phone(s)	~~6~~ 10
Electronic Equipment	
Digital Camera	~~1~~ 3
Digital Video Recorder	1
Document Scanner (2)	
Laser Printer (2)	
Color Printer (2)	
Specialized Equipment	
Surveyor's Level & Measuring Rod	1
Electronic Digitizer	1
Digital Display Level	1
Infrared Thermometer	
Laser Range Finder	1
Paper Shredder	1
Miscellaneous Items	
Internet Service Provider	1
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.

Copier must be capable to print and scan 11" x 17" paper in color.

Microcomputer Systems. A total of 5 microcomputer systems 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(g), Miscellaneous Materials.

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

I6092A - c06092 ITEM 0609-0002 - INSPECTOR'S FIELD OFFICE AND INSPECTION FACILITIES, DESIGN-BUILD PROJECT

Addendum:	1
Associated Item(s):	0609-0002

Header:
ITEM 0609-0002 - INSPECTOR'S FIELD OFFICE AND INSPECTION FACILITIES, DESIGN-BUILD PROJECT

Provision Body:

In accordance with Section 609, modified as follows:

609.3 CONSTRUCTION – Replace Section 609.3 with the following:

Install the indicated facilities no later than 5 days before the scheduled start of physical construction work, exclusive of Design activities, as identified in Section IV of the Special Provision titled SPECIAL BIDDING – DESIGN-BUILD. Anchor the facilities to withstand high winds. Maintain the facilities from installation until 30 days after physical work (including punch list items from final inspection) has been satisfactorily completed, unless released earlier by the Representative. Satisfactorily clean or arrange for the indicated facilities to be cleaned at least once per week. Provide an adequate number of accessible parking spaces immediately adjacent or in close proximity to the offices or laboratory for exclusive use by Department personnel. Provide proper maintenance of parking areas. Ensure that there is sufficient lighting to illuminate the exterior of offices or laboratory and all parking areas. Designate a specific individual to serve as the contact person for service-related problems. After physical work has been completed, but before release by the Representative, arrange to meet with the Inspector-in-Charge to examine and determine the condition of all specialized equipment that is contractor-owned. Report any unresolved disputes over the condition of such equipment to the Representative. Failure to meet with the Inspector-in-Charge or to report problems with the condition of specialized equipment will create a presumption that, except for expected wear resulting from normal usage, the equipment is in good condition and remains fully functional. Specialized equipment that is lost or determined to be damaged beyond repair will be replaced or reimbursement will be made as specified in Section 110.03, provided such loss or damage is not the result of carelessness or negligence on the part of the Contractor or any other responsible third party. The Representative may direct that the facilities be maintained for more than 30 days after physical work has been satisfactorily completed, as necessary, to allow time for Department personnel to process outstanding project records. Remove and dispose of furnishings, equipment, and materials upon release by the Representative.

609.4 MEASUREMENT AND PAYMENT – Replace Section 609.4 with the following:

The proposal will include separate pay items for the Inspector’s Field Office and Inspection Facilities, Field Laboratory, Proportioning Plant Office, and Equipment Package, as applicable.

Each contract item will be paid, as specified in Section 110.05, in two equal payments, according to the following schedule:

- When work is completed in an amount equivalent to at least 10% of the original contract amount, excluding the bid price for the applicable item and the bid prices for the items for the Design activities identified in Section IV of the Special Provision titled SPECIAL BIDDING – DESIGN-BUILD, the first payment will be made.
- When work is completed in an amount equivalent to at least 60% of the original contract amount, excluding the bid price for the applicable item and the bid prices for the items for the Design activities identified in Section IV of the Special Provision titled SPECIAL BIDDING – DESIGN-BUILD, the second payment will be made.

(a) Price Adjustments. Adjustments to the lump sum prices bid for the indicated office or laboratory facilities and equipment package, as applicable, will be made as follows:

1. Time Extensions and Reductions. In the event the time for completion of all work on the project is extended or reduced, as specified in Section 108.06, an appropriate adjustment (payment to the Contractor or rebate to the Department) will be made to the lump sum prices bid for the indicated office or laboratory facilities and equipment package, as applicable, for the days in excess of (payment) or less than (rebate) the original contract time, at the following daily rate:

$$\text{Daily Price Adjustment Rate} = \frac{75\% \times \text{Contract Lump Sum Price}}{\text{Original Contract Time in Days}}$$

No adjustment will be made when the cause for the extension or reduction of Contract Time occurs during the time before the indicated office or laboratory facilities and equipment package were installed.

2. Facilities Maintained for More than 30 Days After Physical Work Completion. In the event the Representative directs that the office or laboratory facilities and equipment package be maintained for more than 30 days after the date of physical work completion, as specified in Section 609.3, an appropriate adjustment (payment to the Contractor) will be made to the lump sum prices bid for the indicated office or laboratory facilities and equipment package, as applicable, for the days in excess of 30 until released by the Representative, at the Daily Price Adjustment Rate specified in Section 609.4(a)1.

No adjustment will be made if the Representative directs that the office or laboratory facilities and equipment package be maintained for more than 30 days after the date of physical work completion due to the Contractor's failure to submit, complete, and/or correct required certificates or documents, as established during the final inspection.

00 - c0962 4962-1000/1001/1002/1005 WATERBORNE PAVMENT MARKINGS

Addendum:

Associated Item(s): 4962-1000, 4962-1001, 4962-1002, 4962-1005

Header:

ITEM 4962-1000 4" WHITE WATERBORNE PAVEMENT MARKINGS MODIFIED
ITEM 4962-1001 6" WHITE WATERBORNE PAVEMENT MARKINGS MODIFIED
ITEM 4962-1002 8" WHITE WATERBORNE PAVEMENT MARKINGS MODIFIED
ITEM 4962-1005 4" YELLOW WATERBORNE PAVEMENT MARKINGS MODIFIED

Provision Body:

In accordance with Section 962 except as follows:

Section 962.3(c)1 Paint. Dispense at a wet-film thickness of 180 um (+/-) 30um (7 mils (+/-) 1 mil

00 - c1018-0050 REMOVAL OF PORTION OF EXISTING BRIDGE

Addendum:

Associated Item(s): 1018-0050

Header:
ITEM 1018-0050 – REMOVAL OF PORTION OF EXISTING BRIDGE

Provision Body:
In accordance with Section 1018 and as follows:

Section 1018.1 DESCRIPTION - Revise to read:

This work is the removal and satisfactory disposal of portions of the existing bridge as indicated and as directed.

Section 1018.3 CONSTRUCTION - Revise by adding the following:

Removal includes, but is not limited to the following:

1. Remove portion of the barrier, deck, and cheekwall for proposed approach slab construction.

Submit to the Department for review and approval a Removal Plan that is sealed by a Professional Engineer registered in the Commonwealth of Pennsylvania. Include the method of removal and equipment to be used.

Do not permit debris from removal or other operations to fall onto the ground or the stream below the structure. Provide a method to ensure that no debris falls from the structure. The provisions proposed by the Contractor are subject to approval of the Representative and are incidental to this item of work.

Notify the Representative immediately if any portion of the existing bridge designated for reuse is defective or otherwise unsuitable for reuse.

Repair any damage to the structure to remain, caused by the removal operations, to the satisfaction of the Representative, at no additional cost to the Department. Have a Professional Engineer, registered in the Commonwealth of Pennsylvania, prepare and seal the repair plans and obtain the approval of the District Bridge Engineer prior to beginning repairs.

Properly dispose of all materials removed from the structure.

MEASUREMENT AND PAYMENT - Lump Sum

Includes all items incidental to the removal including disposal and saw cutting concrete.

00 - c1018-0051 REMOVAL OF PORTION OF EXISTING BRIDGE

Addendum:

Associated Item(s): 1018-0051

Header:
ITEM 1018-0051 – REMOVAL OF PORTION OF EXISTING BRIDGE

Provision Body:
In accordance with Section 1018 and as follows:

Section 1018.1 DESCRIPTION - Revise to read:

This work is the removal and satisfactory disposal of portions of the existing bridge as indicated and as directed.

Section 1018.3 CONSTRUCTION - Revise by adding the following:

Removal includes, but is not limited to the following:

1. Remove portion of the barrier, deck, and cheekwall for proposed approach slab construction.

Submit to the Department for review and approval a Removal Plan that is sealed by a Professional Engineer registered in the Commonwealth of Pennsylvania. Include the method of removal and equipment to be used.

Do not permit debris from removal or other operations to fall onto the ground or the stream below the structure. Provide a method to ensure that no debris falls from the structure. The provisions proposed by the Contractor are subject to approval of the Representative and are incidental to this item of work.

Notify the Representative immediately if any portion of the existing bridge designated for reuse is defective or otherwise unsuitable for reuse.

Repair any damage to the structure to remain, caused by the removal operations, to the satisfaction of the Representative, at no additional cost to the Department. Have a Professional Engineer, registered in the Commonwealth of Pennsylvania, prepare and seal the repair plans and obtain the approval of the District Bridge Engineer prior to beginning repairs.

Properly dispose of all materials removed from the structure.

MEASUREMENT AND PAYMENT - Lump Sum

Includes all items incidental to the removal including disposal and saw cutting concrete.

00 - c1018-0052 REMOVAL OF PORTION OF EXISTING BRIDGE

Addendum:

Associated Item(s): 1018-0052

Header:
ITEM 1018-0052 - REMOVAL OF PORTION OF EXISTING BRIDGE

Provision Body:
In accordance with Section 1018 and as follows:

Section 1018.1 DESCRIPTION - Revise to read:

This work is the removal and satisfactory disposal of portions of the existing bridge as indicated and as directed.

Section 1018.3 CONSTRUCTION - Revise by adding the following:

Removal includes, but is not limited to the following:

1. Remove portion of the barrier, deck, and cheekwall for proposed approach slab construction.

Submit to the Department for review and approval a Removal Plan that is sealed by a Professional Engineer registered in the Commonwealth of Pennsylvania. Include the method of removal and equipment to be used.

Do not permit debris from removal or other operations to fall onto the ground or the stream below the structure. Provide a method to ensure that no debris falls from the structure. The provisions proposed by the Contractor are subject to approval of the Representative and are incidental to this item of work.

Notify the Representative immediately if any portion of the existing bridge designated for reuse is defective or otherwise unsuitable for reuse.

Repair any damage to the structure to remain, caused by the removal operations, to the satisfaction of the Representative, at no additional cost to the Department. Have a Professional Engineer, registered in the Commonwealth of Pennsylvania, prepare and seal the repair plans and obtain the approval of the District Bridge Engineer prior to beginning repairs.

Properly dispose of all materials removed from the structure.

MEASUREMENT AND PAYMENT - Lump Sum

Includes all items incidental to the removal including disposal and saw cutting concrete.

00 - c1018-0053 REMOVAL OF PORTION OF EXISTING BRIDGE

Addendum:

Associated Item(s): 1018-0053

Header:
ITEM 1018-0053 – REMOVAL OF PORTION OF EXISTING BRIDGE

Provision Body:
In accordance with Section 1018 and as follows:

Section 1018.1 DESCRIPTION - Revise to read:

This work is the removal and satisfactory disposal of portions of the existing bridge as indicated and as directed.

Section 1018.3 CONSTRUCTION - Revise by adding the following:

Removal includes, but is not limited to the following:

1. Superstructure: Remove the required portion of the existing deck, backwall and barriers necessary for the construction of the proposed expansion dams.

2. Remove the existing expansion dams and associated hardware.

Submit to the Department for review and approval a Removal Plan that is sealed by a Professional Engineer registered in the Commonwealth of Pennsylvania. Include the method of removal and equipment to be used.

Do not permit debris from removal or other operations to fall onto the ground or the stream below the structure. Provide a method to ensure that no debris falls from the structure. The provisions proposed by the Contractor are subject to approval of the Representative and are incidental to this item of work.

Notify the Representative immediately if any portion of the existing bridge designated for reuse is defective or otherwise unsuitable for reuse.

Repair any damage to the structure to remain, caused by the removal operations, to the satisfaction of the Representative, at no additional cost to the Department. Have a Professional Engineer, registered in the Commonwealth of Pennsylvania, prepare and seal the repair plans and obtain the approval of the District Bridge Engineer prior to beginning repairs.

Properly dispose of all materials removed from the structure.

MEASUREMENT AND PAYMENT - Lump Sum

Includes all items incidental to the removal including disposal and saw cutting concrete.

00 - c1018-0054 REMOVAL OF PORTION OF EXISTING BRIDGE

Addendum:

Associated Item(s): 1018-0054

Header:
ITEM 1018-0054 – REMOVAL OF PORTION OF EXISTING BRIDGE

Provision Body:
In accordance with Section 1018 and as follows:

Section 1018.1 DESCRIPTION - Revise to read:

This work is the removal and satisfactory disposal of portions of the existing bridge as indicated and as directed.

Section 1018.3 CONSTRUCTION - Revise by adding the following:

Removal includes, but is not limited to the following:

1. Superstructure: Remove the required portion of the existing deck and barriers necessary for the construction of the proposed expansion dams.

2. Remove the existing expansion dams and associated hardware.

Submit to the Department for review and approval a Removal Plan that is sealed by a Professional Engineer registered in the Commonwealth of Pennsylvania. Include the method of removal and equipment to be used.

Do not permit debris from removal or other operations to fall onto the ground or the stream below the structure. Provide a method to ensure that no debris falls from the structure. The provisions proposed by the Contractor are subject to approval of the Representative and are incidental to this item of work.

Notify the Representative immediately if any portion of the existing bridge designated for reuse is defective or otherwise unsuitable for reuse.

Repair any damage to the structure to remain, caused by the removal operations, to the satisfaction of the Representative, at no additional cost to the Department. Have a Professional Engineer, registered in the Commonwealth of Pennsylvania, prepare and seal the repair plans and obtain the approval of the District Bridge Engineer prior to beginning repairs.

Properly dispose of all materials removed from the structure.

MEASUREMENT AND PAYMENT - Lump Sum

Includes all items incidental to the removal including disposal and saw cutting concrete.

00 - c1090-0600 CLASS AA CEMENT CONCRETE REPAIRS

Addendum:

Associated Item(s): 1090-0600

Header:
ITEM 1090-0600 CLASS AA CEMENT CONCRETE REPAIRS

Provision Body:

DESCRIPTION - This work is repairing deteriorated concrete with Rapid Set Class AA Cement Concrete at areas as indicated and as directed, including removal of unsound portions of concrete, furnishing, placing, and grouting concrete anchors, joint filler material, and reinforcing bars.

MATERIAL -

Rapid Set Concrete in accordance with Section 525.2(c)

Reinforcement Bars - Section 709.1

Fabric Reinforcement - Section 709.3

Epoxy Bonding Compound - ASTM C881-78

High-Range Water Reducer - Section 711.3

Epoxy Adhesive Anchoring Material- Bulletin 15, Miscellaneous Anchoring Adhesives And Mechanical Anchors

HIGH-RANGE WATER REDUCER (HRWR) ADMIXTURES - If using HRWR Admixtures in this item, notify the Department at the Pre-Job conference. The following are the specifications required to use the HRWR:

Include a sample placement in the mix design process to check that no adverse placing or finishing problems occur.

Add the HRWR to the mix at the project site. This requires specialized metering/measuring equipment and a wand to effectively disperse the HRWR into the truck. If a truck demonstrates inconsistency for mixing and delivery, the truck will be rejected for subsequent deliveries. In addition, meet the following requirements:

Test concrete and meet the slump requirements in accordance with Section 704. Test plastic air content for information only, prior to the addition of the HRWR.

Add HRWR to the load by use of a pressurized/pump system including wand of sufficient length to uniformly disperse the HRWR throughout the load while the drum is turning slowly. Manual or automated measurement of the dose is permitted. Correlation by timing a pump is prohibited.

Mix the load no less than 50 revolutions to disperse and mix the admixtures.

Submit a Quality Control Plan for approval for each type of placement. Include the frequency of testing prior to the introduction of the HRWR and at the point of placement. Ensure that the Engineer has all test results.

Follow the manufacturer's recommended HRWR dosage.

No redosing of HRWR is permitted after the initial dose has been introduced.

Control maximum slump by the project conditions, but do not exceed 7-inches at the point of placement.

As part of the design/approval process for the job mix design, include testing of two specimens for hardened air content at the Materials & Testing Division in accordance with the PTM No. 623.

Provide a technical representative for the HRWR manufacturer at the project for at least the initial placement.

Other specification requirements such as discharge time, temperature, placement rate, strength, air content in the hardened state will not be waived under any conditions.

Perform acceptance testing at the point of placement in accordance with Section 704, except limit the slump to seven inches maximum, conditions permitting.

The Structure Control engineer may restrict the maximum slump to less than seven inches if project conditions dictate. Provide concrete of a suitable slump to remain in place after initial strike-off and final finishing. Ensure that concrete remains plastic long enough to allow workability, proper finishing, and texturing.

Mold three additional companion cylinders to the acceptance cylinders per class of concrete for each 250 cy or less, but no more than three sets per structure and send to the Materials & Testing Division for testing. Two cylinders will be tested for 28-day compressive strength and one for hardened air content. Package the cylinders and deliver to the Engineer.

