SPECIAL PROVISIONS

ROUTE 17
FROM SOUTH OF TERRACE AVENUE TO SOUTH OF WEST SADDLE RIVER ROAD
CONTRACT NO. 009113910
RESURFACING AND BRIDGE DECK REPAIRS
BOROUGH OF HASBROUCK HEIGHTS, CITY OF HACKENSACK, BOROUGH OF LODI, TOWNSHIP OF ROCHELLE PARK, BOROUGH OF PARAMUS, VILLAGE OF RIDGEWOOD

BERGEN COUNTY

AUTHORIZATION OF CONTRACT

The Contract is authorized by the provisions of Title 27 of the Revised Statutes of New Jersey and supplements thereto, and Title 23 of the United States Code - Highways.

SPECIFICATIONS TO BE USED

The 2007 Standard Specifications for Road and Bridge Construction, of the New Jersey Department of Transportation as amended herein will govern the construction of this Project and the execution of the Contract.

These Special Provisions consist of the following:

Pages 1 to 65 inclusive.

State wage rates may be obtained from the New Jersey Department of Labor & Workforce Development (Telephone: 609-292-2259) or by accessing the Department of Labor & Workforce Development's web site at http://lwd.dol.state.nj.us/labor/wagehour/wagehour_index.html The State wage rates in effect at the time of award are part of this Contract, pursuant to Chapter 150, Laws of 1963 (NJSA 34:11-56.25, et seq.).

If an employee of the Contractor or subcontractor has been paid a rate of wages less than the prevailing wage, the Department may suspend the Work, and declare the Contractor in default.
The following Wholly State funded project Attachments that are located at the end of these Special Provisions:"

1. State of New Jersey Equal Employment Opportunity Special Provisions for Construction Contracts Funded by Wholly or partially State Funds.
2. Payroll Requirements for 100 Percent State Projects.
3. Americans with Disabilities Act for 100 Percent State Funded Contracts.
4. Small Business Enterprise Utilization Attachment for 100% State Funded Contracts.

DIVISION 100 – GENERAL PROVISIONS

SECTION 101 – GENERAL INFORMATION

101.03 TERMS
THE FOLLOWING TERMS ARE CHANGED.

pavement structure. The combination of pavement, base courses, and when specified, a subbase course, placed on a subgrade to support the traffic load and distribute it to the roadbed (see Figure 101-1). These various courses are defined as follows:

1. **pavement.** One or more layers of specified material of designed thickness at the top of the pavement structure.
2. **base course.** One or more layers of specified material of designed thickness placed on the subgrade or subbase.
3. **subbase.** One or more layers of specified material of designed thickness placed on the subgrade.

101.04 INQUIRIES REGARDING THE PROJECT

1. **Before Award of Contract.**

THE FIRST PARAGRAPH IS CHANGED TO:

Submit inquiries and/or view other questions/answers by following the format prescribed on the project's electronic bidding web page.

THE SECOND PARAGRAPH IS CHANGED TO:

The deadline for submitting inquiries is 12:00 noon, 7 days before the opening of bids.

2. **After Award of Contract.**

North Region
Ms. Chrissa Roessner, Regional Construction Engineer
200 Stierli Court
Mt. Arlington, NJ 07856-1322
Telephone: 973-601-6670

SECTION 102 – BIDDING REQUIREMENTS AND CONDITIONS

102.02 BIDDER REGISTRATION AND DOWNLOADING OF THE PROPOSAL DOCUMENTS
THE LAST SENTENCE OF THE FIRST PARAGRAPH IS CHANGED TO:

The Bidder shall not alter or in any way change the software.

102.03 REVISIONS BEFORE SUBMITTING A BID
THE SECOND PARAGRAPH IS CHANGED TO:

The Bidder shall acknowledge all addenda posted through the Department's website. The addenda acknowledgement folder is included in the Department's electronic bidding file. The Department has the right to reject the bid if the Bidder has not acknowledged all addenda posted.

102.04 EXAMINATION OF CONTRACT AND PROJECT LIMITS

1. Evaluation of Subsurface and Surface Conditions.

THE FOLLOWING IS ADDED:

Test Date: May 11, 2011				
International Roughness Index (IRI) values of the existing roadway				
Route	Direction	Mile Post		Existing IRI Value
		From	To	
017	N	8.0	8.1	71
017	N	8.1	8.2	103
017	N	8.2	8.3	127
017	N	8.3	8.4	131
017	N	8.4	8.5	127
017	N	8.5	8.6	153
017	N	8.6	8.7	104
017	N	8.7	8.8	114
017	N	8.8	8.9	80
017	N	8.9	9.0	127
017	N	9.0	9.1	149
017	N	9.1	9.2	214
017	N	9.2	9.3	118
017	N	9.3	9.4	116
017	N	9.4	9.5	98
017	N	9.5	9.6	105
017	N	9.6	9.7	96
017	N	9.7	9.8	118
017	N	9.8	9.9	171
017	N	9.9	10.0	121
017	N	10.0	10.1	133
017	N	10.1	10.2	123
017	N	10.2	10.3	143
017	N	10.3	10.4	117
017	N	10.4	10.5	73
017	N	10.5	10.6	77
017	N	10.6	10.7	112
017	N	10.7	10.8	218
017	N	10.8	10.9	238
017	N	10.9	11.0	116
017	N	11.0	11.1	108
017	N	11.1	11.2	95
017	N	11.2	11.3	89
017	N	11.3	11.4	109
017	N	11.4	11.5	112
017	N	11.5	11.6	116
017	N	11.6	11.7	71
017	N	11.7	11.8	239
017	N	11.8	11.9	194
017	N	11.9	12.0	145
017	N	12.0	12.1	119
017	N	12.1	12.2	132
017	N	12.2	12.3	178
017	N	12.3	12.4	174
017	N	12.4	12.5	117
017	N	12.5	12.6	89
017	N	12.6	12.7	107

017	N	12.7	12.8	124
017	N	12.8	12.9	124
017	N	12.9	13.0	120
017	N	13.0	13.1	117
017	N	13.1	13.2	131
017	N	13.2	13.3	95
017	N	13.3	13.4	159
017	N	13.4	13.5	124
017	N	13.5	13.6	120
017	N	13.6	13.7	117
017	N	13.7	13.8	136
017	N	13.8	13.9	102
017	N	13.9	14.0	150
017	N	14.0	14.1	180
017	N	14.1	14.2	105
017	N	14.2	14.3	88
017	N	14.3	14.4	96
017	N	14.4	14.5	108
017	N	14.5	14.6	77
017	N	14.6	14.7	87
017	N	14.7	14.8	98
017	N	14.8	14.9	174
017	N	14.9	15.0	147
017	N	15.0	15.1	90
017	N	15.1	15.2	80
017	N	15.2	15.3	113
017	N	15.3	15.4	113
017	N	15.4	15.5	75
017	N	15.5	15.6	97
017	N	15.6	15.7	103
017	N	15.7	15.8	113
017	N	15.8	15.9	121
017	N	15.9	16.0	96
017	N	16.0	16.1	109
017	N	16.1	16.2	90
017	N	16.2	16.3	84
017	N	16.3	16.4	78
017	N	16.4	16.5	89
017	N	16.5	16.6	83
017	N	16.6	16.7	79
017	N	16.7	16.8	69
017	N	16.8	16.9	90
017	N	16.9	17.0	77
017	N	17.0	17.1	240
017	N	17.1	17.2	91
017	N	17.2	17.3	97
017	N	17.3	17.4	119
017	N	17.4	17.5	75
017	N	17.5	17.6	112
017	N	17.6	17.7	121
017	N	17.7	17.8	94
017	N	17.8	17.9	119
017	N	17.9	18.0	126
017	S	8.0	8.1	129
017	S	8.1	8.2	88
017	S	8.2	8.3	127
017	S	8.3	8.4	127

017	S	8.4	8.5	132
017	S	8.5	8.6	195
017	S	8.6	8.7	156
017	S	8.7	8.8	180
017	S	8.8	8.9	120
017	S	8.9	9.0	149
017	S	9.0	9.1	174
017	S	9.1	9.2	123
017	S	9.2	9.3	123
017	S	9.3	9.4	135
017	S	9.4	9.5	121
017	S	9.5	9.6	94
017	S	9.6	9.7	116
017	S	9.7	9.8	131
017	S	9.8	9.9	150
017	S	9.9	10.0	162
017	S	10.0	10.1	157
017	S	10.1	10.2	154
017	S	10.2	10.3	118
017	S	10.3	10.4	176
017	S	10.4	10.5	145
017	S	10.5	10.6	144
017	S	10.6	10.7	127
017	S	10.7	10.8	132
017	S	10.8	10.9	182
017	S	10.9	11.0	205
017	S	11.0	11.1	123
017	S	11.1	11.2	101
017	S	11.2	11.3	117
017	S	11.3	11.4	116
017	S	11.4	11.5	148
017	S	11.5	11.6	134
017	S	11.6	11.7	111
017	S	11.7	11.8	134
017	S	11.8	11.9	129
017	S	11.9	12.0	157
017	S	12.0	12.1	157
017	S	12.1	12.2	106
017	S	12.2	12.3	157
017	S	12.3	12.4	216
017	S	12.4	12.5	125
017	S	12.5	12.6	121
017	S	12.6	12.7	133
017	S	12.7	12.8	154
017	S	12.8	12.9	153
017	S	12.9	13.0	108
017	S	13.0	13.1	94
017	S	13.1	13.2	111
017	S	13.2	13.3	121
017	S	13.3	13.4	106
017	S	13.4	13.5	108
017	S	13.5	13.6	93
017	S	13.6	13.7	90
017	S	13.7	13.8	98
017	S	13.8	13.9	108
017	S	13.9	14.0	156
017	S	14.0	14.1	75

017	S	14.1	14.2	94
017	S	14.2	14.3	91
017	S	14.3	14.4	88
017	S	14.4	14.5	79
017	S	14.5	14.6	88
017	S	14.6	14.7	94
017	S	14.7	14.8	90
017	S	14.8	14.9	208
017	S	14.9	15.0	150
017	S	15.0	15.1	74
017	S	15.1	15.2	105
017	S	15.2	15.3	101
017	S	15.3	15.4	101
017	S	15.4	15.5	88
017	S	15.5	15.6	119
017	S	15.6	15.7	124
017	S	15.7	15.8	89
017	S	15.8	15.9	99
017	S	15.9	16.0	86
017	S	16.0	16.1	87
017	S	16.1	16.2	86
017	S	16.2	16.3	110
017	S	16.3	16.4	93
017	S	16.4	16.5	89
017	S	16.5	16.6	143
017	S	16.6	16.7	87
017	S	16.7	16.8	71
017	S	16.8	16.9	91
017	S	16.9	17.0	102
017	S	17.0	17.1	191
017	S	17.1	17.2	134
017	S	17.2	17.3	69
017	S	17.3	17.4	74
017	S	17.4	17.5	61
017	S	17.5	17.6	68
017	S	17.6	17.7	78
017	S	17.7	17.8	74
017	S	17.8	17.9	70
017	S	17.9	18.0	58

This information is the latest available IRI data of the right most through lane from the Pavement Management Unit. The pavement information shown herein was obtained by the Department and is made available to the authorized users only that they may have access to the same information available to the Department. It is presented in good faith, but is not intended as a substitute for investigations, interpretation or judgment of such authorized users.

NEW JERSEY DEPARTMENT OF TRANSPORTATION
PAVEMENT CORE RECORD

PROJECT/ROUTE & SECTION: Route 17: NB (MP 9.3-11.0 & 11.7-16.5) & SB (MP 8.7-17.1)

DRILLER: Patrick Bernard

INSPECTOR: Nirad Shah

COUNTY/TOWNSHIP: Hasbrouck Heights Borough, Hackensack City, Lodi Borough, Maywood, Rochelle Park Township, Paramus Borough and Ridgewood Village, Bergen County

DATE STARTED: 5/20/11 **DATE COMPLETED:** 5/21/11

CORE NUMBER	**1**	**2**	**3**	**4**	**5**
ROUTE	017	017	017	017	017
DIRECTION (N, E, S, W)	N	N	N	N	N
MILE POST (MP or Station)	9.44	9.81	10.24	10.52	10.89
LANE NO. (Left to Right)		3	2	2	
SHOULDER (Inside or Outside)	Outside Shoulder				Outside Shoulder
CORE DIAMETER (Inches)	4	4	4	4	4
TOTAL CORE DEPTH (Inches)	5.00	13.75	8.75	5.75	14.00
CORE DRILLED TO	0-6": Fn GVL (SE) 6-18": Fn GVL (SE) & SD w/Silt 18-24": SD w/Fn GVL (SE) & Silt	0-6": Fn GVL (SE) w/SD 6-24": Fn GVL (SE) & SD w/Silt	PCC	PCC	0-6": Fn GVL (SE) 6-24": Fn GVL (SE) & SD w/Silt
SURFACE TYPE (AC/PC)	AC	AC	AC	AC	AC
AC THICKNESS (Inches)	5.00	13.75	8.75	5.75	14.00
PC THICKNESS (Inches)	---	---	Not Retrieved	Not Retrieved	---

* Lane 1 is the left lane in the direction of travel.