If initial field results are unsatisfactory, despite instituting the precautions noted above, the Department will immediately withdraw approval of the mix.

CONSTRUCTION - Section 1001.3.

All areas to be repaired will be delineated by the Contractor and verified by the Representative.

Provide access and work platforms to delineate the work area, perform operations and inspection of the work. This access may be a rigging system consisting of steel cables and platforms or crane system. Take every precaution not to damage the structure and it's components, repair any damage to the structure at no cost to the Department. Do not place any rigging or scaffolding in the stream. Work platforms are incidental to the repair items.

Saw cut around the periphery of delineated repair areas and remove deteriorated concrete within the boundaries to sound concrete.

EQUIPMENT - Power- driven hand tools for removal of deteriorated concrete are required and are subject to the following restrictions:

Do not use pneumatic hammers heavier than the normal 30 pound class.

Do not operate pneumatic hammers or mechanical chipping tools at an angle in excess of 45 degrees relative to the surface of the concrete being repaired.

Use hand tools such as hammers and chisels or small air chisels to remove final particles of unsound concrete or to provide necessary clearances around reinforcement bars.

After removal of concrete, clean the concrete surface within the patch limits to remove partially loosened chips.

Clean all exposed reinforcement to remove all rust. Remove and replace in- kind all portions of damaged or heavily corroded reinforcement bars. Splice new bars to the remaining reinforcement. Wire mesh may be substituted for new reinforcement steel.

Place dowels and new reinforcement or wire mesh.

Blow clean all removal areas with oil-free compressed air and protect against any contaminant detrimental to the bond of the new patching material.

Immediately prior to placing new concrete, apply epoxy bonding compound to the area of existing concrete that is in contact with the new concrete. Placing bonding compound in accordance with manufacturer's recommendations.

Where indicated and as directed, place joint filler material as needed or replace missing joint filler material.

CONSTRUCTION -

a) General:

• Submit the manufacturer’s written installation instructions to the representative prior to the start of any work.

• Drill holes of proper diameter in accordance with manufacturer's specifications and to the depth as indicated on the plans to accept reinforcement bars at the locations indicated. Only rotary- type drills without the use of impact will be permitted. Avoid drilling through existing reinforcement. Locate existing steel, where necessary using a method approved by the Representative.

• Clean and prepare the holes in accordance with the recommendations provided by the manufacturer of the anchoring material.

• Place anchoring material and install reinforcement bar in accordance with manufacturer's recommendations. Provide supplemental support to the reinforcement bar to ensure its proper alignment and position during the curing phase of the anchoring material.

b) Proof-Load Testing:

Proof- load testing is not required. Instead, provide satisfactory evidence from the manufacturer's literature documenting that a minimum of 50% of the full yield force of the reinforcement bar can be developed for the embedment length indicated.

MEASUREMENT AND PAYMENT - Cubic Foot. Measured prior to placing forms.

00 - c1090-0610 - Class A Cement Concrete Repairs

Addendum:

Associated Item(s): 1090-0610

Header:

ITEM 1090-0610 - CLASS A CEMENT CONCRETE REPAIRS

Provision Body:

DESCRIPTION - This work is repairing deteriorated concrete with Class A Cement Concrete at areas as indicated and as directed, including removal of unsound portions of concrete, furnishing, placing, and grouting concrete anchors, joint filler material, and reinforcing bars.

MATERIAL -

- Class A Cement Concrete. Section 704, except use only AASHTO No. 8 Coarse Aggregate
- Reinforcement Bars - Section 709.1
- Fabric Reinforcement - Section 709.3
- Epoxy Bonding Compound - ASTM C881-78
- High-Range Water Reducer - Section 711.3
- Epoxy Adhesive Anchoring Material- Bulletin 15, Miscellaneous Anchoring Adhesives And Mechanical Anchors

HIGH-RANGE WATER REDUCER (HRWR) ADMIXTURES - If using HRWR Admixtures in this item, notify the Department at the Pre-Job conference. The following are the specifications required to use the HRWR:

Include a sample placement in the mix design process to check that no adverse placing or finishing problems occur.

- Add the HRWR to the mix at the project site. This requires specialized metering/ measuring equipment and a wand to effectively disperse the HRWR into the truck. If a truck demonstrates inconsistency for mixing and delivery, the truck will be rejected for subsequent deliveries. In addition, meet the following requirements:
    - Test concrete and meet the slump requirements in accordance with Section 704. Test plastic air content for information only, prior to the addition of the HRWR.
    - Add HRWR to the load by use of a pressurized/pump system including wand of sufficient length to uniformly disperse the HRWR throughout the load while the drum is turning slowly. Manual or automated measurement of the dose is permitted. Correlation by timing a pump is prohibited.
    - Mix the load no less than 50 revolutions to disperse and mix the admixtures.
- Submit a Quality Control Plan for approval for each type of placement. Include the frequency of testing prior to the introduction of the HRWR and at the point of placement. Ensure that the Engineer has all test results.
- Follow the manufacturer's recommended HRWR dosage.
- No redosing of HRWR is permitted after the initial dose has been introduced.
- Control maximum slump by the project conditions, but do not exceed 7-inches at the point of placement.

- As part of the design/approval process for the job mix design, include testing of two specimens for hardened air content at the Materials & Testing Division in accordance with the PTM No. 623.
- Provide a technical representative for the HRWR manufacturer at the project for at least the initial placement.
- Other specification requirements such as discharge time, temperature, placement rate, strength, air content in the hardened state will not be waived under any conditions.
- Perform acceptance testing at the point of placement in accordance with Section 704, except limit the slump to seven inches maximum, conditions permitting.
- The Structure Control engineer may restrict the maximum slump to less than seven inches if project conditions dictate. Provide concrete of a suitable slump to remain in place after initial strike- off and final finishing. Ensure that concrete remains plastic long enough to allow workability, proper finishing, and texturing.
- Mold three additional companion cylinders to the acceptance cylinders per class of concrete for each 250 cy or less, but no more than three sets per structure and send to the Materials & Testing Division for testing. Two cylinders will be tested for 28-day compressive strength and one for hardened air content. Package the cylinders and deliver to the Engineer.
- If initial field results are unsatisfactory, despite instituting the precautions noted above, the Department will immediately withdraw approval of the mix.

CONSTRUCTION - Section 1001.3.

All areas to be repaired will be delineated by the Contractor and verified by the Representative.

Provide access and work platforms to delineate the work area, perform operations and inspection of the work. This access may be a rigging system consisting of steel cables and platforms or crane system. Take every precaution not to damage the structure and it's components, repair any damage to the structure at no cost to the Department. Do not place any rigging or scaffoldingin any bodies of water. Work platforms are incidental to the repair items.

Saw cut around the periphery of delineated repair areas and remove deteriorated concrete within the boundaries to sound concrete.

EQUIPMENT - Power- driven hand tools for removal of deteriorated concrete are required and are subject to the following restrictions:

- Do not use pneumatic hammers heavier than the normal 30 pound class.
- Do not operate pneumatic hammers or mechanical chipping tools at an angle in excess of 45 degrees relative to the surface of the concrete being repaired.

Use hand tools such as hammers and chisels or small air chisels to remove final particles of unsound concrete or to provide necessary clearances around reinforcement bars.

After removal of concrete, clean the concrete surface within the patch limits to remove partially loosened chips.

Clean all exposed reinforcement to remove all rust. Remove and replace in- kind all portions of damaged or heavily corroded reinforcement bars. Splice new bars to the remaining reinforcement. Wire mesh may be substituted for new reinforcement steel.

Place dowels and new reinforcement or wire mesh.

Blow clean all removal areas with oil-free compressed air and protect against any contaminant detrimental to the bond of the new patching material.

Immediately prior to placing new concrete, apply epoxy bonding compound to the area of existing concrete that is in contact with the new concrete. Placing bonding compound in accordance with manufacturer's recommendations.

Where indicated and as directed, place joint filler material as needed or replace missing joint filler material.

CONSTRUCTION -

a) General:

• Submit the manufacturer's written installation instructions to the representative prior to the start of any work.

• Drill holes of proper diameter in accordance with manufacturer's specifications and to the depth as indicated on the plans to accept reinforcement bars at the locations indicated. Only rotary-type drills without the use of impact will be permitted. Avoid drilling through existing reinforcement. Locate existing steel, where necessary using a method approved by the Representative.

• Clean and prepare the holes in accordance with the recommendations provided by the manufacturer of the anchoring material.

• Place anchoring material and install reinforcement bar in accordance with manufacturer's recommendations. Provide supplemental support to the reinforcement bar to ensure its proper alignment and position during the curing phase of the anchoring material.

b) Proof-Load Testing:

Proof-load testing is not required. Instead, provide satisfactory evidence from the manufacturer's literature documenting that a minimum of 50% of the full yield force of the reinforcement bar can be developed for the embedment length indicated.

MEASUREMENT AND PAYMENT - Cubic Foot. Measured prior to placing forms.

I19992A - c1999-9999 - 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: 4

00 - c4409-0881/6850 & 4419-1120 Safety Edge

Addendum:

Associated Item(s): 4409-0881, 4409-6850, 4419-1120

Header:

ITEM 4409-0881 - SUPERPAVE ASPHALT MIXTURE DESIGN, HMA WEARING COURSE, PG 76-22, >/= 30 MILLION ESALS, 9.5 MM MIX, 1 1/2" DEPTH, SRL-E
ITEM 4409-6850 - SUPERPAVE ASPHALT MIXTURE DESIGN, HMA BINDER COURSE, PG 76-22, >/= 30 MILLION ESALS, 19.0 MM MIX, 2 1/2" DEPTH
ITEM 4419-1120 - STONE MATRIX ASPHALT MIXTURE DESIGN, HMA WEARING COURSE, RPS, PG 76-22, >/= 30 MILLION ESALS, 9.5 MM MIX, 1 1/2" DEPTH, SRL-E

Provision Body:

In accordance with Section 409 and 491 and as indicated.

Attach a device to the paver to confine material at the end gate and extrude the asphalt material in a wedge shape. Use an adjustable device that allows the operator to vary the slope extruded at the paver to account for the angle becoming steeper during compaction (roll-up). After compaction of the mat is complete, provide a safety edge meeting the final shape requirements of the safety edge detail. The completed angle of the safety edge must be 26-40 degrees measured from the pavement cross slope extended. Do not delay rolling of the mat adjacent to the safety edge. Maintain contact between the device and road shoulder surface and allow automatic transition to intersections, driveways, guiderail sections, and obstructions. Use the device to constrain the asphalt head, reducing the area and increasing the density of the extruded profile. A single plate strikeoff method is not allowed. Prior to construction, the safety edge device must be approved by the Representative. Do not place the safety edge on organic material.

Construction of safety edge incidental to adjacent binder and wearing courses.

00 - c4422-0130 Bituminous Wearing Course FJ-1, SRL-H Modified

Addendum:

Associated Item(s): 4422-0130

Header:

ITEM 4422- 0130 - BITUMINOUS WEARING COURSE, FJ-1, SRL-H MODIFIED

Provision Body:

Repair longitudinal and transverse joints by removing deteriorated concrete to sound concrete by either milling or other satisfactory method, the width and depth will vary. Once removed, clean and tack joints before placing FJ-1 material. The removal of existing concrete, cleaning and tacking are incidental to the FJ-1 (tons) Items.

00 - c4461-0001 BITUMINOUS PRIME COAT MODIFIED

Addendum:

Associated Item(s): 4461-0001

Header:

ITEM 4461-0001 BITUMINOUS PRIME COAT MODIFIED

Provision Body:

In accordance with Section 461, except as follows:

Section 461.2(a) BITUMINOUS MATERIAL – delete

AE-P

Revise by adding the following:

E-3M Prime

As determined by the Engineer, repair the shoulder backup and E3M oil damaged by any construction activity at no additional cost to the Department.

00 - c4515-0001 - Sawing & Sealing of Bit. Overlays Mod (physically locate spec where conc.pavement)

Addendum:

Associated Item(s): 4515-0001

Header:
ITEM 4515-0001 - SAWING AND SEALING OF BITUMINOUS OVERLAYS MODIFIED

Provision Body:

In accordance with Section 515, as directed, and as follows:

Physically locate each individual pavement joint by using a stringline and the use of steel pins or survey hubs at each edge of the roadway at each joint location. Global positioning systems, survey, or any other methods are not acceptable.

I29903A - c4901-0001 MAINTENANCE AND PROTECTION OF TRAFFIC DURING CONSTRUCTION

Addendum: 1

Associated Item(s): 4901-0001

Header:
ITEM 4901-0001 - MAINTENANCE AND PROTECTION OF TRAFFIC DURING CONSTRUCTION

Provision Body:

I. DESCRIPTION - This work is the construction of the maintenance and protection of traffic according to the approved Traffic Control Plan developed as part of the ITEM 9901-0001 - Design Traffic Control Plan.

II. MATERIAL - As indicated and as specified in the Traffic Control Plan.

III. CONSTRUCTION - In accordance Publication 408; the Special Provisions of the contract; and any additional requirements specified herein.

The following official Department holidays will not be included as working days:

- New Year's Day
- Dr. Martin Luther King, Jr. Day
- Presidents Day
- Memorial Day
- Independence Day
- Labor Day
- Columbus Day
- Veteran's Day
- Thanksgiving Day
- Day after Thanksgiving Day
- Christmas Day

Notify the District Traffic Engineer a minimum of fourteen (14) calendar days prior to modifying existing traffic patterns. All modifications must be approved in writing by the District Traffic Engineer.

Before beginning work, imposing traffic restrictions, or implementing changes to traffic restrictions, provide a minimum of fourteen (14) calendar days advance notice in writing to the following:

- District Community Relations Coordinator
- District Hauling Permit Office
- Inspector-in-Charge
- Local Municipalities
- Local School Districts
- Local Emergency Services
- Pennsylvania State Police
- Airport Management Office

The Contractor is responsible for contacting the Pennsylvania One Call System, Inc. at 1-800-242-1776 a minimum of ten (10) working days before digging.

Notify the District Construction Unit, a minimum of fourteen (14) calendar days advance notice in writing (excluding weekends and holidays) before implementing, changing, or extending any restriction or closure.Notify the District Construction Unit, a minimum of seven (7) calendar days advance notice in writing (excluding weekends and holidays) before removing any restrictions or closure.

District personnel must complete Form M-937R "Route/Bridge Restriction" and it must be received at the District Permit Office a minimum of fourteen (14) working days (excluding weekends and holidays) prior to the implementation of any width restriction, road closure, or request of an extension of the restriction from the original end date. Form M-937RO "Route/Bridge Restriction Opening" must be received at the District Permit Office a minimum of seven (7) working days (excluding weekends and holidays) prior to opening the restriction early.

Immediately upon completion of the work, remove all traffic control devices. All traffic control devices will remain the Contractor's property unless otherwise specified in the special provisions of the contract. The Contractor will remove any existing traffic control devices erected by Department forces. Those devices will remain the property of the Department.

Erect all traffic control devices before work begins. The Inspector-in-Charge will inspect all traffic control devices before work begins.

Maintain all official existing roadway signs. Completely cover or remove all signs not in use. When covering conflicting existing signs, do not place adhesive on the sign face. Place adhesive on the back of the sign. Any reflective sheet damaged by adhesive constitutes damage to the sign. Replace the sign at no additional cost to the Department. For signs that are frequently covered and uncovered based upon work schedules, provide a cover which permits the entire sign face (including the border and margin) to be visible when the sign is uncovered.

Remove any conflicting signs in a manner approved by the Inspector-in-Charge, and replace upon completion of the project.

If possible, maintain a minimum spacing of 200 feet between all regulatory, warning, and destination signs (temporary and permanent).

All traffic control signs and devices to be constructed of the same type of PennDOT-approved fluorescent orange retroreflective material.

Install and maintain traffic control signs and devices that are in new condition throughout the duration of the project. Any damage incurred shall be immediately repaired or replaced by the Contractor to the satisfaction of the Inspector-in-Charge.

The Contractor is responsible for the removal and proper storage of all unnecessary existing traffic regulatory signs within the project limits. These signs will remain the property of the Department. The Contractor is responsible for reinstalling the applicable signs at the end of the project as directed by the Inspector-in-Charge.

Sign location and distances may be adjusted slightly to fit field conditions.

All long-term traffic control signing to be mounted on Type III barricades unless otherwise noted.

All traffic control signs and devices must comply with the most current NCHRP 350 criteria.

Inventory and document all existing signs and pavement marking patterns prior to the start of work and provide to the Inspector-in-Charge. Documentation must include segment/offset references.

Maintain all pavement markings at all times and as directed by the Inspector-in-Charge. Remove completely all temporary pavement markings when they are no longer required as appropriate and as directed.

Remove completely any conflicting pavement markings and replace upon completion of the project to the satisfaction of the Inspector-in-Charge.

Provide additional channelizing devices and barricades at ramps to prevent vehicles from turning into a lane closed for construction. Space channelizing devices at 5-foot intervals or as directed by the Inspector-in-Charge.

Mount a Type C steady-burn light on each indicator barricade and channelizing device used to transition traffic.