The pavement information shown herein was used by the Department for design and estimate purposes.

NEW JERSEY DEPARTMENT OF TRANSPORTATION
PAVEMENT CORE RECORD

PROJECT/ROUTE & SECTION: Route 17: NB (MP 9.3-11.0 & 11.7-16.5) & SB (MP 8.7-17.1)

DRILLER: Patrick Bernard

INSPECTOR: Nirad Shah

COUNTY/TOWNSHIP: Hasbrouck Heights Borough, Hackensack City, Lodi Borough, Maywood, Rochelle Park Township, Paramus Borough and Ridgewood Village, Bergen County

DATE STARTED: 5/20/11 **DATE COMPLETED:** 5/21/11

CORE NUMBER	**6**	**7**	**8**	**9**	**10**
ROUTE	017	017	017	017	017
DIRECTION (N, E, S, W)	N	N	N	N	N
MILE POST (MP or Station)	11.82	12.16	12.44	12.95	13.15
LANE NO. (Left to Right)	2	3	3	3	2
SHOULDER (Inside or Outside)					
CORE DIAMETER (Inches)	4	4	4	4	4
TOTAL CORE DEPTH (Inches)	13.50	11.00	9.75	15.25	5.25
CORE DRILLED TO	Crse GVL (SE) & Fn GVL (SE)	PCC	0-6": Fn GVL (SE) w/SD 6-24": Fn GVL (SE) & SD	Fn Gvl (SE) w/SD	PCC
SURFACE TYPE (AC/PC)	AC	AC	AC	AC	AC
AC THICKNESS (Inches)	13.50	11.00	9.75	5.50	5.25
PC THICKNESS (Inches)	---	Not Retrieved	---	9.75	Not Retrieved

* Lane 1 is the left lane in the direction of travel.

The pavement information shown herein was used by the Department for design and estimate purposes.

NEW JERSEY DEPARTMENT OF TRANSPORTATION
PAVEMENT CORE RECORD

PROJECT/ROUTE & SECTION: Route 17: NB (MP 9.3-11.0 & 11.7-16.5) & SB (MP 8.7-17.1)

DRILLER: Patrick Bernard

INSPECTOR: Nirad Shah

COUNTY/TOWNSHIP: Hasbrouck Heights Borough, Hackensack City, Lodi Borough, Maywood, Rochelle Park Township, Paramus Borough and Ridgewood Village, Bergen County

DATE STARTED: 5/20/11 **DATE COMPLETED:** 5/21/11

CORE NUMBER	**11**	**12**	**13**	**14**	**15**
ROUTE	017	017	017	017	017
DIRECTION (N, E, S, W)	N	N	N	N	N
MILE POST (MP or Station)	13.45	13.72	13.91	14.19	14.53
LANE NO. (Left to Right)	4		3		3
SHOULDER (Inside or Outside)		Outside Shoulder		Outside Shoulder	
CORE DIAMETER (Inches)	4	4	4	4	4
TOTAL CORE DEPTH (Inches)	2.50	2.25	3.50	4.00	4.00
CORE DRILLED TO	PCC	0-6": Fn GVL (SE) w/SD & SD (SE) 6-24": Fn GVL (SE) & SD & SD (SE)	PCC	PCC	PCC
SURFACE TYPE (AC/PC)	AC	AC	AC	AC	AC
AC THICKNESS (Inches)	2.50	2.25	3.50	4.00	4.00
PC THICKNESS (Inches)	Not Retrieved	---	Not Retrieved	Not Retrieved	Not Retrieved

* Lane 1 is the left lane in the direction of travel.

The pavement information shown herein was used by the Department for design and estimate purposes.

NEW JERSEY DEPARTMENT OF TRANSPORTATION
PAVEMENT CORE RECORD

PROJECT/ROUTE & SECTION: Route 17: NB (MP 9.3-11.0 & 11.7-16.5) & SB (MP 8.7-17.1)

DRILLER: Patrick Bernard

INSPECTOR: Nirad Shah

COUNTY/TOWNSHIP: Hasbrouck Heights Borough, Hackensack City, Lodi Borough, Maywood, Rochelle Park Township, Paramus Borough and Ridgewood Village, Bergen County

DATE STARTED: 5/20/11 **DATE COMPLETED:** 5/21/11

CORE NUMBER	**16**	**17**	**18**	**19**	**20**
ROUTE	017	017	017	017	017
DIRECTION (N, E, S, W)	N	N	N	N	N
MILE POST (MP or Station)	14.81	15.09	15.45	15.74	16.06
LANE NO. (Left to Right)	3		2	3	2
SHOULDER (Inside or Outside)		Outside Shoulder			
CORE DIAMETER (Inches)	4	4	4	4	4
TOTAL CORE DEPTH (Inches)	2.50	9.50	10.50	6.00	6.50
CORE DRILLED TO	PCC	0-12": Fn GVL (SE) w/SD 12-24": SD w/ Fn GVL (SE)	PCC	PCC	PCC
SURFACE TYPE (AC/PC)	AC	AC	AC	AC	AC
AC THICKNESS (Inches)	2.50	9.50	10.50	6.00	6.50
PC THICKNESS (Inches)	Not Retrieved	---	Not Retrieved	Not Retrieved	Not Retrieved

* Lane 1 is the left lane in the direction of travel.

The pavement information shown herein was used by the Department for design and estimate purposes.