Use the same type of delineator devices on all temporary concrete barrier spaced a maximum of 40 feet through the work zone.

Weight traffic control devices with a PennDOT-approved method and to the satisfaction of the Inspector-in-Charge. Provide sufficient supervision to see that they remain in place 24 hours a day, seven (7) days a week.

Place traffic control channelizing devices in the direction of traffic flow. Remove traffic control channelizing devices in the direction opposite of traffic flow.

Locations for the Contractor's access to be determined in the field and approved by the Inspector-in-Charge prior to use. Access points to be controlled by flagging during working hours to control through traffic from entering the work area (flagging is incidental to the Maintenance and Protection of Traffic During Construction item). Flagging is not to be used to stop traffic for Contractor access, only to slow oncoming traffic. All access locations must remain closed during non-working hours.

Do not leave equipment or material along roadway or outside of a suitably protected area.

All highway workers to wear yellow/green (ANSI II) vests. All flaggers to wear yellow/green (ANSI II) vests and leggings.

Maintain travel lanes in good condition when in use and to the satisfaction of the Inspector-in-Charge.

Furnish and place R14-16-1 (96" x 96" on I-80) and (60" x 60" for on-ramps) "Vehicles Over _ _ Feet Wide Prohibited" signs or R11-2 (48" x 30") "Road Closed" at locations as directed by the Inspector-in-Charge. Supplemental plaques R14-16 (1, 2, or 3) "Beyond Exit _ _ ", "Beyond Next Exit" or "Beyond Next Intersection" to be added as necessary.

Provide, at the preconstruction meeting, a written notification of proposed roadway/bridge closures or construction activities that will create a restriction to the roadway/bridge (height, width, weight, or length). Include a written schedule indicating the proposed times and details of the restrictions or closures for the various phases of construction. All restrictions are subject to Department approval. Notification to be sent to the affected municipalities prior to beginning any work and subject to Department approval.

All drop-off issues to be in accordance with Publication 408/2011, Section 901.3(j).

Changeable message sign board location and messages to be approved by the Inspector-in-Charge. Message to be updated as necessary and as directed to meet current conditions. Relocation and updated messages are incidental to the item.

Transition traffic control phases during periods of lowest traffic volume, as approved by the Inspector-in-Charge.

All merging tapers to be illuminated with floodlights during dark hours. Location of floodlights to be positioned without creating a glare to the motorists and approved by the Inspector-in-Charge.

Location of speed display signs to be approved by the Inspector-in-Charge. Relocation to be incidental to the item.

All resets of 0901 items are incidental.

Designate a full-time traffic control supervisor to maintain constant surveillance of traffic control operations, and satisfactorily replace or correct all missing, damaged, ineffective, or misaligned equipment and devices to the satisfaction of the Inspector-in-Charge. Provide the name and telephone number of a designated traffic control supervisor to the Inspector-in-Charge, District Traffic Engineer, Pennsylvania State Police, Washington Township, and local EMS. Ensure that the supervisor is on-call and available 24 hours per day, seven (7) days a week. It is the responsibility of the traffic control supervisor to be at the project site during working hours and must be able to be on-site within two (2) hours of the initial telephone call during non-working hours. The supervisor is responsible for and must be familiar with the project Traffic Control Plan and the coordination of scheduled work with any other adjacent Department projects. This position is incidental to the Maintenance and Protection of Traffic During Construction item.

Coordinate working schedule with any adjacent Department projects.

The traffic control devices shown on the Traffic Control Plan do not necessarily depict the actual number of devices required.

Do not remove guide rail or other protective devices without prior approval of the Inspector-in-Charge.

On final paint applications, paint 200 feet prior to new pavement and 200 feet beyond new pavement.

Keep lane closure lengths to a minimum. Lane closures should not exceed one-half (½) mile unless approved by the District Traffic Unit or Inspector-in-Charge.

All construction vehicles and equipment must enter and exit in the same direction of traffic.

Stockpiled materials must be stored within legal right-of-way, protected by barrier if within the 30 feet clear zone, and approved by the Inspector-in-Charge.

Any damage incurred by stockpiled materials to be immediately repaired by the contractor at no additional cost to the Department and to the satisfaction of the Inspector-in-Charge.

Intermittent traffic stoppages on S.R. 0080 are not permitted at any time.

Winter shutdown to be in effect from November 1st to March 15th, or as directed by the Department.

No short-term daylight or long-term lane closures on S.R. 0080 are permitted during winter shutdown.

Prior to winter shutdown, remove all traffic control devices including the temporary concrete barrier and the temporary pavement markings. Install all appropriate signing and pavement markings to restore normal traffic patterns on S.R. 0080 for winter shutdown.

Do not start construction until the Traffic Control Plans stamped “Released for Construction” are transmitted by a letter indicating which work can proceed. Construction may start on stages or phases of the Traffic control Plans provided that partial plans stamped “Released for Construction” are transmitted by a letter indicating which work can proceed.

Provide, site, install, maintain and remove ten (10) temporary portable camera units to monitor traffic conditions on the eastbound lanes of Interstate 80 when westbound traffic is utilizing the eastbound passing lane.

Provide certification that all components meet the requirements of the National Electrical Code and all applicable state and local codes and regulations prior to the installation. Test each unit once installed at each appropriate location; make required repairs and adjustments.

Be responsible for determining the appropriate site to deploy the temporary portable camera unit. Obtain approval of the Representative for the location of each unit.

Maintained the cameras for the duration of the restricted traffic flow on the eastbound lanes of Interstate 80. Ensure twenty-four (24) hours a day, seven (7) days a week operations by providing adequate battery or solar panels as necessary. Provide a contact responsible for keeping the equipment functioning twenty-four (24) hours a day, seven (7) days a week.

IV. MEASUREMENT AND PAYMENT - Lump Sum

The Department will measure and pay for this item in a proportionate manner based on current estimates. If an item or device is required for maintenance and protection of traffic, the cost of the item is incidental to this item, without exception.

00 - c9000-0002 CONCRETE BEAM SPALL REPAIR

Addendum:

Associated Item(s): 9000-0002

Header:
ITEM 9000-0002 - CONCRETE BEAM SPALL REPAIR

Provision Body:

DESCRIPTION - This work is repairing deteriorated concrete on the underside of the prestressed box beams, as indicated and directed.

MATERIAL -

- Epoxy Grout, Vertical and overhead use listed in Bulletin 15.
- Organic zinc-rich primer listed in Bulletin 15, Section 1071.2(a).

CONSTRUCTION - Section 1040.3(c) and as follows:

The Contractor will delineate all areas to be repaired. Contractor to provide access to all areas so the Representative in the field can approve the repair areas.

Remove deteriorated concrete within the boundaries to 1/4" minimum into sound concrete. Deteriorated concrete removal to be limited to less than one inch depth form face of beam or to the face of any beam reinforcement.

Use hand tools such as hammers and chisels, or small air chisels to remove unsound concrete.

Do not damage sound concrete or prestressed strands. Repair any damage to the existing concrete beams caused by the removal operations, to the satisfaction of the Department, at no additional cost to the Department. The representative in the field shall determine the extent of damage and the approval procedure to repair the damages.

After removal of concrete, sandblast the concrete surface within the patch limits to remove partially loosened chips. Remove loose rust on steel and prepare steel surfaces to allow proper adhesion of primer.

Blow clean removal areas with oil free compressed air and protect against any contaminant detrimental to the bond of the new patching material.

Areas with exposed mild steel reinforcement and/or prestressed strands. Paint the steel with the organic zinc-rich primer. Allow for proper surface dying times of the primer.

Use an approved epoxy grout to coat the exposed sound concrete and primed steel surfaces.

MEASUREMENT AND PAYMENT - Square Foot.

I1070A - c9000-0003 PERMITS FOR DESIGN-BUILD PROJECTS

Addendum:

Associated Item(s): 9000-0003

Header:
ITEM 9000-0003 - PERMITS FOR DESIGN-BUILD PROJECTS

Provision Body:

I. DESCRIPTION - This work is the preparation of and obtaining approval for all permits necessary to construct the project as indicated in the contract documents and signed Final Design Drawings.

II. DESIGN –

(a) Department-obtained permits. The following permits have been obtained by the Department for construction of this project:

· None

(b) General. Obtain the following permits for construction of this project:

- US Army Corps of Engineers Section 404 Permit
- PA DEP Water Obstruction and Encroachment Permit 105/404
- PA DEP PAG-2 NPDES General Permit for Discharge of Storm Water
- PA DEP Section 401 Water Quality Certification
- PA DEP Flood Plain Management Permit (Section 106)

All permits must comply with Environmental Commitments and Mitigation Measures.

The following documents are attached (FOR INFORMATION ONLY) to facilitate the preparation of the permit submissions: None

The approved Categorical Exclusion Evaluation is available on the Department's CE/EA Expert System.

Be responsible to ensure that all plans and documents are relevant and current for the appropriate permit submissions. Application fees will be waived for permits submitted on behalf of the Department.

1. Erosion and Sediment Pollution Control (E&SPC) Plan. Prepare and submit the E&SPC Plan to the Jefferson County Conservation District or Pennsylvania Department of Environmental Protection, as required for review/approval, as applicable.

2. NPDES - If an NPDES Permit is required, develop and submit the NPDES Permit Application to the Jefferson County Conservation District for review/ approval. The Contractor responsible for earthmoving activities on the project will become co-permittee with the Department on the NPDES Permit.

The review of the E&SPC Plan and NPDES Permit Application by the Jefferson County Conservation District will be according to the policies of the conservation district. The Contractor will be responsible for accounting for the review time of the E&SPC Plan and NPDES Permit by the conservation district in the project schedule.

3. Waterway Permits- Prepare and submit the Permit Applications listed above in accordance with the conditions of the permit(s). Use of the JPA2 Expert System ***is*** required. Do not commence construction activities until the applicable waterway permit(s) are obtained.

III. MEASUREMENT AND PAYMENT – Lump Sum.

Partial payment will be made for the design activity based on the approved Schedule of Values in accordance with Section IX of the Special Provision titled SPECIAL BIDDING – DESIGN-BUILD, utilizing the following components:

- NPDES Permit Application Initial Submission
- NPDES Permit Issuance
- Waterway Permit Application Initial Submission
- Waterway Permit Issuance

I1072A - c9000-0004-UTILITY RELOCATION INFORMATION FOR DESIGN/BUILD PROJECTS

Addendum:

Associated Item(s): 9000-0004

Header:

ITEM 9000-0004 - UTILITY RELOCATION INFORMATION FOR DESIGN/BUILD PROJECTS

Provision Body:

I. DESCRIPTION - The utility relocation coordination for contract document 94915 has not been finalized as this is a **partial** Design/Build Project and final design is not completed. This work is the coordination of any and all utility facility relocation required to complete the project within the project limits as shown on the **Conceptual Drawings.**

II. COORDINATION

Coordinate all utility work required to complete the project. Perform the following, at minimum:

- Contact all utilities identified or having facilities within the project limits within 7 calendar days from the issuance of the Notice to Proceed and thereafter in intervals not to exceed 30 calendar days, and provide updates to the District Utility Administrator (DUA) as to plan development and updated estimates in calendar days for completion of utility relocations for both the utility and contractor;
- Incorporate all utility relocation design and resulting relocation arrangements into the Schedule;
- Coordinate required utility relocation highway occupancy permits and utility reimbursement agreements through the DUA; and
- Coordinate the relocation of any utilities affected by the project. If the utilities claim a real property interest within the project limits, then forward the reimbursement documents including real property interest documentation to the DUA immediately upon receipt. The DUA will forward the information to the Central Office Utility Relocation Unit (COURU) so determination can be made on the real property interest.

Be responsible for the cost and delay of any additional utility relocation that results from changes in the Contractor's plans or construction sequences made subsequent to (1) acceptance of the utility's relocation plans and (2) where the utility has physically moved its facilities based upon those relocation plans.

For all utility relocation coordination activities, follow the procedures as provided in Publication 16M, Design Manual Part 5, Utility Relocation.

Throughout the project, upon taking appropriate action, forward all utility documents and correspondence to the DUA for recordation.

Review and approve all documents associated with the utility relocation process requiring signatures within 5 working days of receipt and forward to the DUA for an expedited 30 working day review. The DUA in turn will forward to the Central Office Utility Relocation Unit all documents requiring Central Office approval. Working days are as specified in the Special Provision titled SPECIAL BIDDING – DESIGN-BUILD, Section VII.

Verify the following list of utilities and contact all utilities within the project limits, including any utilities within the project limits not listed.

Utilities:

United Electric Cooperative, Inc.—Stephen A. Long, P.E., (814)371-8570

National Fuel Gas Corporation—James Kennedy, (716)857-7967

Based on information received from the utility companies in response to PA One- Call Design Ticket #20120381856 and subsequent coordination, existing facilities exist at the following locations:

Approximate Station153+50—Overhead electric.Line is assumed to be unaffected; verify in final design.

- Approximate Station 215+25—Overhead electric.Line is assumed to be unaffected; verify in final design.
- Approximate Station 260+00—Overhead electric.Line is assumed to be unaffected; verify in final design.
- Approximate Station 347+25—Overhead electric.Line is assumed to be unaffected; verify in final design.
- Approximate Station 457+50—High pressure gas transmission line.Information regarding the depth of the gas line has not been furnished; verify depth of cover in final design to determine if undercut or other excavation activities will require relocation.
- Approximate Station 214+00 to 215+00—Appurtanenances associated with the Department's Intelligent Transportation System (ITS) such as LED message sign, weather station, junction boxes, concrete pads and conduit are assumed to be impacted by construction of barrier dike; verify in final design

III. MEASUREMENT AND PAYMENT – Lump Sum

Full payment for Utility Coordination will be made upon completion of all utility facility relocations on the project.

I29900B - c9000-6001/6002 - DESIGN ROADWAY

Addendum: 1

Associated Item(s): 9000-6001, 9000-6002

Header:
ITEM 9000-6001 - DESIGN ROADWAY, CONCRETE PAVEMENT
ITEM 9000-6001 - DESIGN ROADWAY, BITUMINOUS PAVEMENT

Provision Body:

I. DESCRIPTION - This work is the design and preparation of plans for the construction of roadway and associated work as indicated on the Conceptual Drawings for I-80 Jefferson concrete WB**.** Also included are the preparation of widened embankments and associated benching excavation and backfill, pavement undercut, subbase, drainage, pavement, shoulders, guide rail, signing, delineators, pavement markings and any feature necessary to make a complete and safe facility. Supplemental plans include Erosion and Sediment Pollution Control and Signing and Pavement Marking. The acquisition of a NPDES General permit is required.Incorporate elements of bid/build construction, as indicated by the combination plan, including safety upgrades to bridges and approach slabs on I-80 westbound and pavement overlay of I-80 eastbound lanes.

Provide all geotechnical investigation and engineering services required for the determination of possible utility conflicts and for the design of stable embankments and subgrade. This includes all geotechnical exploration and testing, inspection of site conditions, test borings, and sampling of the test boring materials, as required to ensure that the design and the construction of stable embankments and subgrade is achieved.

II. DESIGN -

(a) General. The Department will provide conceptual design plans that indicate Line, Grade and Typical Sections.

All computations must be computed and checked by Lead Design Engineer staff and initialed as such. Format all design computations on 215.9 mm x 279.4 mm (8½ inch x 11 inch) sheets. All computations must be neat and legible.

(b) Additional Designer Qualifications. None

(c) Information/Data Made Available to the Contractor by the Department

- Conceptual Roadway Plan
- Existing Survey Data.Survey for Conceptual Design represents a compilation of PASDA LIDAR and surveyed pavement cross sections.Submit a request to the District Executive agreeing to the terms and conditions for the release of electronic files.
- Mapping from photogrammetry will be made available to the successful bidder.

- MicroStation CADD files and will be made available to the successful bidder.Submit a request to the District Executive agreeing to the terms and conditions for the release of electronic files.
- The Department has obtained environmental clearance for this project. The environmental clearance level obtained is a CE 1b. The Lead Design Engineer must submit a written response for approval to the District Representative describing how the design will comply with the approved CE 1b. Refer to the Special Provision titled ENVIRONMENTAL COMMITMENTS AND MITIGATION TRACKING SYSTEM (ECMTS) REPORT.

(d) Design Specifications. Design the roadway construction plan in accordance with the Special Provision titled SPECIAL BIDDING – DESIGN-BUILD, Section VIII – General Design Requirements, Design Specifications; and if applicable : Corrosion Resistant Gabions, Reclaimed Portland Cement Concrete (RPCC) aggregate for miscellaneous drainage, and Corrosion Resistant Gabions, Reclaimed Portland Cement Concrete (RPCC) aggregate for rock lining, Class R Modified.

(e) Design Requirements

1. Geometry. Maintain the horizontal and vertical alignments, and superelevation rates provided on the conceptual drawings. No changes are to be made to the geometry without approval of the Department. Changes to the vertical alignment must be established to meet the grade of existing mainline structures, project termini points, and the ramps of the SR 0831 interchange.

Develop and provide all pertinent survey information required for the design and construction of the project. Specify type of Construction Surveying required, and include with the design submission for review and approval.

2. Pavement Design. The pavement design will consist of either 14" of Plain Cement Concrete Pavement on 4" Treated Asphalt or Cement Treated Permeable Base Course on 4" Subbase (No. 2A) using Concrete Shoulder, Type 2 (12’ width) for Item 9000-6001; or 1 1/2" Superpave Asphalt Mixture Design, HMA Wearing Course, R.P.S., PG 76-22, >/=30 Million ESALS, 9.5 mm Mix, SRL-E on 2 1/2" Superpave Asphalt Mixture Design, HMA Binder Course, PG 76-22, >/=30 Million ESALS, 19.0 mm Mix on 14" Superpave Asphalt Mixture Design, HMA Base Course, PG 64-22, >/=30 Million ESALS, 37.5 mm Mix on 8" Subbase (No. 2A), using Paved Shoulder, Type 1-SP ~~(12’ width)~~ for Item 9000-6002, as indicated on the Conceptual Drawings.Construction of ~~an 18" depth of undercut and~~ a 24" Rock Cap that incorporates undercut and Selected Borrow Excavation, 206 Rock backfill is required with either pavement design.

Provide approach slabs as indicated on the structure plans.

3. Typical Sections. Develop typical sections in accordance with Publication 14M Design Manual Part 3, Chapter 2, Section 2.3.J. Develop these typical sections based on the sections provided in the conceptual plans. Do not reduce lane and shoulder widths.

4. Drainage. Design drainage in accordance with Publication 13M, Design Manual Part 2, Chapter 10; Publication 584 Drainage Manual; and permit requirements. Design new drainage features indicated on the Conceptual Plan. Review the existing drainage system and design improvements to conform to Publication 584 and permit requirements.

Conceptual plan based on the following:

Replacement of cross pipes whose depth is less than 10' and whose proposed, extended length does not impact streams and wetland areas. Reeplacement of parallel drainage systems, including inlets. Ditch and pipe cleaning is required for all existing facilities not being replaced.The condition of all existing pipes ~~36-inch or less in diameter~~ that are to remain should be documented through field notes and video recordings, ~~and findings presented to the Department for review~~. Submit to the Department the field notes and videos within two (2) months of Notice to Proceed. At that time the Department will determine the need for additional scope and compensation.

5. Guide Rail, Cable Barrier, and Concrete Barrier. Design guide rail, end treatments, and guide rail to barrier connections, including determining length of need and guide rail warrants to meet the current (at time of advertisement) Department criteria.

For "Long Post Guide Rail" (2440 mm length (8 feet)) details and requirements see Publication 72M Roadway Construction Standard RC-50M. Install the "Long Post Guide Rail" when the minimum clearance from the rear face of the guide rail post to the fill slope break point cannot be maintained.

Indicate on the Final Roadway Drawings the locations of existing guide rail to be removed.

Install Long Post Guide Rail as indicated on the typical sections.

Connect guide rail to new parapets at the existing bridges.Connect to existing guide rail at Station 230+50 Left, and at Station 547 +90 Left and Right.

6. Utilities. Provide for the safety and protection of all utility facilities within the project limits. Refer to the Conceptual Plan.

7. Environmental. Comply with the approved environmental document. Refer to the Special Provision titled ENVIRONMENTAL COMMITMENTS AND MITIGATION TRACKING SYSTEM (ECMTS) REPORTS.

8. Soil Erosion and Sediment Pollution Control Plan / National Pollutant Discharge Elimination System (NPDES) Approval. Refer to the Special Provision titled PERMITS FOR DESIGN-BUILD PROJECTS.

9. Maintenance of Permanent Erosion and Sediment Pollution Control Devices. Upon final acceptance of the project, the Department will maintain the permanent Erosion and Sediment Pollution Control.

10. Geotechnical Design Requirements.

10.a. Geotechnical Investigation. Develop and execute a subsurface investigation program in accordance with Publication 15M, Design Manual Part 4 (DM 4), Chapter 6, Publication 293M, Publication 281, and the approved Environmental Document.

- Provide a Problem Statement and Draft Exploration Plan and a Schedule of Borings for Final Design of ~~both the structure and earthwork for roadway elements of the project~~ widened embankments and slopes, and temporary crossover subgrade stabilization. Prepare the Schedule of Borings in accordance with Publication 222M, Attachment 1. (The contractor will perform a minimum of two sets of boring per fill section and spacing of sets of boring not to exceed ~~1000~~ 500 FT. for design of widened embankment. One (1) boring should be taken at the top of slope and should be drilled to a minimum depth of 10 FT below final grade elevation in front of the widened embankment slope or to dense or hard material whichever is deeper, and the second boring should be taken at the toe of slope and should be drilled to a minimum depth of 10 FT below final grade elevation in front of the widened embankment slope or to dense or hard material, whichever is deeper. If the proposed fill slope line intersects the existing fill slope line above the bottom of the existing toe of slope, the toe of slope boring may be eliminated. The Contractor will perform a minimum of two borings per temporary crossover in existing unpaved areas to determine stability and verify that existing subgrade will provide a minimum CBR value of 5.0.)

Obtain approval of any investigative equipment for collection of subsurface data before mobilization to the site. Drill a sufficient number of borings and perform geotechnical testing as necessary to provide the required designs.

- Obtain drilling services from a subcontractor ~~currently entered on ECMS as~~ pre-qualified as noted in ~~for Work Class Code C6. Advance the borings in accordance with the methods provided in~~ Publication 222M.
- Provide full time drilling inspection services with personnel qualified as Level 1 and Level 2 Drilling Inspectors as defined in Publication 222M. Provide a minimum of one full time Level 2 Drilling Inspector during all subsurface exploration activities. Provide a minimum of one drilling inspector for each operating drilling machine.
- Log and classify materials in accordance with Publication 219M BC-795M and Publication 293M requirements. Prepare typed engineer's boring logs on forms provided in DM 4. Require the drilling Contractor to prepare independent boring logs.
- Store all soil and rock samples in core boxes constructed in accordance with Publication 222M. Deliver all soil samples and rock samples in core boxes to the respective District Engineering Office upon completion of subsurface exploration activities. Prepare Engineer's Field Boring Records, Structure Boring Tracings and Subsurface Profiles using LOGDRAFT 4.0 software. Prepare Subsurface Profiles in accordance with Publication 14M Design Manual Part 3, Chapter 5 requirements.
- Prepare Structure Boring Tracings in accordance with the requirements of Publication 15M Design Manual Part 4. Include foundation information for each substructure unit on the tracings.

10.b. Geotechnical Design.

- Submit a proposed geotechnical laboratory-testing program to the District Geotechnical Engineer for approval after completion of test drilling. Include type of test, boring and sample numbers to be tested, purpose for the test, and appropriate test method designation.
- An approved pavement design was prepared in preliminary engineering.
- Perform geotechnical ~~designs~~ analyses and develop geotechnical details. The details listed in this Section II(e)10b are the minimum requirements. Develop more stringent requirements as may be required to provide for stable embankments and subgrade, including greater widths and depths of excavation/benching, as well as increased thicknesses of Section 206 Rock for strength and drainage.
- Utilize the following embankment material requirements:
    - 2:1 or flatter slopes – Embankment (exclusive of Section 206 rock in bench bottom and elsewhere required for strength and drainage).
    - 2:1 to 1.5:1 slope – Selected Borrow Excavation, 206 Rock or Geosynthetic Reinforced Soil (GRS).
    - 1.5:1 to 1:1 slope – Geosynthetic Reinforced Soil (GRS).

- Perform slope stability analyses for embankments and analyses of global stability including the structure using ~~PASTABLE~~ GSTABL7. Assume the following soil parameters/limitations for stability analyses:
  - Existing Fill:Phi = 30; Unit Wt. = 120 pcf; Sat. Unit Wt. = 125 pcf; C = 50 psf
  - Alluvium: Phi = 32; Unit Wt. = 120 pcf; Sat. Unit Wt. = 125 pcf; C = 0 psf
  - Weathered Bedrock: ~~Unlikely to be encountered~~ To be determined by Contractor
  - Bedrock:~~Unlikely to be encountered~~ To be determined by Contractor
  - Common Embankment:Phi = 32; Unit Wt. = 120 pcf; Sat. Unit Wt. = 125 pcf; C = ~~0~~ 50 psf
  - Selected Borrow Excavation, Section 206 Rock:Phi = 45; Unit Wt. = ~~130~~ 140 pcf; Sat. Unit Wt. = ~~135~~ 145 pcf; C = 0 psf
  - R-3 & R-4 Rock: Phi = 45; Unit Wt. = ~~130~~ 140 pcf; Sat. Unit Wt. = ~~135~~ 145 pcf; C = 0 psf
- The Contractor shall verify the soil and rock parameters/limitations provided above based on the results from the new test borings and laboratory testing prior to their use in the geotechnical analyses.

Provide a minimum factor of safety of 1.5 for all embankment designs.

- Submit all typical details to the District Geotechnical Engineer for review and approval.
- Stabilize the subgrade to a non-movement condition for the entire project length, as per Section 210, and the special provision “Special Rolling”, the special provision “Rock Cap for Pavement Subgrade Undercut”, and Type I Subgrade Undercut Detail.
- Backfill all pipe trenches under pavement with Section 703 No. 2A coarse aggregate up to subgrade level.
- Provide the roadway recommendations in the Geotechnical Report for Final Design.
- Include all as constructed geotechnical treatments in the ”As-Built” roadway cross-sections.
- Design and construct Geosynthetic Reinforced Soil Slope per special provision “Design Requirements for Geosynthetic Reinforced Soil (GRS) Slope”.

(f) Submittals

1. Pre-Final Plan Submission. Submit a Pre-Final Plan, (e.g. 60% to 70% plans) with the Lead Design Engineer's Seal in accordance with Publication 14M, Design Manual Part 3 (DM 3), Section 2.1.K and Figure 2.1, for review and approval by the Department prior to plan completion. Include the following minimum information:

a. Existing Topography

b. Roadway Plans (including Traffic Control Plan)

c. Survey References

d. Typical Sections

e. Proposed Guide Rail

f. Proposed Utility Relocation

g. Proposed limits of Roadway Construction

h. Proposed pavement geometry (superelevation rates, runout lengths, spot elevation details

i. Proposed Drainage Items and location

j. Erosion & Sediment Pollution Control Plan (approved by DEP or County Conservation District)

k. Cross Sections (as required)

l. Surveying and Mapping deliverables in accordance with Publication 122M (as applicable)

Also submit the Geotechnical Report for Final Design.

The Lead Design Engineer will be responsible to address all plan review comments. The District will conduct a final review to ensure that all comments have been addressed. Include the plan review dates in the CPM schedule for the project.

2. Signing and Pavement Markings. Submit a Permanent Pavement Marking, and Signing Plan (in accordance with applicable publications and the Pavement Marking, and Delineation sheets) for review and approval by the District Traffic Unit.

Apply pavement markings on SR 0080 with a 6-inch wide center except at SR 8010 interchange, apply with an 8-inch wide center.

Apply Type II waterborne paint as specified in Section 962.

Place pavement markers as determined necessary during design.

Place approved delineator devices at all drainage structures.

Replace all signs disrupted by construction activities with new signs. Show these signs on the Permanent Pavement Marking and Signing Plan. Include applicable sign nomenclatures, sizes, mounting types, etc., on the plan. Provide sign fabrication plans as applicable.

3. Final Roadway Drawings. After all applicable reviews and all comments have been addressed to the satisfaction of the District Executive, submit Final Roadway Drawings prepared in accordance with the procedures discussed in DM 3, Section 1.5. Follow the naming convention for standard ANSI D size, 863.6 mm x 558.8 mm (34 inches x 22 inches) plan sheets, which has been established for the Department's Electronic Document Management System (EDMS), and is outlined in DM 3, Appendix A. Provide Final Roadway Drawings include but not limited:

a. Title Sheet

b. Index Sheet

c. Typical Section Sheet

d. Summary of Quantities Sheets

e. Tabulation of Quantities Sheets

f. Plan Sheets

g. Profile Sheets

h. Final Structure Plans (in accordance with DM 4 and the Design Special Provisions in this Contract)

i. Cross Sections (as required)

j. Permanent Pavement Markings and Signing (as described above)

k. Soil Profile Plans

l. Erosion and Sediment Pollution Control Plan

m. Traffic Control Plan

The above requirements must be in accordance with the appropriate Sections of DM 3 and DM 4. Show a breakdown of quantities by station/location on the Tabulation of Quantities sheet for the Final Construction Roadway Drawings. Follow the format in DM 3 Section 2.5 and 15.2. The Final Roadway Construction Plans may not be the same as the Final "As-Built" Roadway Plans.

Provide a complete set of computations, including any submitted previously, for the design and additional calculations as needed by the Department to evaluate any details throughout the life of the Contract. Submit an electronic copy if requested by the Department.

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

Upon completion of Quality Assurance Review, or Owner’s Perspective Review, as applicable, and receipt of all drawings stamped “Released for Construction” for the project, provide the Department with one drafting film copy of the Title Sheet for signature by the Department.

The signed Final Roadway Drawings and computations become the Final Construction Plans for the project.

4. “As-Built” Plans

Provide "As-Built" roadway plans as per Design Manual Part 1. Comply with Publication 10, Design Manual, Part 1 and Publication 10C, Design Manual Part 1C criteria. Final "As-Built" Roadway Drawings include all Contract Drawings including Roadway Plans, Quantity Tabulations, Erosion & Sediment Pollution Control Plans, Traffic Control Plans and Structure Plans. Conform the "As-Built" drawings to the procedures as outlined in Section 5.7 of Design Manual Part 1C and prepare per plan presentation procedures as stated in DM 3 and DM 4.

Take Final "As-Built" Cross Sections at critical locations and at least 20 meter (50 foot) intervals on the Main Line. Template Cross Sections to reflect "As-Built" details and prepare in accordance with DM 3 Section 2.7.

All "As- Built" plans are the sole responsibility of the Contractor and must be submitted to the District within 3 months of final inspection acceptance as defined in Section 110.08(a).

(g) Submittal Review, Approval, and Distribution.

Make all submissions in accordance with the Special Provision titled SPECIAL BIDDING – DESIGN-BUILD.

III. MEASUREMENT AND PAYMENT - Lump Sum

Partial payment will be made for the design activity based on the approved Schedule of Values in accordance with Section IX the Special Provision titled SPECIAL BIDDING – DESIGN-BUILD, utilizing the following components:

- Complete Geotechnical Investigation
- Pre-Final Plan Approval
- Signing and Pavement Marking Plan Approval
- Erosion and Sediment Pollution Control Plan approval
- Traffic Control Plan approval
- Final Roadway Drawings Approval
- As-Built Drawings

I29901A - c9000-6011 CONSTRUCT ROADWAY

Addendum:

Associated Item(s): 9000-6011

Header:
ITEM 9000-6011 - CONSTRUCT ROADWAY

Provision Body:

I. DESCRIPTION - This work is the construction of the roadway and associated work of the type bid in the corresponding specification entitled "ITEM 9000 - 6001 - Design Roadway, Concrete/ ITEM 9000-6002 Design Roadway, Bituminous" and in accordance with the approved Final Roadway Drawings.

II. MATERIAL - As indicated and as specified for each respective item included in the roadway and associated work.

III. CONSTRUCTION - In accordance with the Publication 408, approved plans and permits, Publication 72M, the Special Provisions of the Contract, and additional requirements specified herein.

Work for the entire project area also includes seeding and mulching as required by the installation, maintaining, and removal of the erosion and sediment pollution control measures required by the Jefferson County Conservation District and the approved plan.

Do not start work until plans stamped “Released for Construction” are transmitted by a letter indicating which work can proceed. Construction may start on partial submissions stamped “Released for Construction” are transmitted by a letter indicating which work can proceed.

Do not start construction work until Erosion & Sediment Pollution Control plans are approved, and required permits are obtained.

Incorporate requirements for reclaimed concrete.Reclaimed concrete cannot be used in toe or bonding benches.

Do not start construction work until utility clearance is obtained, construction may begin within sections or stages where utility clearance has been obtained and approved for construction.

Do not start incorporated utility work until an executed agreement or agreement signed by the utility is received by the Central Office Utility Unit.

Be responsible for the cost and delay of any additional utility relocation that results from changes in the Lead Design Engineer's plans or construction sequences made subsequent to (1) acceptance of the utility's relocation plans and (2) where the utility has physically moved its facilities based on those relocation plans. Additional contract time will not be considered for additional utility relocation work or any additional work associated with an alternate construction method.

Existing guide rail removed during construction will become the property of the Contractor unless specified otherwise.

IV. MEASUREMENT AND PAYMENT - Lump Sum

Partial payment will be made for all work indicated on the Final Roadway Drawings based on the approved Schedule of Values in accordance with Section IX of the Special Provision titled SPECIAL BIDDING – DESIGN-BUILD.

00 - c9001-0001 CLASS AA CEMENT CONCRETE, MODIFIED

Addendum:

Associated Item(s): 9001-0001

Header:
ITEM 9001-0001 - CLASS AA CEMENT CONCRETE, MODIFIED

Provision Body:
In accordance with Sections 704 and 1001, except as follows:

DESCRIPTION - This work is for the bridge barriers.