NEW JERSEY DEPARTMENT OF TRANSPORTATION
PAVEMENT CORE RECORD

PROJECT/ROUTE & SECTION: Route 17: NB (MP 9.3-11.0 & 11.7-16.5) & SB (MP 8.7-17.1)

DRILLER: Patrick Bernard

INSPECTOR: Nirad Shah

COUNTY/TOWNSHIP: Hasbrouck Heights Borough, Hackensack City, Lodi Borough, Maywood, Rochelle Park Township, Paramus Borough and Ridgewood Village, Bergen County

DATE STARTED: 5/20/11 **DATE COMPLETED:** 5/21/11

CORE NUMBER	**21**	**22**	**23**	**24**	**25**
ROUTE	017	017	017	017	017
DIRECTION (N, E, S, W)	N	N	S	S	S
MILE POST (MP or Station)	16.26	16.44	16.89	16.49	16.26
LANE NO. (Left to Right)	2	3	3		3
SHOULDER (Inside or Outside)				Outside Shoulder	
CORE DIAMETER (Inches)	4	4	4	4	4
TOTAL CORE DEPTH (Inches)	5.00	16.75	6.50	11.75	2.50
CORE DRILLED TO	PCC	PCC	PCC	PCC	PCC
SURFACE TYPE (AC/PC)	AC	AC	AC	AC	AC
AC THICKNESS (Inches)	5.00	16.75	6.50	11.75	2.50
PC THICKNESS (Inches)	Not Retrieved	Not Retrieved	Not Retrieved	Not Retrieved	Not Retrieved

* Lane 1 is the left lane in the direction of travel.

The pavement information shown herein was used by the Department for design and estimate purposes.

NEW JERSEY DEPARTMENT OF TRANSPORTATION
PAVEMENT CORE RECORD

PROJECT/ROUTE & SECTION: Route 17: NB (MP 9.3-11.0 & 11.7-16.5) & SB (MP 8.7-17.1)

DRILLER: Patrick Bernard

INSPECTOR: Nirad Shah

COUNTY/TOWNSHIP: Hasbrouck Heights Borough, Hackensack City, Lodi Borough, Maywood, Rochelle Park Township, Paramus Borough and Ridgewood Village, Bergen County

DATE STARTED: 5/20/11 **DATE COMPLETED:** 5/21/11

CORE NUMBER	**26**	**27**	**28**	**29**	**30**
ROUTE	017	017	017	017	017
DIRECTION (N, E, S, W)	S	S	S	S	S
MILE POST (MP or Station)	16.04	15.63	15.34	15.10	14.79
LANE NO. (Left to Right)	2	4		3	2
SHOULDER (Inside or Outside)			Outside Shoulder		
CORE DIAMETER (Inches)	4	4	4	4	4
TOTAL CORE DEPTH (Inches)	4.25	3.25	4.25	8.25	4.00
CORE DRILLED TO	PCC	PCC	0-6": Fn GVL (SE) w/SD & SD (SE) 6-18": Fn GVL (SE) & SD & SD (SE) w/Silt	PCC	PCC
SURFACE TYPE (AC/PC)	AC	AC	AC	AC	AC
AC THICKNESS (Inches)	4.25	3.25	4.25	8.25	4.00
PC THICKNESS (Inches)	Not Retrieved	Not Retrieved	---	Not Retrieved	Not Retrieved

* Lane 1 is the left lane in the direction of travel.

The pavement information shown herein was used by the Department for design and estimate purposes.

NEW JERSEY DEPARTMENT OF TRANSPORTATION
PAVEMENT CORE RECORD

PROJECT/ROUTE & SECTION: Route 17: NB (MP 9.3-11.0 & 11.7-16.5) & SB (MP 8.7-17.1)

DRILLER: Patrick Bernard

INSPECTOR: Nirad Shah

COUNTY/TOWNSHIP: Hasbrouck Heights Borough, Hackensack City, Lodi Borough, Maywood, Rochelle Park Township, Paramus Borough and Ridgewood Village, Bergen County

DATE STARTED: 5/20/11 **DATE COMPLETED:** 5/21/11

CORE NUMBER	**31**	**32**	**33**	**34**	**35**
ROUTE	017	017	017	017	017
DIRECTION (N, E, S, W)	S	S	S	S	S
MILE POST (MP or Station)	14.46	14.19	13.93	13.62	13.32
LANE NO. (Left to Right)	2	4		3	2
SHOULDER (Inside or Outside)			Outside Shoulder		
CORE DIAMETER (Inches)	4	4	4	4	4
TOTAL CORE DEPTH (Inches)	4.75	4.25	4.00	4.00	4.50
CORE DRILLED TO	PCC	PCC	Fn Gvl (SE) w/SD	PCC	PCC
SURFACE TYPE (AC/PC)	AC	AC	AC	AC	AC
AC THICKNESS (Inches)	4.75	4.25	4.00	4.00	4.50
PC THICKNESS (Inches)	Not Retrieved	Not Retrieved	---	Not Retrieved	Not Retrieved

* Lane 1 is the left lane in the direction of travel.

The pavement information shown herein was used by the Department for design and estimate purposes.

NEW JERSEY DEPARTMENT OF TRANSPORTATION
PAVEMENT CORE RECORD

PROJECT/ROUTE & SECTION: Route 17: NB (MP 9.3-11.0 & 11.7-16.5) & SB (MP 8.7-17.1)

DRILLER: Patrick Bernard

INSPECTOR: Nirad Shah

COUNTY/TOWNSHIP: Hasbrouck Heights Borough, Hackensack City, Lodi Borough, Maywood, Rochelle Park Township, Paramus Borough and Ridgewood Village, Bergen County

DATE STARTED: 5/20/11 **DATE COMPLETED:** 5/21/11

CORE NUMBER	**36**	**37**	**38**	**39**	**40**
ROUTE	017	017	017	017	017
DIRECTION (N, E, S, W)	S	S	S	S	S
MILE POST (MP or Station)	13.06	12.12	12.05	11.52	11.26
LANE NO. (Left to Right)	3	2	3	2	
SHOULDER (Inside or Outside)					Outside Shoulder
CORE DIAMETER (Inches)	4	4	4	4	4
TOTAL CORE DEPTH (Inches)	8.75	11.25	11.00	4.25	3.75
CORE DRILLED TO	PCC	Fn Gvl (SE)	PCC	PCC	PCC
SURFACE TYPE (AC/PC)	AC	AC	AC	AC	AC
AC THICKNESS (Inches)	8.75	11.25	11.00	4.25	3.75
PC THICKNESS (Inches)	Not Retrieved	---	Not Retrieved	Not Retrieved	Not Retrieved

* Lane 1 is the left lane in the direction of travel.