MATERIAL -

• Class AA Cement Concrete, Section 704, except use AASHTO No. 8 Coarse Aggregate

MEASUREMENT AND PAYMENT – Cubic Yard

00 - c9008-0001 - PREFORMED NEOPRENE COMPRESSION JOINT SEAL, 3/4" MOVEMENT

Addendum:

Associated Item(s): 9008-0001

Header:
ITEM 9008-0001 - PREFORMED NEOPRENE COMPRESSION JOINT SEAL, 3/4" MOVEMENT

Provision Body:
In accordance with Section 1008 and as follows:

DESCRIPTION - Revise Section 1008.1 to read:

This work is the installation of preformed neoprene compression joint seals for the movement classification indicated.

MATERIAL – In accordance with Section 1008.2.

CONSTRUCTION - In accordance with Section 1008.3 and as follows:

Coordinate placement of joint material with traffic control plans.

MEASUREMENT AND PAYMENT – Linear Foot.

00 - c9019-0152 PROTECTIVE COATING FOR REINFORCED CONCRETE SURFACES

Addendum:

Associated Item(s): 9019-0152

Header:
ITEM 9019-0152 - PROTECTIVE COATING FOR REINFORCED CONCRETE SURFACES

Provision Body:

DESCRIPTION - This work is applying a protective coating of the type specified and as directed.

MATERIAL - Section 1019.2 with revisions and additions as follows:

Section 1019.2(c) revise title as follows:

(c) Penetrating Sealers (for Reinforced Concrete Surfaces Not Exposed to Vehicular Traffic).

(d) Penetrating Sealers (for Reinforced Concrete Surfaces Exposed to Vehicular Traffic). Furnish a penetrating sealer from a manufacturer listed in Bulletin 15 as follows:

1. Silicates in Water. Certify as specified in Section 106.03(b)3. Meet the following requirements:

Property	Test Method	Requirements
Freeze/ Thaw Resistance	ASTM C 666, Procedure A, modified as follows:Use Class AA cement concrete for the test specimens. Test 4 specimens; 2 with sealer, 2 without sealer. Apply penetrating sealer to all sides of specimens as per manufacturer's recommendations. Repeat using Class AA cement concrete without air entrainment.	No visible cracking, powdering, hairline cracking or spalling.
Chlorine Ion Penetration	Chloride Ion Penetration AASHTO T 259, Section 3.6, modified as follows:Use Class AA cement concrete with water/cement ration of 0.55 for the test specimens. Apply penetrating sealer to top surface of specimens as per manufacturer's recommendations. Sandblast treated surface, removing approximately 2 mm (1/16-inch) before ponding with NaCl.	Maximum Chloride Content Absorbed: 1.6 mm (0.0625- inch) to13 mm (0.5- inch) -0.31% >13 mm (0.5-inch) to 25 mm (1.0-inch) -0.06%

Skid Resistance	ASTM E 274 and ASTM E 524 (Smooth Tire)	Acceptable to MTD
Concrete Discolor- ation	Visual	Provide a penetrating sealer that does not discolor cement concrete

CONSTRUCTION - Section 1019.3 with revisions and additions as follows:

(c) Penetrating Sealers (for Reinforced Concrete Surfaces Not Exposed to Vehicular Traffic).

1. Surface Preparation. Thoroughly dry and clean the surfaces of any dirt, debris, oil, grease and foreign matter which would prevent protective coating penetration, adhesion, or drying.

2. Application. Apply penetrating sealer, which does not discolor the concrete, to areas indicated in accordance with the manufacturer's specifications.

(d) Penetrating Sealers (for Reinforced Concrete Surfaces Exposed to Vehicular Traffic).

1. Storage. Keep the product under cover and at temperatures above freezing.

2. Surface Preparation. Thoroughly clean the surfaces of any dirt, debris, oil, grease, and foreign matter, which would prevent penetration, adhesion, or drying. For bridge decks, seal cracks greater than 2 mm (1/16-inch) as specified in Section 1091, as indicated, or as directed by theEngineer. For pavements and other areas, seal cracks greater than 2 mm (1/16-inch) as specified in Section 590. Repair surfaces as indicated or directed by the Engineer. Do not apply penetrating sealer until cement concrete is cured as specified in Section 1019.3(a)1.b, and crack sealers have completely cured.

3. Application. Follow manufacturer's recommendations for air and/ or surface temperatures and, if applicable, other climatic conditions, to properly apply the penetrating sealer. Each day before and during application, mix, stir, or otherwise prepare the penetrating sealer, if required, in accordance with the manufacturer's recommendations. Use rollers, brushes, sprayers, or other applicators, in accordance with the manufacturer's recommendations, to apply the penetrating sealer. Apply the penetrating sealer in two or more coats and at application rates as recommended by the manufacturer. Cure each coat in accordance with the manufacturer's recommendations. If for any reason and in the opinion of the Engineer, the penetrating sealer does not penetrate the surface, remove the penetrating sealer by sand blasting and reapply at no cost to the Department.

On new reinforced concrete surfaces, do not apply pavement markings until 7 days after the application of penetrating sealer.

On existing reinforced concrete surfaces, remove pavement markings, apply penetrating sealer, and cure the penetrating sealer in accordance with the manufacturer's recommendations before reapplication of pavement markings.

MEASUREMENT AND PAYMENT – Square Yards - Section 1019.4 with additions as follows:

Includes the cost of additional sand or water blasting, if required, for surface preparation.

00 - c9043-0101 EPOXY BASED SURFACE TREATMENT FOR BRIDGE DECKS

Addendum:

Associated Item(s): 9043-0101

Header:

ITEM 9043-0101 - EPOXY-BASED SURFACE TREATMENT FOR BRIDGE DECKS

Provision Body:

DESCRIPTION - This work is preparing deck surfaces, furnishing and construction of a multiple layer wearing surface of epoxy-urethane resin and aggregate on in-service bridge decks.

The indicated or specified depth of the wearing surface is 3/8" minimum.

MATERIAL -

(a) Epoxy-Urethane Resin. A two-component, (base and hardener), 100% solids, thermosetting, moisture insensitive, flexible, high elongation epoxy-urethane resin, from a Manufacturer listed in Bulletin 15, and meeting the following physical requirements at 24 +/- 1 C when the base and hardener are combined:

Viscosity (ASTM D 2393-86, Model RVT Brookfield, Spindle No. 3 at 20 rpm)	35-70 poises
Gel Time (ASTM C 881, para. 11.2 modified, 70 ml sample)	15-45 minutes
Tensile Strength (neat), 7-day (ASTM D 638)(2,500-5,000 psi)	17.2 - 34.4 MPa
Tensile Elongation (neat), 7-day (ASTM D 638)	30-70%
Absorption (neat), 24-hour (ASTM D 570)	1%, Maximum
Compressive Strength(mixed with aggregate), 3 hrs.(1,000-psi, minimum) (ASTM C 109, 50 mm square mortar cube with plastic inserts)	6.9 MPa
Compressive Strength (mixed with aggregate), 24 hrs.(5,000 psi, minimum) (ASTM C 109, 50 mm square mortar cube with plastic inserts)	34.4 MPa
Permeability to chloride ion, 28-days (AASHTO T277)	100 coulombs, Maximum
Thermal Compatibility (Mixed with aggregate) (ASTM C 884)	No delamination of overlay or cracks in the concrete
Infrared spectrum (AASHTO T237, para. 4 & 5)	Established for each component for each Manufacturer

(b) Certification.

Certify each lot of epoxy-urethane resin as specified in Section 106.03(b)3.

Independent quality assurance sampling and testing may be performed by the Bureau of Construction and Materials and will be used for the purpose of making independent checks on the certification acceptance procedure as specified in Section 106.03(b)1.

(c) Fine Aggregate. Provide aggregate from an approved source of Type A fine aggregate listed in Bulletin 14 and/or approved by the Bureau of Construction and Materials, and also approved by the epoxy-based concrete overlay Manufacturer. This aggregate consists of angular silica s an d, basalt, or other highly siliceous metamorphic or igneous rock having less than 0.2 percent moisture, and free of dirt, clay asphalt and other foreign or organic materials. Provide an aggregate with a minimum Mohs' scale hardness of 7, and meeting the following gradation:

Sieve Size	Percent Passing by Weight
4.75 mm (#4)	100
2.36 mm (#8)	30-75
1.18 mm (#16)	0-5
600 m (#30)	0-1

(d) Manufacturer Technical Representative. Have a trained, Manufacturer Technical Representative present during every phase of the application, unless a factory trained, licensed installer, as indicated by written approval from the Manufacturer, applies the epoxy-urethane resin concrete overlay. Manufacturer Technical Representative will provide recommendations to the Engineer on approval or disapproval of deck surface preparation, equipment, mixing of components, type and method of application, and finish.

CONSTRUCTION -

(a) Delivery and Storage. Order, stock and store the material necessary to perform the entire overlay application prior to any field preparation. Deliver and store all epoxy-urethane resin materials in containers, with the manufacturer's name, date of manufacture, batch number, trade name, quantity and mixing ratio printed on the label.

Store and protect the materials from the elements to insure their quality and fitness for the work. Keep the storage space clean and dry, and do not allow the temperature of the storage space to fall below 16 C (60 F) or exceed 38 C (100 F). Avoid contact with flame.

Immediately remove from the work site any material which is rejected because of failure to meet the required tests or that has been damaged.

(b) Equipment. Have all equipment for the deck preparation, mixing and placement of the epoxy-urethane resin concrete overlay approved by the Engineer prior to the start of any work.

1. Surface Preparation Equipment. Provide shotblasting equipment capable of removing partially loosened chips of concrete, cleaning the bridge deck surface, roughening the bridge deck surface, and removing rust and/or corrosion from steel expansion joint assemblies or steel-grid decking. Do not use scarifiers, milling machines, or sandblasting in lieu of shotblasting, unless otherwise approved by the Engineer.
   Provide a self-propelled vacuum capable of picking up dust and other loose material from the shotblasting operation.
   Provide air compressors equipped with an oil/water separator capable of drying all moisture from the bridge deck.
2. Epoxy-Urethane Resin Application Equipment. Of the following types:

   2.a Mechanical Application Equipment. Provide mechanical metering, mixing, and distribution equipment that accurately meters and blends the base and hardening components, and uniformly applies the blended epoxy-urethane resin resin at the specified rate to the bridge deck in order to cover 100% of the work area. Provide equipment owned by the epoxy-urethane resin overlay Manufacturer.

   Provide a fine aggregate spreader that uniformly applies the aggregate at the specified rate in order to cover 100% of the expoxy-based resin material.

   Provide a self-propelled vacuum truck.

Provide lighting for work performed at night.

2.b Hand Application is not permitted.

(c) Surface Preparation. Remove any unsound concrete and repair the areas in accordance with Section 1040, as directed by the Engineer. Do not use patching material containing magnesium phosphate.

Do not apply the epoxy-urethane resin concrete overlay on hydraulic cement concrete that is less than 28 days of age. Not more than 24 hours before overlay placement begins, clean the surface of the bridge deck by shotblasting and/or other approved methods to expose the coarse aggregate, and to remove any asphaltic material, oils, dirt, rubber, curing compounds, paint carbonation, laitance, weak surface mortar, and other detrimental materials that would interfere with the bond or cure of the overlay. After shotblasting, vacuum the bridge deck surface to remove all dust and other loose material. Brooms are not to be a substitute for the vacuum. Protect the existing expansion dams in a manner acceptable to the engineer during surface preparation.

Use compressed air that is free of oil and water to remove all moisture from the surface of the bridge deck before application of the overlay. Maintain a completely dry surface during the application of the epoxy-urethane resin concrete overlay.

Protect the deck against damage, contamination and traffic until the overlay operation is completed. Satisfactorily repair damaged areas prior to placing succeeding construction.

(d) Placing Epoxy-urethane resin Concrete Overlay. Satisfy the Engineer that all necessary equipment, tools, materials, and manpower are on hand at the site of work, and that all workers are familiar with the blending and application of the overlay.

If required by the Engineer, place the overlay on a small test strip not to exceed 9 square meters (100 square feet) off the project site. Use the test strip for equipment calibration and to establish procedures, and techniques for the actual overlay placement on the bridge deck.

Cover exposed areas not to be overlaid with the epoxy-urethane resin concrete overlay, such as curbs, sidewalks, railings, parapets, or inlets with suitable coverings.

Premark the bridge deck surface as a guide to obtain the proper application rate when applying the mixed epoxy-urethane resin by hand.

Combine and mix the base and hardener components as specified by the Manufacturer. Immediately after mixing, apply the mixed epoxy-urethane resin by a distributor, squeegee, or paint roller, or combinations thereof. Apply the material smoothly, uniformly and continuously over 100 percent of the deck surface. do not allow the mixed epoxy-urethane resin to puddle or accumulate in holes or depressions in the deck.

Apply the epoxy-urethane resin concrete overlay using a minimum of two (2) separate courses at the following application rates:

Course	**Mixed Epoxy-Based Resin Application Rate** Liters/Sq. Meter (Gal./100 S.F.)	**Aggregate Application Rate** Liters/Sq. Meter (Lbs./S.Y.)
1	1.3 (3.3) minimum	5.4+
2+	2.7 (6.7) minimum	7.6+

Apply the aggregate at the specified rate, in a uniform manner, such that the aggregate just covers the epoxy base resin. Apply the aggregate within five minutes after application of the mixed epoxy-urethane resin or as recommended by the Manufacturer.

Repair areas of individual courses identified by the engineer that did not receive a uniform and sufficient application of aggregate before the epoxy urethane resin is cured. Sandblast areas identified as having insufficient aggregate. Clean sandblasted areas of all loose material. Apply the epoxy-urethane resin and aggregate to the clean, sandblasted areas in accordance with these specifications.

Remove the excess aggregate from each course after the course has completely cured. Use brooms, vacuums, compressed air free from oil and water, or other approved methods to remove the excess aggregate. Do not remove excess aggregate until vacuuming or brooming can be performed without tearing or damaging the surface.

Protect the existing expansion dams with suitable covers during application of the multilayer epoxy based concrete overlay.

(e) Limitation of Operations. Do not apply the epoxy-urethane resin concrete overlay at surface, air, or resin and aggregate component temperatures lower that 16 C (60 F). Do not apply the epoxy-urethane resin concrete overlay if the temperature is expected to drop below 13 C (55 F) within 8 hours after application, or the gel time of the mixed epoxy-urethane resin experienced becomes less than 10 minutes.

Do not allow vehicular traffic on the first course. Do not allow vehicular traffic on any course during the cure period.

Cure each course for the minimum cure period as follows unless longer periods or alternate methods are recommended by the Manufacturer.

Alternate Methods, if recommended by the manufacturer, are permitted, such as: Perform a "hand test" as follows: Brush excess aggregate from the work area using hands. Attempt to move bonded aggregate by brushing the work area by hand or a hand broom. If no aggregate moves, the work area is considered cured. Perform this test at locations directed by the engineer.

The final decision as to the adequate length of cure is the responsibility of the manufacturer's representative. In no case is the cure time to be less than one hour.

Maintain a log of cure times and temperatures.

Average temperature of deck surface, resin, and aggregate components in C

Course	16-18 (60-64)	19-21 (65-69)	22-23 (70-74)	24-26 (75-79)	27-29 (80-84)	30+ 85+
1	4 hours	3 hours	2.5 hours	2 hours	1.5 hours	1 hour
2+	6.5 hours	5 hours	4 hours	3 hours	3 hours	3 hours

(f) Defective Work. In accordance with Section 105.12 and as follows:

If temperatures fall below 16 C (60 F), the Engineer will require a longer curing period. If, at any time during the curing period, the temperature falls below 10 C (50 F), the work may be considered unsatisfactory and rejected.

Protect freshly applied epoxy-urethane resin concrete overlays from sudden or unexpected rain Contractor operations. Stop all application operations when it starts to rain. The Engineer may order removal and replacement of any material damaged by rainfall or Contractor operations that cannot be satisfactorily repaired.

Remove the replace rejected or damaged epoxy-urethane resin concrete overlay in rectangular sections by milling or saw cutting to the top of the concrete deck surface. Remove and replace at no additional cost to the Department.

(g) Application of Live Loads. Do not allow vehicular equipment or the traveling public on the epoxy-urethane resin concrete overlay before the overlay is cured.

MEASUREMENT AND PAYMENT - Square Meter (Square Yard).

Payment includes surface preparation, furnishing and applying all courses and saw cutting the joints.

Repairs to the bridge deck will be paid separately for type of concrete bridge deck repair indicated.

00 - c9205-0200 SELECTED BORROW EXCAVATION, 206 ROCK

Addendum: 1

Associated Item(s): 9205-0200

Header:
ITEM 9205-0200 - SELECTED BORROW EXCAVATION, 206 ROCK

Provision Body:

In accordance with Section 206 and as follows:

Selected Borrow Excavation, 206 Rock (max. stone dimension of 12 inches) must meet section 206.2 (a) l.d. No more than 20% by weight may pass the No. 4 sieve. Exclude all rock types except sandstone or limestone. Rock must be able to be readily placed in an 12-inch maximum lift thickness. For sandstone, individual grains must be visibly evident without the aid of magnification, and fines must be limited to rock fines. The 206 Rock must offer resistance to crushing. Reclaimed concrete may not be used as widened embankment fill. 206 Rock must be approved by the District Geotechnical Engineer. Maintain moisture content of the material within plus or minus 2% of the optimum moisture content at the time of compaction.

~~I. DESCRIPTION: This work is the placement of a minimum 18-inch thick (1.5 foot) layer of rock at the top of all roadway subgrade areas within the travel and passing lanes of the westbound lanes of I-80.Rock material will be obtained from available quantities within the excavation of the project including rubblization and reuse of existing concrete pavement.~~

~~I MATERIALSI:~~

~~a.Selected Borrow Excavation, 206 Rock (max. stone dimension of 12 inches) must meet section 206.2 (a) l.d.Exclude all rock types except sandstone or limestone. Rock must be able to be readily placed in an 18-inch maximum lift thickness. For sandstone, individual grains must be visibly evident without the aid of magnification, and fines must be limited. The 206 Rock must offer resistance to crushing. Rubblized concrete may be used provided the length is no more than twice the width. 206 Rock must be approved by the District Geotechnical Engineer.~~

~~b.Class 4, Type A Geotextile meeting Section 735 requirements~~

~~c.Class 4, Type B Geotextile meeting Section 735 requirements~~

~~d.Subbase (NO. 2A)~~

~~II CONSTRUCTION:~~

~~a.Excavate and remove the existing pavement structure to the bottom of subbase elevation. Excavate and remove the existing subgrade to a depth of eighteen (18) inches below proposed pavement subbase within the travel and passing lanes. Prior to placement of rock, place a Class 4 Type B geotextile on the top of existing subgrade. Overlap and secure in accordance to Section 212.If the entire fill is being constructed of rock meeting Section 206.s (a) l.d, this layer of geotextile is not required.The Project Engineer must approve the elimination of this layer of geotextile.~~

~~b.Place the rock layer in accordance with Section 206 and fine grade the rock cap to within 1.5 inches of final subgrade elevations using material meeting Section 703.2 requirement for Subbase (NO. 2A) to choke off the voids in the rock material until filled. Compact in accordance with Section 206.3 (b) 1 and revise the fifth bullet to read: Compact the rock material using an initial compaction based on non- movement of the material under compaction with a vibratory padfoot soil compactor with blade and equivalent to a Caterpillar Model 825F and with final compaction and sealing with a smooth drum vibratory roller with the same centrifugal force capabilities as the Caterpillar Model 825F.~~

~~c.Prior to placement of the Subbase (NO. 2A) layer, place a Class 4 Type A geotextile on the top of the rock layer. Overlap and secure in accordance to Section 212.~~

~~III MEASUREMENT AND PAYMENT:~~

a. ~~Geotextile, Class 4, Type A-Square Yards~~
b. ~~Geotextile, Class 4, Type B-Square Yards~~
c. ~~Class 1 Excavation-Cubic Yards~~
d. ~~Selected Borrow Excavation, 206 Rock-In accordance with Section 206 Embankment – Cubic Yards~~
e. ~~Subbase (NO. 2A) material is incidental to Selected Borrow Excavation, 206 Rock.~~

00 - c9591-0001 MILLING OF CEMENT CONCRETE PAVEMENT SURFACE

Addendum:

Associated Item(s):

Header:
ITEM 9591-0001 - MILLING OF CEMENT CONCRETE PAVEMENT SURFACE MODIFIED

Provision Body:
In accordance with Section 591 and as indicated:

Removal of adjacent bituminous overlay incidental.

00 - c9619-0470 RESET PERMANENT IMPACT ATTENUATING DEVICE

Addendum:

Associated Item(s): 9619-0470

Header:
ITEM 9619-0470 - RESET PERMANENT IMPACT ATTENUATING DEVICE

Provision Body:
As directed.

All material required for proper installation is incidental.

00 - c9620-0001 – REPAIR GUIDE RAIL

Addendum:

Associated Item(s): 9620-0001

Header:
ITEM 9620-0001 – REPAIR GUIDE RAIL

Provision Body:

DESCRIPTION – In accordance with Section 620.1.This work is the repair and/or resetting of existing guide rail or construction of new guide rail on I-80 Eastbound resulting from damages incurred from vehicular impacts.

MATERIAL – In accordance with Section 620.2

CONSTRUCTION - Repair damaged guide rail between I-80 median crossovers within 72 hours of incident.

Use flaggers in accordance with Publication 213 to control traffic during the repair work.

MEASUREMENT AND PAYMENT - Dollar. The proposal will indicate a predetermined amount of money for repair of guide rail during construction. 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, the provisions of Section 110.02(d) are not applicable to this item.

Measure and pay for, under the Repair Guide Rail item as follows:

Force Account Work. Section 110.03(d)

I29902A - c9901-0001 DESIGN TRAFFIC CONTROL PLAN

Addendum: 1

Associated Item(s): 9901-0001

Header:
ITEM 9901-0001 - DESIGN TRAFFIC CONTROL PLAN

Provision Body:

I. DESCRIPTION - This work is the design and plan preparation for required maintenance and protection of traffic during construction for the I-80 Jefferson Concrete Westbound Project.

II. DESIGN –

(a) General. Provide design and drawings in the units of measurement shown on the Conceptual Roadway Plans.

Design Traffic Control Plan is to be in agreement with Design Roadway Plan (including also plans).

Include in the Traffic Control Plan (TCP) all the Maintenance and Protection of Traffic General Notes, Index Sheets, a legend showing all traffic control devices and symbols, a sequence of construction and construction narrative, and tabulation of traffic control devices included in 'Construct Maintenance and Protection of Traffic'.

(**b) Additional Designer Qualifications.**

Have the design completed and sealed by a Professional Engineer licensed in the Commonwealth of Pennsylvania.

(c) Design Specifications. Design a TCP in accordance with the Special Provision titled SPECIAL BIDDING – DESIGN-BUILD, Section VIII – General Design Requirements, Design Specifications.

Design a Traffic Control Plan (TCP) in accordance with the most current edition of all Department Standards, Specifications, and Regulations.These include, but are not limited to the following:

- The Special Provisions of the Contract
- Design Manual, Part 2, Highway Design, Publication 13M
- Design Manual, Part 3, Plans Presentation, Publication 14M
- Temporary Traffic Control Guidelines, Publication 213
- Official Traffic Control Devices, Publication 212
- Approved Construction Materials (Bulletin 15), Publication 35
- Traffic Engineering Manual, Publication 46
- Specifications, Publication 408/2011, Latest Edition
- Handbook of Approved Signs, Publication 236
- Traffic Control – Pavement Markings and Signing Standards, TC-8600 and TC-8700 Series, Publication 111M
- Civil and Structural Standards for Intelligent Transportation Systems, ITS-1000M Series, Publication 647M
- Manual on Uniform Traffic Control Devices (MUTCD), Federal Highway Administration

In the event that a clear order of predominance cannot be established or a difference in interpretation of the design cannot be resolved, the District Traffic Engineer will be the arbiter and his/her decision will be final.

(d) Design Requirements.

Maintenance of Traffic During Construction.

1. Develop an Incident Management Plan (IMP). Provide traffic management details and coordination (police, EMS, local officials, fire departments, etc.) procedures for dealing with an incident. Include in the IMP detours with supplemental signing that do not include the emergency colored detour signs for a total closure of SR 0080 eastbound and westbound if an incident occurs within the work zone.Submit the IMP and have it approved before starting work.

Provide a list of 24-hour emergency phone numbers (i.e. emergency services and organizations, Contractor's representatives, Department Representatives, County Maintenance Managers, etc.) and conceptual plan.Plan to include conceptual lane closures and/or conceptual detours relative to severity of the incident.

The Contractor is required to contact the District Assistant Construction Engineer immediately for all lane closures and major incidents so that information may be provided to motorists and other stakeholders via district variable message signs, highway advisory radios, and the statewide road closure reporting and traveler information systems.

The Contractor is required to submit an Emergency Response Plan (ERP) at the pre-construction conference.The ERP should include: contact individuals for incidents that occur during non-working hours, alternate contacts individuals, and maximum response times.

Following an incident, the Contractor will conduct an After Action Review with the Department and emergency services and organizations to evaluate the plan.The Contractor will modify the plan as directed.

2. Develop a TCP. Meet the requirements of and maintain traffic as shown on the Conceptual TCP. Detour routes and traffic restrictions must follow the Conceptual TCP.

Develop a TCP for SR 0080 Westbound Reconstruction that accommodates the following:

- Reconstruction of the SR 0080 Westbound Lanes – Reconstruct the SR 0080 westbound lanes approximately from Station 141+15± to Station 525+50± by entirely closing the westbound lanes and incorporating temporary crossovers at each end of the project to cross one lane of westbound traffic to and from the eastbound lanes.Reduce the westbound and eastbound traffic to a single lane prior to the temporary crossovers.Maintain one 12' lane with a 4' right and left shoulder for the temporary crossovers.Temporary lighting will be required for the temporary crossovers utilizing temporary wood poles with arm mounted, 250-Watt high pressure sodium luminaires.On the existing eastbound lanes maintain one 11' lane for westbound traffic and one 11' lane for eastbound traffic separated by standard temporary concrete barrier with anti-glare screens.
- Provide emergency pull-off areas at one-half-mile intervals with signing and delineation adjacent to the existing eastbound lanes for both directions of travel when the temporary crossovers are in use.Adjust to meet field conditions.The pavement structure for the emergency pull-off areas will be flexible pavement consisting of bituminous wearing course, 3" depth on subbase, 6"depth.Design the emergency pull-off areas in accordance to the Traffic Engineering Manual, Publication 46.
- Closure of the SR 0080 Westbound Ramps at Interchange 8010 (Exit 90) – Implement the detours as shown on the Conceptual TCP for the closure of the SR 0080 Westbound Ramps B and C at Interchange SR 8010 (Exit 90).Modification to the detours as shown on the Conceptual TCP is not permitted unless prior written approval is acquired from the District Traffic Engineer or authorized representative.
- Closure of the SR 0080 Westbound Safety Rest Area within the project limits.Provide appropriate signing at the closed SR 0080 Westbound Safety Rest Area and the preceding SR 0080 Westbound Safety Rest Area indicating the next SR 0080 Westbound Safety Rest Area is closed with the distance to the next SR 0080 Westbound Safety Rest Area that is open.
- Determine the necessary equipment for ten (10) temporary portable camera units to monitor traffic conditions on the eastbound lanes of Interstate 80 when westbound traffic is utilizing the eastbound passing lane.
- Provide the District with a detailed equipment list, catalog cuts and other information regarding the components that are encompassed by the temporary portable camera unit.
- Obtain approval of the District for the proposed equipment as part of the Traffic Control Plan submission.
- The temporary portable camera unit are be a self-contained trailer mounted unit with a mast, a day time / night time Pan-Tilt-Zoom ITS camera, wireless communication equipment, solar / battery powered, and a password protected web site that will provide both control of the camera and viewing of the image. At the end of the project, the temporary portable camera unit will remain the property of the Contractor. It is expected that the contractor will provide the following material:
- o Trailer - Provide a NCHRP compliant, commercial / industrial grade trailer that is clean, well painted and in good repair. Trailer must be of sufficient size to support all required equipment. When fully deployed, the support system (trailer and any outriggers) must be able to resist overturning when the mast is raised to its highest position.
- o Mast - Provide a mast securely mounted to the trailer capable of supporting the camera and other equipment. Mast must be capable of extending to a minimum of 30' above the surrounding terrain and capable of 360° rotation. The mast must be easily extended and rotated manually and have the capability to be locked into position, both vertically and rotationally.

- o Camera - Provide a high performance camera capable of color and black and white images, daytime and nighttime operations, with pan-tilt-zoom capabilities, in a weather-proof dome. The camera must be capable of panning 360°, tilting 90° down from horizontal and zooming 16x (minimum) optically and 8x (minimum) digitally. Camera that is provided must be commonly used in ITS and/or security applications and provide both real-time motion and still images.
- o Communications - Provide robust wireless communications (radio or cellular) for remote access to the components of the temporary portable camera unit including viewing the video and controlling the camera. Establish two (2) dedicated website for each of the cameras deployed, one password protected live feed for viewing and monitoring by TMC in District 11-0 and the Jefferson County 911 Center (14 unique users each with their own password) and piblic site that just shows all the cameras on one page (static images, updated every 5-10 sec). Both the video image (still or streaming) and the pan-tilt-zoom camera controls shall be available through the live feed web site only. Make web site available at all times when eastbound traffic is limited to one lane through the use of concrete barriers.
- o Power - Provide both solar panels and batteries for power which when combined will provide sufficient power to operate all equipment comprising the temporary portable camera unit for at least 72 hours without outside assistance regardless of the daylight or weather conditions.
- o Other Equipment - Provide all cabling, electronics and other equipment, labor and appurtenances that is necessary for the proper operations of the temporary portable camera unit.
- ~~Provide a temporary closed circuit television (CCTV) camera system that includes 10 camera locations within the project limits to be monitored at the fire station in Falls Creek.~~The emergency protocol will be to shutdown SR 0080 in both directions and detour around the construction area in the event that a traffic incident occurs on the SR 0080 travel lanes within the traffic control work zone.
- Guide rail will need to be reset and appropriate end treatments provided on the median side of the existing eastbound lanes to address the safety of the westbound traffic when the temporary crossovers are in use.
- Half-width Construction of the SR 0080 Westbound Lanes – Reconstruct the westbound lanes in half-width construction approximately from Station 525+50± to Station 547+90± (boundary line between Jefferson and Clearfield Counties).Reduce the westbound traffic to a single lane through the construction area, while reconstructing the other lane.Maintain one 12’ lane for westbound traffic with standard temporary concrete barrier with anti-glare screens to separate the travel lane and construction area.

3. Develop Final Transportation Management Plan. None.

(e) Submissions.

1. Preliminary Plan Submission. In accordance with Publication 14M, Design Manual Part 3, Chapter 4. Submit the plans at required scale including:

- Plans for each required stage
- Proposed Temporary Signing and Pavement Markings
- Traffic Control Details as required

Include phases and sequences, detours, traffic flow arrows (one per each lane of traffic), line striping, channelizing devices, arrow panels, temporary concrete barrier, temporary impact attenuators, barricades, and construction areas hatching.

2. Final Plans and Computations. In accordance with Design Manual, Part 3, Chapter 4. Submit the plans at required scale indicating all phases and sequences, and all signs and devices. Provide tabulation of all items associated with each phase, site, sequence and detour as shown on the TCP.

Upon release of the Contractor’s design plans and computations, the plans become the Final Traffic Control Plans for the project. Upon written notice of completion of review by the Department and receipt of the Final Traffic Control Plans stamped "Released for Construction," submit seven (7) sets of signed and sealed prints and an electronic PDF copy (if required by District).

3. Revisions During Construction. Any changes to the Final Traffic Control Plans must be submitted as revisions for review by the Department. Do not deviate from the Final Traffic Control Plans until notice of completion of review of the revisions by the Department.

(f) Submittal Review, Approval, and Distribution

Make all submissions in accordance with the Special Provision titled SPECIAL BIDDING – DESIGN-BUILD.

III. MEASUREMENT AND PAYMENT - Lump Sum

Partial payment will be made for the design activity based on the approved Schedule of Values in accordance with Section IX of the Special Provision titled SPECIAL BIDDING – DESIGN-BUILD, utilizing the following components:

- Incident/Transportation Management Plan Approval
- Preliminary Plan Approval
- Final Plan Approval

00 - c9901-0002 – REPLACEMENT OF ANTI-GLARE SCREEN MOUNTED ON TEMPORARY CONCRETE BARRIER

Addendum:

Associated Item(s): 9901-0002

Header:

ITEM 9901-0002 – REPLACEMENT OF ANTI-GLARE SCREEN MOUNTED ON TEMPORARY CONCRETE BARRIER

Provision Body:

DESCRIPTION – This work is the replacement of anti- glare screen mounted on temporary concrete barrier, including all appurtenances and hardware, as directed when damaged.

MATERIALS –

Anti-glare screen module replacements need to be replaced in-kind using an approved type listed in Publication 35 (Bulletin 15).

CONSTRUCTION –

As directed by the Inspector- in- Charge, remove the damaged anti- glare screen (s) and install the replacement on top of the temporary concrete barrier with the appropriate appurtenances and hardware according to the manufacturer's instructions.

MEASUREMENT AND PAYMENT – Dollar

Includes removal of the damaged anti-glare screen(s) and installation of the replacement with all appurtenances and hardware.

Due to the contingent or unpredictable nature of the work being performed, the provisions of Section 110.02(d) are not applicable to this item.