The pavement information shown herein was used by the Department for design and estimate purposes.

NEW JERSEY DEPARTMENT OF TRANSPORTATION
PAVEMENT CORE RECORD

PROJECT/ROUTE & SECTION: Route 17: NB (MP 9.3-11.0 & 11.7-16.5) & SB (MP 8.7-17.1)

DRILLER: Patrick Bernard

INSPECTOR: Nirad Shah

COUNTY/TOWNSHIP: Hasbrouck Heights Borough, Hackensack City, Lodi Borough, Maywood, Rochelle Park Township, Paramus Borough and Ridgewood Village, Bergen County

DATE STARTED: 5/20/11 **DATE COMPLETED:** 5/21/11

CORE NUMBER	**41**	**42**	**43**	**44**	**45**
ROUTE	017	017	017	017	017
DIRECTION (N, E, S, W)	S	S	S	S	S
MILE POST (MP or Station)	11.20	10.97	10.61	10.30	9.68
LANE NO. (Left to Right)		2	2	2	3
SHOULDER (Inside or Outside)	Outside Shoulder				
CORE DIAMETER (Inches)	4	4	4	4	4
TOTAL CORE DEPTH (Inches)	4.50	7.50	14.50	16.25	6.00
CORE DRILLED TO	PCC	PCC	PCC	PCC	PCC
SURFACE TYPE (AC/PC)	AC	AC	AC	AC	AC
AC THICKNESS (Inches)	4.50	7.50	14.50	16.25	6.00
PC THICKNESS (Inches)	Not Retrieved	Not Retrieved	Not Retrieved	Not Retrieved	Not Retrieved

* Lane 1 is the left lane in the direction of travel.

The pavement information shown herein was used by the Department for design and estimate purposes.

NEW JERSEY DEPARTMENT OF TRANSPORTATION
PAVEMENT CORE RECORD

PROJECT/ROUTE & SECTION: Route 17: NB (MP 9.3-11.0 & 11.7-16.5) & SB (MP 8.7-17.1)

DRILLER: Patrick Bernard

INSPECTOR: Nirad Shah

COUNTY/TOWNSHIP: Hasbrouck Heights Borough, Hackensack City, Lodi Borough, Maywood, Rochelle Park Township, Paramus Borough and Ridgewood Village, Bergen County

DATE STARTED: 5/20/11 **DATE COMPLETED:** 5/21/11

CORE NUMBER	**46**	**47**	**48**	**49**	
ROUTE	017	017	017	017	
DIRECTION (N, E, S, W)	S	S	S	S	
MILE POST (MP or Station)	9.39	9.09	8.94	8.80	
LANE NO. (Left to Right)	3		2	2	
SHOULDER (Inside or Outside)		Outside Shoulder			
CORE DIAMETER (Inches)	4	4	4	4	
TOTAL CORE DEPTH (Inches)	5.50	9.75	7.25	3.75	
CORE DRILLED TO	PCC	PCC	PCC	PCC	
SURFACE TYPE (AC/PC)	AC	AC	AC	AC	
AC THICKNESS (Inches)	5.50	9.75	7.25	3.75	
PC THICKNESS (Inches)	Not Retrieved	Not Retrieved	Not Retrieved	Not Retrieved	

* Lane 1 is the left lane in the direction of travel.

The pavement information shown herein was used by the Department for design and estimate purposes.

3. Existing Plans and As-Builts.

Existing Plans and As-builts used are as follows:

a. Route 2 Section 6
b. Route 2 Section 7
c. Route 4 Section 2AE & Route 17 Sections 2P & 3G
d. Route 17 Sections 2J
e. Route 17 Sections 2P & 3G
f. Route 17 Sections 3B & 5J
g. Route 17 Sections 3H & 5AE
h. Route 17 Sections 4L & 2H
i. Route 17 Section 5C
j. Route 17 Contract No. 010960211

SECTION 104 – SCOPE OF WORK

104.03.04 Contractual Notice

THE SECOND PARAGRAPH IS CHANGED TO:

Immediately provide written notice to the RE of a circumstance that is believed to be a change to the Contract. If notice is not provided on Contractual Notice (Form DC-161), include the following in the initial written notice:

1. A statement that this is a notice of a change.
2. The date when the circumstances believed to be a change were discovered.
3. A detailed and specific statement describing the nature and circumstances of the change.
4. If the change will or could affect costs to the Department.
5. If the change will or could affect Contract Time as specified in 108.11.01.C.

In addition to the hard copy of the notice, email the notice to the RE. It is not necessary to attach listed documents to the email.

104.03.09 Delay Damages

1. Non-Productive Activity.

e. Equipment.

THE FIRST SENTENCE IS CHANGED TO:

If as the result of the delay, equipment cannot be used for any active work, and is directed by the RE to remain on the work site during the delay, the Department will make payment as specified in 104.03.08.7.a.5.

SECTION 105 – CONTROL OF WORK

105.05 WORKING DRAWINGS

THE SECOND PARAGRAPH IS CHANGED TO:

Ensure that working drawing submissions also conform to the Department design manuals and other Department standards for the proposed work. Ensure that working drawings are signed and sealed by a Professional Engineer. After Award, the Department will provide additional formatting information, the number of copies required, and the address of the receiving designated design unit.

105.07.01 Working in the Vicinity of Utilities

A. Initial Notice.

ELECTRIC

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
PSE&G Gas & Electric Delivery Districts
744 Broad Street
Newark, NJ 07102
Mr. L.A. Pannucci, PMP**, Program** Manager**,** Tel. # (973) 430-5135 (Office), Fax # (973) 624-9047
Email: len.pannucci@pseg.com
Mr. Jim Lizer, Senior Engineering Plant Supervisor, Tel. # (201) 330-6582,
Email: james.lizer@pseg.com
325 County Road, Secaucus, NJ 07094

TELEPHONE

VERIZON - NEW JERSEY, INC
6000 Hadley Road
South Plainfield, NJ 07080
Mr. Frank Antisell**,** Manager, **Tel**. # (908) 412-6152, Fax # (908) 753-5460
Email; frank.t.antisell@verizon.com
Ms. Sandra Cruger, Engineer. Tel. # 201-541-9969, Fax # 908-753-5369
Email: Sandra.L.Cruger@verizon.com

GAS

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
PSE&G Gas & Electric Delivery Districts
744 Broad Street
Newark, NJ 07102
Mr. L.A. Pannucci, PMP**, Program** Manager**,** Tel. # (973) 430-5135 (Office), Fax # (973) 624-9047
Email: len.pannucci@pseg.com

WILLIAMS GAS PIPE LINE-- TRANSCO
99 Farber Road
Princeton, NJ. 08540
Mr. Jose Rodriguez, Division Engineer, Tel. # (609) 936-2411
Email: jose.rodriguez@Williams.com

WATER

UNITED WATER NEW JERSEY
700 Kinderkamack Road
Oradell, NJ 07649
Mr. John.Reger. E.I.T., *Supervisor Network Engineering & Hydraulic Modeling*
Tel. # 201-261-5224 XT.4374, Fax # 201-225-5113
E Mail: John.Reger@UnitedWater.com

PASSAIC VALLEY WATER COMMISSION (WATER)
1525 Main Avenue
Clifton, NJ. 07011
Mr.Nerum Malyar, Senior Engineer, Tel: 973-340-4318, Fax # 973-340-4368
Email: nmalyar@pvwc.com

RT 17 RESURFACING
CONTRACT NO. 009113910
BERGEN COUNTY

SANITARY SEWER

BOROUGH OF HASBROUCK HEIGHTS (SANITARY SEWER)
320 Boulevards
Hasbrouck Heights, NJ 07604
Mr. Michael Kronyak, Administrator, Tel. 201-288-0195, Fax # 201-288-6408
Mr. Kenneth J.Job, MS, P.E., L.S. P.P.., Borough Engineer, Tel. # 201-487-8754, Fax. # 201-487-7679
Email: jobandjobce@aol.com
Job & Job Consulting Engineers.

CITY OF HACKENSACK (SANITARY SEWER)
65 Central Avenue
Hackensack, NJ 07601
Mr. John Flannigan, Project Manager, Tel. # (201) 646-7596,
Email. : Flannigan@ Hackensack.org

BOROUGH OF LODI (SANITARY SEWER)
One Memorial Drive, 1st Floor, Room 108
Lodi, NJ 07644
Mr. Brian Palladino, DPW Director, Tel. # 973-365-4068
Email: bpalladino@lodi-nj.org

TOWNSHIP OF ROCHELLE PARK (SANITARY SEWER)
151 W. Passaic Street
Rochelle Park, NJ 07662
Ms. Virginia De Maria, Township Clerk, Tel. 201-587-7730, Fax # 201-556-0581
Mr. Kenneth J.Job, MS, P.E., L.S. P.P.., Borough Engineer, Tel. # 201-487-8754, Fax. # 201-487-7679
Email: jobandjobce@aol.com
Job & Job Consulting Engineers.

BERGEN COUNTY UTILITY AUTHORITY (SANITARY SEWER)
Foot of Mehrhof Road, P.O. Box 9
Little Ferry, NJ 07643
Mr. Eric Andersen, P.E. Chief Engineer / Director of WPC DIV. Tel.# 201-807-8634,Fax.# 201-807-8633
Email: eandersen@bcua.org

BOROUGH OF PARAMUS (SANITARY SEWER)
1 Joekish Square
Paramus, NJ 07652
Mr. Joseph D' Arco, Business Administrator, Tel. 201-265-2100XT. 667, Fax # 201-265-3716
Mr. Guy Piccone, DPW Superintendent, Tel. 201-265-2100 XT. 687, Fax # 201-265-1433
Email: gpiccone@paramusboro.org
Mr. Peter C. Ten Kate, Borough Engineer, Tel. # 201-373-8908, Fax. # 201-641-1831
Email: ptenkate@boswellengineerig .com
Boswell McClave Engineering

VILLAGE OF RIDGEWOOD (WATER & SANITARY SEWER)
131 North Maple Avenue
Ridgewood, NJ 07451
Mr. Christopher J. Rutishauser, P.E., Village Engineer / Director of Public Works, Tel. # (201) 670-5500 XT 239

RAIL ROAD

NEW YORK SUSQUEHANNA & WESTERN RAILWAY (RAIL ROAD)
1 Railroad Avenue
Cooperstown, N.Y. 13326
Mr.Dick Hensel, Vice President of Engineering, Tel. # (607) 547-2555 ext.264
Email: dhensel@nysw.com

B. Locating Existing Facilities.

2.

Bureau of Traffic Operations, North Region (TOCN)
670 River Drive
Elmwood Park, NJ 07407-1347
Telephone: 201-797-3575

3.

Bureau of Electrical Maintenance, North Region
200 Stierli Court
Mt. Arlington, NJ 07856-1322
Telephone: 973-601-6600

C. Protection of Utilities.

Location	Speed	Number Per Day	Time
Within Project Limits	5 mph	1 on Sunday Evenings	N/A

THE SECOND PARAGRAPH IS CHANGED TO:

Protect and support existing Department electrical and ITS facilities and ensure that there is no interruption of service. Use hand tools only while working within two feet of the fiber optic network. At least 30 days before beginning the work, submit a plan to the RE for approval showing the method of support and protection.

THE FOURTH PARAGRAPH IS CHANGED TO:

Access within railroad right-of-way is restricted. Before beginning work within the railroad ROW or on railroad facilities, obtain the railroad's written approval for access, the method of construction, and the schedule of the work. Provide a copy of the submittal and approval to the RE. Comply with the railroad's requirements for working within the railroad right-of-way.

THE FOLLOWING IS ADDED TO THE SIXTH PARAGRAPH

Ensure that the work is performed following the railroad's access and safety restrictions.

105.07.02 Work Performed by Utilities
THE FOLLOWING IS ADDED:

UTILITY WORK TO BE PERFORMED

UNITED WATER NEW JERSEY (WATER)

Existing Facilities:

Water valves

WORK TO BE PERFORMED BY UTILITY

(1) No utility relocation work and no inspection work to be performed by Utility.
(2) Provide all required water valve risers (ring) at no cost to State at job sites prior to resetting By the State contractor.

WORK TO BE PERFORMED BY STATE CONTRACTOR

(1) Reset thirteen (13) W.V. @ various locations as shown on construction plans to meet final grade.

NEW YORK SUSQUEHANNA & WESTERN RAILWAY (RAILROAD)

Existing Facilities

There is an active railroad crossing by NYSW Railway (Lodi Industrial Track), Route 17 NB/SB @ Highway M.P. 9.87 (NB RR M.P.15.03 and SB RR M.P.15.38) within the limit of this project.

WORK TO BE PERFORMED BY RAIL ROAD

No RR relocation work and no RR inspection work to be performed by Rail Road.

RR TRACK OUTAGES

Currently freight train runs on a week day schedule. Check with railroad for updated current train schedule.

SCHEDULE:

The limit of work involved in the Rt. 17 NB/SB project at the RR grade crossings, as per the plan, is within the boundaries of the railroad right-of-way. Railroad requires 14 days notice (Utility) to NEW YORK SUSQUEHANNA & WESTERN RAILWAY (RAIL ROAD) for Track outages or access to Railroad ROW.

WORK TO BE PERFORMED BY STATE CONTRACTOR

Perform resurfacing adjacent to Lodi Industrial RR Track, Highway M.P. 9.87 (NB RR M.P.15.03 and SB RR M.P.15.38)
Notify Mr. Dick Hensel, Vice President of Engineering, Tel. # (607) 547-2555 ext.264
Email: dhensel@nysw.com before performing resurfacing (paving work) adjacent to RR Track.

After resurfacing work is completed the State contractor will be installing “In-kind” railroad stop bars and railroad advance pavement markings on the Route 17 NB & SB approaches in accordance with the Manual on Uniform Traffic Control Devices.

NOTES TO STATE CONTRACTOR

1. Remove Any Debris from RR Track during Resurfacing Construction work.
2. Working around the railroad tracks / railroad property will require Railroad Protective Liability Insurance.
3. Resurface 25 feet on either side of center line of Railroad crossing.
4. Field verify the elevations of existing new replaced roadway finished work to meet existing, as well as maintain a contact with the railroad for train activity when working in the area of the crossing..
5. Discuss work schedules with the owner and if there is to be any train activity.
6. Maintain the existing railroad advance warning sign (W10-1) and "EXEMPT" warning sign (W10-1aP) on the Route17 NB&SB approach in accordance with the Manual on Uniform Traffic Control Devices.

SECTION 106 – CONTROL OF MATERIAL

106.03 FOREIGN MATERIALS
THE FOLLOWING IS ADDED AFTER THE FIRST PARAGRAPH:

For steel and iron products incorporated into the Project, provide a certification from the manufacturer stating the country where the steel or iron product was melted and manufactured including application of coatings which protect or enhance the value of the material. Ensure that 4 copies of the manufacturer's certification are provided with each delivery of steel and iron products. Retain 1 copy and submit 3 copies to the RE. Ensure that the certification includes, materials description, quantity of material represented by the certification, country of manufacture, and notarized signature of a person having legal authority to bind the supplier. If a Certification of Compliance as specified in 106.07 contains a statement regarding the country of manufacture, a separate certification is not necessary.

SECTION 107 – LEGAL RELATIONS

107.04 NEW JERSEY CONTRACTUAL LIABILITY ACT
THE FOURTH PARAGRAPH IS CHANGED TO:

For purposes of determining the date of "completion of the contract" pursuant to N.J.S.A. 59:13-5, "completion of the contract" occurs on the date that the Contractor provides written notice to the Department of Acceptance or conditional Acceptance of the Proposed Final Certificate or the 30th day after the Department issues the Proposed Final Certificate, whichever event occurs first.

107.09 INDEPENDENT CONTRACTOR
THE ENTIRE SUBSECTION IS CHANGED TO:

The relationship of the Contractor to the State is that of an independent contractor. Conduct business consistent with such status. Do not hold out or claim to be an officer or employee of the Department by reason hereof. Do not make a claim, demand, or application to or for the rights or privileges applicable to an officer or employee of the Department, including, but not limited to, Workers Compensation Insurance, unemployment insurance benefits, social security coverage, or retirement membership or credit.

107.12.01 Satisfying the Notice Requirements
THE FOLLOWING IS ADDED TO THE SECOND PARAGRAPH:

Upon request, provide the RE with 3 copies of all documentation submitted in support of the claim.

107.12.02 Steps

3. Step III, Claims Committee.

THE SECOND PARAGRAPH IS CHANGED TO:

The Claims Committee will not review a claim or combination of claims valued less than $250,000 until after the receipt of conditional release as specified in 109.11. If the Contract is 75 percent complete or greater as measured by Contract Time or Total Adjusted Contract Price, the Claims Committee will not review a claim or combination of claims valued more than $250,000 until after receipt of conditional release as specified in 109.11. If the Claims Committee does not review a claim or combination of claims before Completion, the Claims Committee will review the claim or combination of claims at a single session of the Claims Committee after the receipt of the conditional release as specified in 109.11 and all claims have been reviewed at Steps I and II of the Claims Resolution Process. When reviewing a combination of claims, the Claims Committee will not review any individual claim valued less than $20,000.

THE FOLLOWING SUBSECTION IS ADDED:

107.17 COMMUNICATION WITH THE NEWS MEDIA

Do not communicate with the news media or issue a news release without obtaining a prior written approval from the Department.

SECTION 108 – PROSECUTION AND COMPLETION

108.01 SUBCONTRACTING

1. Values and Quantities.

THE FOLLOWING IS ADDED TO FIRST PARAGRAPH

1.

There are no Specialty Items in this Project.

THE THIRD PARAGRAPH IS CHANGED TO:

If a partial quantity of work for a unit price Item is subcontracted, the Department will determine the value of the work subcontracted by multiplying the price of the Item by the quantity of units to be performed by the subcontractor.

THE FOURTH PARAGRAPH IS CHANGED TO:

If only a portion of work of an Item is subcontracted, the Department will determine the value of work subcontracted based on the value of the work subcontracted as indicated in the subcontract agreement and as shown in a breakdown of cost submitted by the Contractor.