Measure and pay for, under the REPLACEMENT OF ANTI- GLARE SCREEN MOUNTED ON TEMPORARY CONCRETE BARRIER item as follows:

Force Account Work. Section 110.03(d)

00 - c9957-0001/0002 Marker, Temporary Non Plowable Chip

Addendum:

Associated Item(s): 9957-0001, 9957-0002

Header:

ITEM 9957-0001 - MARKER, TEMPORARY NON-PLOWABLE CHIP, W/B
ITEM 9957-0002 - MARKER, TEMPORARY NON-PLOWABLE CHIP, Y/B

Provision Body:

TRPM Flexible Chip Seal Marker

Work Zone (WZ) Grade Material Specifications

1) Design

The chip seal marker shall consist of an L-shaped marker a minimum of 2.0 inches tall by 1.125 inches deep, with 0.060 inch (min.) walls, comprised of a base and an upright vertical reflector with two protective I-beams running the length of the marker. All markers shall be capable of sustaining numerous direct wheel-over impacts at 60 MPH (100 KPH) without losing adhesion to the roadway or sustaining damage to the marker body, vertical reflector or the reflective tape applied to the marker. All markers shall be constructed of virgin thermo- plastic polyurethane (TPU) for superior durability, conforming to the following material specifications:

2) Protective Cover (s)

Chip seal markers shall be provided with one (1) or two (2) clear covers to protect the vertical reflector from oil during the sealing process. For standard chip seal operations, a single cover shall be attached to the vertical reflector so as to protect the reflective tape during the oiling process but still be removed without difficulty to expose the reflector to traffic. For operations requiring a 2nd seal, markers shall be provided with two (2) covers. All covers shall be constructed of a clear, flexible polyvinyl chloride compound conforming to the following material specifications:

3) Staples

The protective covers shall be secured to the marker body with one heavy duty high carbon steel staple for single cover markers, and three staples for double covers, two staples securing the inner cover and a single staple securing the outer cover.

4) Standard Colors

The flexible chip seal marker body shall be constructed of 100 % virgin urethane polymers and colors to ensure quality & performance. The color shall be solid throughout and match the color of the lane line on which they will be placed.

5) Reflective Performance

Reflective tape ¼-inch wide shall be affixed along the top of the vertical upright portion of the marker inside the I-beam on one or both sides. The tape shall be a cube-corner micro-prism material with the following minimum optical performance:

6) Adhesive

All markers shall be self-adhesive, with a solid butyl rubber adhesive factory-applied to the entire length of the marker base. The butyl shall be a minimum of 0.125” thick and 0.75” wide on 1.0” wide release paper and of sufficient quality to secure the marker to the roadway and retain its position on the roadway without dislocation.

7) Lengths

All markers shall be supplied in 4.0 inch lengths.

8) Packaging

Markers shall be packed in boxes of 500 pieces such that the vertical reflector will not take a permanent set in excess of 15° from true vertical with respect to the base.

9) Bulletin 15 (Publication 35) Approved Construction Material Acceptance

00 - c9999-9901 - A+B(x) Item Life Cycle Cost Analysis, C-Factor

Addendum:

Associated Item(s): 9999-9901

Header:

ITEM 9999-9901 - A+B(x) ITEM LIFE CYCLE COST ANALYSIS, C-FACTOR

Provision Body:

The bidder is hereby notified that the Department, in cooperation with the Federal Highway Administration (FHWA), is using a special bidding procedure for this project for selecting the bidder to perform work.

The process for bidding will take into account the price offerings of the bidder and also the selection of a roadway pavement alternate.

1. C-Factor:

The C-Factor is based on the Life Cycle Cost Analyses (LCCA) of the different pavement types that are influenced by the results of an Engineering Economic analysis on the cost of construction, future maintenance and road user delay costs. The C-Factor is determined by summing the Present Worth of the future maintenance and user delay costs. An LCCA has been developed, in accordance with the Pavement Policy Manual (Publication 242), to determine the C-Factors for Concrete and Bituminous Pavement Types.

Bid on one of the following pavement alternates:

A. Bituminous Roadway and Bituminous Shoulder *(This pavement alternate includes Items 9000-6002, 9000-6011).*

B. Concrete Roadway and Concrete Shoulder *(This pavement alternate includes Items 9000-6001, 9000-6011).*

2. How to Bid the C-Factor:

Enter the C-Factor amount base on the paving alternate selected by using the following amounts:

Pavement Alternate	C-Factor Dollar Amount (day)
A. Bituminous Roadway and Bituminous Shoulder	$5,121,464
B. Concrete Roadway and Concrete Shoulder	$4,845,120

Although ECMS requires that the unit of measure of Day for an A+B(x) item, bid the C-Factor as a dollar amount. Bidders that enter the wrong alternate C-Factor dollar amounts or use different dollar amounts as shown in the above table will cause the bidder to be disqualified and the bidder's proposal rejected.

3. Consideration of Bids:

The dollar amount of all work to be performed under the proposal plus the C-Factor amount, Item 9999-9901 will be used for comparison of the bids in establishing the successful bidder.

4. Expedite:

Expedite (EBS) bidding for A+B(x) projects - Enter the C-Factor dollar amount (days) to be bid in the "quantity" field. Note that the "check bid" function in Expedite does not function when a quantity field is to be entered and will indicate "bid successfully completed" regardless if the number of calendar days is complete or not. Failure to complete the time component quantity field will result in a bid rejection.

5. Contract:

The total contract amount will be the total bid price excluding the amount bid for Items 9999-9901, A+B(x) Item.

Performance Bonds

Surety Company:	Western Surety Company	**Status:**	Accepted
Bonding Agency:	Marsh USA, Inc.	**Bond Number:**	929559193
Producer:	Marjorie A Altemus/PennDOT BP-002573	**Bond Amount:**	$13,070,612.44
Co-Insurer:	Yes	**NAIC:**	13188

KNOW ALL MEN BY THESE PRESENTS, That we, *New Enterprise Stone & Lime Co., Inc.* of *3912 Brumbaugh Road , P.O. Box 77, New Enterprise, PA 16664-0077* as PRINCIPAL,and Western Surety Company a corporation,as SURETY, are held and firmly bound unto the *Commonwealth of Pennsylvania* in the full and just sum of *$13,070,612.44*, lawful moneyof the United States of America, to be paid to the said Commonwealth of Pennsylvania, or it assigns, to which payment well and truly tobe 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 9 day of October 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 workidentified below for approximately the sum of the bond amount defined above.

The description and location of the project is as follows: For the Design/Build of the highway reconstruction, including the complete removal and replacement of the pavement structure, drainage, delineation, signage, and guide rail along Interstate 80 Westbound. Also, the pavement overlay along Interstate 80 Eastbound. Also, bridge preservation activites on five structures along I-80 and other miscellaneous construction, as indicated on the approved drawings included in the bid package for STATE ROUTE 80, SECTION 540, in JEFFERSON COUNTY, WASHINGTON TOWNSHIP from approximately 0.57 mile west of the SR 1005 (Laurel Run Road) overpass at segment 0881 offset 1640 to approximately the Jefferson/Clearfield County line at segment 0961 offset 0876.

and

WHEREAS, it was one of the conditions of the award of the Secretary of Transportation, acting for and on behalf ofthe Commonwealth of Pennsylvania, pursuant to which said contract was undertaken by the PRINCIPAL that these presentsshould 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 allrespects comply with and faithfully perform the terms and conditions of said contract, and his, their, or its obligationsthereunder, including the plans, specifications, and conditions therein referred to and made a partthereof, 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 fromany expense incurred through the failure of said contractor to complete the work as specified, or for any damages growing outof 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 causewhatsoever, 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 itor the giving by the Commonwealth of any extension of time for the performance of the contract or any other forbearance on thepart of either the Commonwealth or the PRINCIPAL to the other shall not in any way release the PRINCIPAL and the SURETY orSURETIES 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 Performance Bond certifies that he/she is licensed with the company namedas surety for this bond and that to the best of his/ her knowledge the said surety islicensed with the Pennsylvania Insurance Department.

Bond Workflow Status

Status	Name	Disposition	Date/Time
Draft	PATTY E WISSINGER/ PennDOT BP-001149	Submit	10/01/2012 02:59:52 PM
Producer Review	Marjorie A Altemus/ PennDOT BP-002573	Sign	10/09/2012 03:40:08 PM
Contractor Review	Geoffrey W Clarke/PennDOT BP-001149	Sign	10/10/2012 07:51:00 AM
BOD CMD Review	Roland L Rode/PennDOT	Accept	10/10/2012 08:30:01 AM

Surety Company:	Liberty Mutual Insurance Company	**Status:**	Accepted
Bonding Agency:	Marsh USA, Inc.	**Bond Number:**	387005226
Producer:	Marjorie A Altemus/PennDOT BP-002573	**Bond Amount:**	$19,605,918.67
Co-Insurer:	Yes	**NAIC:**	23043

KNOW ALL MEN BY THESE PRESENTS, That we, *New Enterprise Stone & Lime Co., Inc.* of *3912 Brumbaugh Road , P.O. Box 77, New Enterprise, PA 16664-0077* as PRINCIPAL,and Liberty Mutual Insurance Company a corporation,as SURETY, are held and firmly bound unto the *Commonwealth of Pennsylvania* in the full and just sum of *$19,605,918.67*, lawful moneyof the United States of America, to be paid to the said Commonwealth of Pennsylvania, or it assigns, to which payment well and truly tobe 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 9 day of October 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 workidentified below for approximately the sum of the bond amount defined above.

The description and location of the project is as follows: For the Design/Build of the highway reconstruction, including the complete removal and replacement of the pavement structure, drainage, delineation, signage, and guide rail along Interstate 80 Westbound. Also, the pavement overlay along Interstate 80 Eastbound. Also, bridge preservation activites on five structures along I-80 and other miscellaneous construction, as indicated on the approved drawings included in the bid package for STATE ROUTE 80, SECTION 540, in JEFFERSON COUNTY, WASHINGTON TOWNSHIP from approximately 0.57 mile west of the SR 1005 (Laurel Run Road) overpass at segment 0881 offset 1640 to approximately the Jefferson/ Clearfield County line at segment 0961 offset 0876.

and

WHEREAS, it was one of the conditions of the award of the Secretary of Transportation, acting for and on behalf ofthe Commonwealth of Pennsylvania, pursuant to which said contract was undertaken by the PRINCIPAL that these presentsshould 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 allrespects comply with and faithfully perform the terms and conditions of said contract, and his, their, or its obligationsthereunder, including the plans, specifications, and conditions therein referred to and made a partthereof, 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 fromany expense incurred through the failure of said contractor to complete the work as specified, or for any damages growing outof 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 causewhatsoever, 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 itor the giving by the Commonwealth of any extension of time for the performance of the contract or any other forbearance on thepart of either the Commonwealth or the PRINCIPAL to the other shall not in any way release the PRINCIPAL and the SURETY orSURETIES 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 Performance Bond certifies that he/she is licensed with the company namedas surety for this bond and that to the best of his/ her knowledge the said surety islicensed with the Pennsylvania Insurance Department.

Bond Workflow Status

Status	Name	Disposition	Date/Time
Draft	PATTY E WISSINGER/ PennDOT BP-001149	Submit	10/01/2012 03:00:03 PM
Producer Review	Marjorie A Altemus/ PennDOT BP-002573	Sign	10/09/2012 03:36:47 PM
Contractor Review	Geoffrey W Clarke/PennDOT BP-001149	Sign	10/10/2012 07:52:05 AM
BOD CMD Review	Roland L Rode/PennDOT	Accept	10/10/2012 08:30:44 AM

Payment Bonds

Surety Company:	Western Surety Company	**Status:**	Accepted
Bonding Agency:	Marsh USA, Inc.	**Bond Number:**	929559193
Producer:	Marjorie A Altemus/PennDOT BP-002573	**Bond Amount:**	$13,070,612.44
Co-Insurer:	Yes	**NAIC:**	13188

KNOW ALL MEN BY THESE PRESENTS, That we, *New Enterprise Stone & Lime Co., Inc.* of *3912 Brumbaugh Road , P.O. Box 77, New Enterprise, PA 16664-0077* as PRINCIPAL,and Western Surety Company a corporation,as SURETY, are held and firmly bound unto the *Commonwealth of Pennsylvania* in the full and just sum of *$13,070,612.44*, lawful moneyof the United States of America, to be paid to the said Commonwealth of Pennsylvania, or it assigns, to which payment well and truly tobe 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 9 day of October 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 workidentified below for approximately the sum of the bond amount defined above.

The description and location of the project is as follows: For the Design/Build of the highway reconstruction, including the complete removal and replacement of the pavement structure, drainage, delineation, signage, and guide rail along Interstate 80 Westbound. Also, the pavement overlay along Interstate 80 Eastbound. Also, bridge preservation activites on five structures along I-80 and other miscellaneous construction, as indicated on the approved drawings included in the bid package for STATE ROUTE 80, SECTION 540, in JEFFERSON COUNTY, WASHINGTON TOWNSHIP from approximately 0.57 mile west of the SR 1005 (Laurel Run Road) overpass at segment 0881 offset 1640 to approximately the Jefferson/Clearfield County line at segment 0961 offset 0876.

and

WHEREAS, it was one of the conditions of the award of the Secretary of Transportation, acting for and on behalf ofthe Commonwealth of Pennsylvania, pursuant to which said contract was undertaken by the PRINCIPAL that these presentsshould 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 willpromptly or cause to be paid in full all sums of money which may be due by contractor or corporation, for all materials furnishedor labor supplied or performed in the prosecution of the work, whether or not the said material or labor entered into and becamecomponent parts of the work or improvement contemplated, and for rental of the equipment used and services rendered by public utilitiesin, or in connection with, the prosecution of such work, then this obligation to be void, otherwise to remain in full force andeffect.

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 paidin full therefor, may sue assumpsit on this Payment Bond in his, their, or its own name and may prosecute the same to final judgementfor such sum or sums as may be justly due to him, them, or it, and have execution thereon. Provided, however, that theCommonwealth 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 theprovisions of the "Public Works Contractors' Bond Law of 1967", Act No. 385, approved December 20, 1967, P.L. 869, which Act shallbe 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 materialsto be furnished or labor to be supplied or performed under it or the giving by the Commonwealth of any extension of time for theperformance of the contract or any other forbearance on the part of either the Commonwealth or the Principal to the other shallnot 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, orforbearance 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 namedas surety for this bond and that to the best of his/her knowledge the said surety islicensed with the Pennsylvania Insurance Department.

Bond Workflow Status

Status	Name	Disposition	Date/Time
Draft	PATTY E WISSINGER/ PennDOT BP-001149	Submit	10/01/2012 02:59:30 PM
Producer Review	Marjorie A Altemus/ PennDOT BP-002573	Sign	10/09/2012 03:38:13 PM
Contractor Review	Geoffrey W Clarke/PennDOT BP-001149	Sign	10/10/2012 07:51:28 AM
BOD CMD Review	Roland L Rode/PennDOT	Accept	10/10/2012 08:29:34 AM

Surety Company:	Liberty Mutual Insurance Company	**Status:**	Accepted
Bonding Agency:	Marsh USA, Inc.	**Bond Number:**	387005226
Producer:	Marjorie A Altemus/PennDOT BP-002573	**Bond Amount:**	$19,605,918.67
Co-Insurer:	Yes	**NAIC:**	23043

KNOW ALL MEN BY THESE PRESENTS, That we, *New Enterprise Stone & Lime Co., Inc.* of *3912 Brumbaugh Road , P.O. Box 77, New Enterprise, PA 16664-0077* as PRINCIPAL,and Liberty Mutual Insurance Company a corporation,as SURETY, are held and firmly bound unto the *Commonwealth of Pennsylvania* in the full and just sum of *$19,605,918.67*, lawful moneyof the United States of America, to be paid to the said Commonwealth of Pennsylvania, or it assigns, to which payment well and truly tobe 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 9 day of October 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 workidentified below for approximately the sum of the bond amount defined above.

The description and location of the project is as follows: For the Design/Build of the highway reconstruction, including the complete removal and replacement of the pavement structure, drainage, delineation, signage, and guide rail along Interstate 80 Westbound. Also, the pavement overlay along Interstate 80 Eastbound. Also, bridge preservation activites on five structures along I-80 and other miscellaneous construction, as indicated on the approved drawings included in the bid package for STATE ROUTE 80, SECTION 540, in JEFFERSON COUNTY, WASHINGTON TOWNSHIP from approximately 0.57 mile west of the SR 1005 (Laurel Run Road) overpass at segment 0881 offset 1640 to approximately the Jefferson/Clearfield County line at segment 0961 offset 0876.

and

WHEREAS, it was one of the conditions of the award of the Secretary of Transportation, acting for and on behalf ofthe Commonwealth of Pennsylvania, pursuant to which said contract was undertaken by the PRINCIPAL that these presentsshould 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 willpromptly or cause to be paid in full all sums of money which may be due by contractor or corporation, for all materials furnishedor labor supplied or performed in the prosecution of the work, whether or not the said material or labor entered into and becamecomponent parts of the work or improvement contemplated, and for rental of the equipment used and services rendered by public utilitiesin, or in connection with, the prosecution of such work, then this obligation to be void, otherwise to remain in full force andeffect.