108.02 COMMENCEMENT OF WORK

THE SUBPART 4 IN THE FIRST PARAGRAPH IS CHANGED TO:

4. Progress schedule as specified in 153.03

108.06 NIGHT OPERATIONS

2. Visibility Requirements for Workers and Equipment.

THE FIRST PARAGRAPH IS CHANGED TO:

Ensure that workers wear a 360° high-visibility retroreflective safety garment meeting ANSI/ISEA Class 3, Level 2 standards.

108.08 LANE OCCUPANCY CHARGES
THE SECOND PARAGRAPH IS CHANGED TO:

The RE will keep record of each occurrence as well as the cumulative amount of time that a lane is kept closed beyond the lane closure schedule and provide the record to the Contractor. The Department will calculate the lane occupancy charge by multiplying the length of time of the delayed opening, in minutes, by the rate of $10 per minute per lane, unless otherwise specified in the Special Provisions. The total amount per day for the lane occupancy charge that the Department will collect will not exceed $10,000.00.

THE FOLLOWING IS ADDED:

The rate to calculate the Lane Occupancy Charge is as follows:

Description	**Rate**
Route 17 Northbound (Three Travel Lanes)	
Overrun of "Two Lanes Maintained" Time Limits	$10/minute
Overrun of "One Lane Maintained" Time Limits	$60/minute
Route 17 Southbound (Three Travel Lanes)	
Overrun of "Two Lanes Maintained" Time Limits	$70/minute
Overrun of "One Lane Maintained" Time Limits	$90/minute
Route 17 Northbound & Southbound (Two Travel Lanes)	
Overrun of "One Lane Maintained" Time Limits	$30/minute

108.09 MAINTENANCE WITHIN THE PROJECT LIMITS
THE FOLLOWING IS ADDED TO THE FIRST PARAGRAPH:

6. Access to ITS devices and their respective controllers and meter cabinets is maintained throughout the duration of the project.

108.10 CONTRACT TIME

A. Complete all work required for Substantial Completion on or before April 30, 2013.

B. Achieve Completion on or before May 30, 2013.

108.11.01 Extensions to Contract Time

B. Types of Delays.

1. Non-Excusable Delays.
THE FOLLOWING IS ADDED:

For work performed by Utilities, delays up to 30 percent of the estimated duration specified in 105.07.02 are considered non-excusable. The duration includes both the advance notice and the completion of the work by the Utility.

For delays caused by Railroads, delays up to 30 percent of the estimated availability specified in 105.07 are considered non-excusable.

2. Excusable, Non-Compensable Delays.

b. Utilities.
THE FOLLOWING IS ADDED:

For delays caused by Railroads, when the availability to access is reduced by more than 30 percent greater than the estimated availability specified in 105.07.

THE LAST PARAGRAPH IS CHANGED TO:

If approved excusable, non-compensable delays exceed a total of 90 days, the time in excess of 90 days will become excusable and compensable as specified in 108.11.01.B.3.

108.14 DEFAULT AND TERMINATION OF CONTRACTOR'S RIGHT TO PROCEED

THE FOLLOWING IS ADDED AFTER THE 2ND PARAGRAPH:

If the Department directs the Surety to complete the Contract, and the Surety elects to use a completion-contractor to perform the Work, the Surety must promptly submit to the Department a request for approval of the proposed completion-contractor as a subcontractor as per Section 108.01. The Department has the right to reject a request by the Surety to use the Contractor as the completion-contractor, either directly or under the direction of a consultant to the Surety. In addition, the Department has the right to reject a request by the Surety to contract with employees of the Contractor, directly or under the direction of a consultant to the Surety, to complete the Contract. The Department's right to reject contained in this paragraph is based on the sole discretion of the Department.

108.19 COMPLETION AND ACCEPTANCE
THE FOLLOWING IS ADDED:

No Incentive Payment for Early Completion is specified for this project.

108.20 LIQUIDATED DAMAGES

Liquidated damages are as follows:

A. For each day that the Contractor fails to complete the work as specified in Subpart A of Subsection 108.10 of these Special Provisions, for Substantial Completion, the Department will assess liquidated damages in the amount of $5,500.

B. For each day that the Contractor fails to achieve Completion as specified in Subpart B of Subsection 108.10 of these Special Provisions, the Department will assess liquidated damages in the amount of $2,200.

THE FOLLOWING IS ADDED:

When the Contractor may be subjected to more than one rate of liquidated damages established in this Section, the Department will assess liquidated damages at the higher rate.

SECTION 109 – MEASUREMENT AND PAYMENT

109.01 MEASUREMENT OF QUANTITIES
THE SECOND PARAGRAPH IS CHANGED TO:

The Department will designate Items as Measured Items or as Proposal Items by having a suffix of M or P in the Item number respectively. The Department will measure quantities of Measured Items for payment.

109.02 SCOPE OF PAYMENT
THE THIRD SENTENCE OF THE FIRST PARAGRAPH IS CHANGED TO:

The Department will not make additional or separate payment for work or portion of work unless specifically provided for in the "Measurement and Payment" Subsection.

109.07 BONDS POSTED IN LIEU OF RETAINAGES
THE FIRST PARAGRAPH IS CHANGED TO:

The Contractor may deposit negotiable bonds of the State or any of its political subdivisions, which have been approved by the Department, in an escrow account to secure release of all or a portion of the retainage withheld as specified in 109.05. Establish the account under the provisions of an escrow agreement to be entered into between the Contractor, the Department, and a bank located in the State that is an authorized depository with a trust department. Pay the charges of the bank for services rendered according to the terms and conditions of the escrow agreement.

DIVISION 150 – CONTRACT REQUIREMENTS

SECTION 151 – PERFORMANCE BOND AND PAYMENT BOND

151.03.01 Performance Bond and Payment Bond
THE LAST SENTENCE OF THE FIRST PARAGRAPH IS CHANGED TO:

Submit the broker's fees, the certified rate schedule, paid invoices and the report of execution for the bond to the RE.

SECTION 152 – INSURANCE

152.03.01 Owner's and Contractor's Protective Liability Insurance

A. Policy Requirements.
THE FOURTH SENTENCE OF THE FIRST PARAGRAPH IS CHANGED TO:

Ensure that policies are underwritten by companies with a current A.M. Best rating of A- with a Financial Size Category of VII or better.

3. Owner's and Contractor's Protective Liability Insurance.
THE ENTIRE TEXT IS CHANGED TO:

Procure a separate Owner's and Contractor's Protective Liability Insurance Policy with