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 paidin full therefor, may sue assumpsit on this Payment Bond in his, their, or its own name and may prosecute the same to final judgementfor such sum or sums as may be justly due to him, them, or it, and have execution thereon. Provided, however, that theCommonwealth 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 theprovisions of the "Public Works Contractors' Bond Law of 1967", Act No. 385, approved December 20, 1967, P.L. 869, which Act shallbe 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 materialsto be furnished or labor to be supplied or performed under it or the giving by the Commonwealth of any extension of time for theperformance of the contract or any other forbearance on the part of either the Commonwealth or the Principal to the other shallnot 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, orforbearance 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 namedas surety for this bond and that to the best of his/her knowledge the said surety islicensed with the Pennsylvania Insurance Department.

Bond Workflow Status

Status	Name	Disposition	Date/Time
Draft	PATTY E WISSINGER/ PennDOT BP-001149	Submit	10/01/2012 02:59:43 PM
Producer Review	Marjorie A Altemus/ PennDOT BP-002573	Sign	10/09/2012 03:35:07 PM
Contractor Review	Geoffrey W Clarke/PennDOT BP-001149	Sign	10/10/2012 07:51:47 AM
BOD CMD Review	Roland L Rode/PennDOT	Accept	10/10/2012 08:30:30 AM

Insurance

Willis of Pennsylvania, Inc.

c/o 26 Century Blvd.
PO Box 305191
Nashville, TN 37230-5191

Company: Zurich American Insurance Company
Policy: GLO386737804
Expiration: 01/01/2013

DBE Commitments

DBE: 4%
Approved: 4.06%

Perform Less Than 50% of Work Items: No
Good Faith Effort Evaluation: No

Status	Business Partner	Business	% of Bid	Submitted	Acknowledged
Conditionally Approved	General Sewer Service, Inc. t/a General Pipe Cleaning	Subcontractor	0.11%	09/06/2012	09/06/2012
Conditionally Approved	Pavilion Drainage Supply Co., Inc.	Subcontractor	0.53%	09/06/2012	09/06/2012
Approved	American Geotechnical & Environmental Services, Inc.	Subcontractor	0.23%	09/06/2012	09/06/2012
Approved	Brenda L Dixon D/B/A dixon contracting & supply	Regular Dealer	0.08%	09/06/2012	09/06/2012
Approved	Callahan Paving Products, Inc.	Regular Dealer	1.52%	09/06/2012	09/06/2012
Approved	DS Hinkson Lumber and Supplies, LLC	Regular Dealer	0.90%	09/06/2012	09/06/2012
Approved	Kee-Ta Quay Construction, LLC	Subcontractor	0.42%	09/06/2012	09/06/2012
Approved	Klapec Trucking Company	Regular Dealer	0.25%	09/06/2012	09/06/2012

General Sewer Service, Inc. t/a General Pipe Cleaning

Prime

Contact: Geoffrey W. Clarke
Phone: 814-766-2211
DBE: 4%
Status: Conditionally Approved
Revision Number:

DBE

Business Partner: General Sewer Service, Inc. t/a General Pipe Cleaning
Type: DBE
Contact: Nora Hopson
Phone: 610-461-1212
DBE JVT%:
Certification: 11869
Cert. Expiration: 04/30/2014

Agreement Amount: $36,412.75
% of Bid: 0.11
Mobilization: $950.00
Starting: 10/15/2012
Completion: 10/06/2015
Business Type: Subcontractor

Items

None

Partial Items

Item	Description	Unit of Measure	Quantity
9000-6011	CONSTRUCT ROADWAY	LS	1.000
9000-6011	CONSTRUCT ROADWAY	LS	1.000
9000-6011	CONSTRUCT ROADWAY	LS	1.000
0608-0001	MOBILIZATION	LS	1.000

Comment

None

Workflow

Status	Name	Disposition	Date/Time
Draft	PATTY E WISSINGER/ PennDOT BP-001149	Submit	09/06/2012 12:48:35 PM
Awaiting Acknowledgement	Kimberly J Mcerlean/ PennDOT BP-000749	Acknowledge	09/06/2012 01:00:02 PM
Acknowledged	PATTY E WISSINGER/ PennDOT BP-001149	Submit	09/06/2012 03:10:05 PM
PennDOT Review	Delores A Ritzman/PennDOT	Conditionally Approve	09/07/2012 07:59:27 AM

Pavilion Drainage Supply Co., Inc.

Prime

Contact: Geoffrey W. Clarke
Phone: 814-766-2211
DBE: 4%
Status: Conditionally Approved
Revision Number:

DBE

Business Partner: Pavilion Drainage Supply Co., Inc.
Type: DBE
Contact: Philip Plossi
Phone: 585-584-3261
DBE JVT%:
Certification: 1290
Cert. Expiration: 05/31/2012

Agreement Amount: $172,513.55
% of Bid: 0.53
Mobilization: $1,700.00
Starting: 10/15/2012
Completion: 10/06/2015
Business Type: Subcontractor

Items

None

Partial Items

Item	Description	Unit of Measure	Quantity
9000-6011	CONSTRUCT ROADWAY	LS	1.000
9000-6011	CONSTRUCT ROADWAY	LS	1.000
9000-6011	CONSTRUCT ROADWAY	LS	1.000
0608-0001	MOBILIZATION	LS	1.000

Comment

None

Workflow

Status	Name	Disposition	Date/Time
Draft	PATTY E WISSINGER/ PennDOT BP-001149	Submit	09/06/2012 12:49:08 PM
Awaiting Acknowledgement	Frederick W Roll III/PennDOT BP-000681	Acknowledge	09/06/2012 01:44:05 PM
Acknowledged	PATTY E WISSINGER/ PennDOT BP-001149	Submit	09/06/2012 03:10:05 PM
PennDOT Review	Delores A Ritzman/PennDOT	Conditionally Approve	09/07/2012 08:25:28 AM

American Geotechnical & Environmental Services, Inc.

Prime

Contact: Geoffrey W. Clarke
Phone: 814-766-2211
DBE: 4%
Status: Approved
Revision Number:

DBE

Business Partner: American Geotechnical & Environmental Services, Inc.
Type: DBE
Contact: Neil Styer
Phone: 724-916-0300
DBE JVT%:
Certification: 10702
Cert. Expiration: 01/31/2013

Agreement Amount: $75,000.00
% of Bid: 0.23
Mobilization: $0.00
Starting: 10/15/2012
Completion: 10/06/2015
Business Type: Subcontractor

Items

None

Partial Items

Item	Description	Unit of Measure	Quantity
9000-6011	CONSTRUCT ROADWAY	LS	1.000
9000-6011	CONSTRUCT ROADWAY	LS	1.000
9000-6011	CONSTRUCT ROADWAY	LS	1.000

Comment

None

Workflow

Status	Name	Disposition	Date/Time
Draft	PATTY E WISSINGER/ PennDOT BP-001149	Submit	09/06/2012 12:48:01 PM
Awaiting Acknowledgement	Kanwal P Chopra/PennDOT BP-000025	Acknowledge	09/06/2012 02:38:38 PM
Acknowledged	PATTY E WISSINGER/ PennDOT BP-001149	Submit	09/06/2012 03:10:05 PM
PennDOT Review	Delores A Ritzman/PennDOT	Approve	09/07/2012 07:48:08 AM

Brenda L Dixon D/B/A dixon contracting & supply

Prime

Contact: Geoffrey W. Clarke
Phone: 814-766-2211
DBE: 4%
Status: Approved
Revision Number:

DBE

Business Partner: Brenda L Dixon D/B/A dixon contracting & supply
Type: DBE
Contact: Brenda Dixon
Phone: 814-342-5203
DBE JVT%:
Certification: 10532
Cert. Expiration: 05/31/2009

Agreement Amount: $27,737.87
% of Bid: 0.08
Mobilization: $0.00
Starting: 10/15/2012
Completion: 10/06/2015
Business Type: Regular Dealer

Items

None

Partial Items

Item	Description	Unit of Measure	Quantity
9000-6011	CONSTRUCT ROADWAY	LS	1.000
9000-6011	CONSTRUCT ROADWAY	LS	1.000
9000-6011	CONSTRUCT ROADWAY	LS	1.000

Comment

None

Workflow

Status	Name	Disposition	Date/Time
Draft	PATTY E WISSINGER/ PennDOT BP-001149	Submit	09/06/2012 12:48:09 PM
Awaiting Acknowledgement	Brenda L Dixon/PennDOT BP-001363	Acknowledge	09/06/2012 01:42:42 PM
Acknowledged	PATTY E WISSINGER/ PennDOT BP-001149	Submit	09/06/2012 03:10:05 PM
PennDOT Review	Delores A Ritzman/PennDOT	Approve	09/07/2012 08:22:23 AM

Callahan Paving Products, Inc.

Prime

Contact: Geoffrey W. Clarke
Phone: 814-766-2211
DBE: 4%
Status: Approved
Revision Number:

DBE

Business Partner: Callahan Paving Products, Inc.
Type: DBE
Contact: Brian Eberhart
Phone: 434-589-9000
DBE JVT%:
Certification: 10452
Cert. Expiration: 09/14/2012

Agreement Amount: $498,259.57
% of Bid: 1.52
Mobilization: $0.00
Starting: 10/15/2012
Completion: 10/06/2015
Business Type: Regular Dealer

Items

None

Partial Items

Item	Description	Unit of Measure	Quantity
9000-6011	CONSTRUCT ROADWAY	LS	1.000
9000-6011	CONSTRUCT ROADWAY	LS	1.000
9000-6011	CONSTRUCT ROADWAY	LS	1.000

Comment

None

Workflow

Status	Name	Disposition	Date/Time
Draft	PATTY E WISSINGER/ PennDOT BP-001149	Submit	09/06/2012 12:48:18 PM
Awaiting Acknowledgement	Brian Eberhart/PennDOT BP-000822	Acknowledge	09/06/2012 12:55:17 PM
Acknowledged	PATTY E WISSINGER/ PennDOT BP-001149	Submit	09/06/2012 03:10:05 PM
PennDOT Review	Delores A Ritzman/PennDOT	Approve	09/07/2012 07:57:21 AM

DS Hinkson Lumber and Supplies, LLC

Prime

Contact: Geoffrey W. Clarke
Phone: 814-766-2211
DBE: 4%
Status: Approved
Revision Number:

DBE

Business Partner: DS Hinkson Lumber and Supplies, LLC
Type: DBE
Contact: Debbie Hinkson
Phone: 724-813-2687
DBE JVT%:
Certification: 13498
Cert. Expiration: 11/30/2013

Agreement Amount: $293,126.04
% of Bid: 0.90
Mobilization: $0.00
Starting: 10/15/2012
Completion: 10/06/2015
Business Type: Regular Dealer

Items

None

Partial Items

Item	Description	Unit of Measure	Quantity
0212-0015	GEOTEXTILE, CLASS 4, TYPE B	SY	173,715.000
0212-0015	GEOTEXTILE, CLASS 4, TYPE B	SY	173,715.000
0212-0015	GEOTEXTILE, CLASS 4, TYPE B	SY	173,715.000
0212-0014	GEOTEXTILE, CLASS 4, TYPE A	SY	173,715.000
0212-0014	GEOTEXTILE, CLASS 4, TYPE A	SY	173,715.000
0212-0014	GEOTEXTILE, CLASS 4, TYPE A	SY	173,715.000

Comment

None

Workflow

Status	Name	Disposition	Date/Time
Draft	PATTY E WISSINGER/ PennDOT BP-001149	Submit	09/06/2012 12:48:27 PM
Awaiting Acknowledgement	*Terry L Leiter/PennDOT	Acknowledge	09/06/2012 02:49:03 PM
Acknowledged	PATTY E WISSINGER/ PennDOT BP-001149	Submit	09/06/2012 03:10:05 PM
PennDOT Review	Delores A Ritzman/PennDOT	Approve	09/07/2012 07:58:03 AM

Kee-Ta Quay Construction, LLC

Prime

Contact: Geoffrey W. Clarke
Phone: 814-766-2211
DBE: 4%
Status: Approved
Revision Number:

DBE

Business Partner: Kee-Ta Quay Construction, LLC
Type: DBE
Contact: Bobbi Clark
Phone: 717-987-3518
DBE JVT%:
Certification: 11574
Cert. Expiration: 10/31/2013

Agreement Amount: $137,025.00
% of Bid: 0.42
Mobilization: $7,300.00
Starting: 10/15/2012
Completion: 10/06/2015
Business Type: Subcontractor

Items

None

Partial Items

Item	Description	Unit of Measure	Quantity
0608-0001	MOBILIZATION	LS	1.000
9000-6011	CONSTRUCT ROADWAY	LS	1.000
9000-6011	CONSTRUCT ROADWAY	LS	1.000
9000-6011	CONSTRUCT ROADWAY	LS	1.000

Comment

None

Workflow

Status	Name	Disposition	Date/Time
Draft	PATTY E WISSINGER/ PennDOT BP-001149	Submit	09/06/2012 12:48:48 PM
Awaiting Acknowledgement	Rick G Truax/PennDOT BP-000405	Acknowledge	09/06/2012 01:03:01 PM
Acknowledged	PATTY E WISSINGER/ PennDOT BP-001149	Submit	09/06/2012 03:10:05 PM
PennDOT Review	Delores A Ritzman/PennDOT	Approve	09/07/2012 08:23:14 AM

Klapec Trucking Company

Prime

Contact: Geoffrey W. Clarke
Phone: 814-766-2211
DBE: 4%
Status: Approved
Revision Number:

DBE

Business Partner: Klapec Trucking Company
Type: DBE
Contact: Bridget Lander
Phone: 814-676-1512
DBE JVT%:
Certification: 13733
Cert. Expiration: 01/31/2015

Agreement Amount: $80,660.06
% of Bid: 0.25
Mobilization: $0.00
Starting: 10/15/2012
Completion: 10/06/2015
Business Type: Regular Dealer

Items

None

Partial Items

Item	Description	Unit of Measure	Quantity
1002-0153	MECHANICAL SPLICE SYSTEM FOR NO. 6 REINFORCEMENT BARS, EPOXY COATED	EACH	180.000
1002-0153	MECHANICAL SPLICE SYSTEM FOR NO. 6 REINFORCEMENT BARS, EPOXY COATED	EACH	180.000
1002-0153	MECHANICAL SPLICE SYSTEM FOR NO. 6 REINFORCEMENT BARS, EPOXY COATED	EACH	180.000
1002-0152	MECHANICAL SPLICE SYSTEM FOR NO. 5 REINFORCEMENT BARS, EPOXY COATED	EACH	170.000
1002-0152	MECHANICAL SPLICE SYSTEM FOR NO. 5 REINFORCEMENT BARS, EPOXY COATED	EACH	170.000
1002-0152	MECHANICAL SPLICE SYSTEM FOR NO. 5 REINFORCEMENT BARS, EPOXY COATED	EACH	170.000
1002-0053	REINFORCEMENT BARS, EPOXY COATED	LB	154,386.000
1002-0053	REINFORCEMENT BARS, EPOXY COATED	LB	154,386.000

Comment

None

Workflow

Status	Name	Disposition	Date/Time
Draft	PATTY E WISSINGER/ PennDOT BP-001149	Submit	09/06/2012 12:48:56 PM

Awaiting Acknowledgement	Cindy Urban/PennDOT BP-005184	Acknowledge	09/06/2012 01:04:18 PM
Acknowledged	PATTY E WISSINGER/ PennDOT BP-001149	Submit	09/06/2012 03:10:05 PM
PennDOT Review	Delores A Ritzman/PennDOT	Approve	09/07/2012 08:23:59 AM

Plans

Plans	Addendum
Roadway Plan	2
Supplemental Plans	
Cross Section - Conceptual	
Cross Section - Sheets 9, 29, 89, 115, 116, 117, 118, 119, 126, 127, 129, 130, 131, 132, 133, 186, 187, 226, 227, 229 thru 238, 245, 246, 341 and 342 of 407	1
Other/Project-Specific Plan - ITS Plans	1
Signing and Pavement Marking Plan - Conceptual	
Structure Plan - S-32751	
Structure Plan - S-32750	
Structure Plan - S-32749	
Structure Plan - S-32747	
Structure Plan - S-32748	
Traffic Control Plan - Conceptual	
Traffic Control Plan	2
Traffic Control Plan - I-80 Jefferson EB Bituminous	

Attachments

Project-Specific Checklist Items	Addendum
Project Specific - Roadway Design Guidance Report	2
Project Specific - Schedule of Values Template	
Project Specific - Request for Consideration for Restrictions	
Project Specific - ECMTS MATRIX	
Project Specific - Steel Escalation Option Form	
Reviews	
None	
Contract Award Items	
Disclosure of Lobbying Activities	
F.A.R. REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS	
Federal Wage Rate	
Local Agreements and Coordination	
None	
Environmental Clearances	
None	
Permits	
Environmental Due Diligence (EDD) - Contractor	
Environmental Due Diligence (EDD) - PennDOT	
Environmental Due Diligence (EDD) - PennDOT - Eastbound	
Right of Way	
None	
Survey	
None	
Utilities Clearance	
None	
Utility Engineering	
None	
Construction Items	
Pre-Bid Construction Schedule - Concrete	
Pre-Bid Construction Schedule - Asphalt	
Structures and Geotechnical	
None	
Railroad Coordination	
D4279A Railroad Crossing Data for Contractor - Revised	2
Traffic	
None	

Construction Coordination

None

Maintenance Items

None

Estimates

None

Comments: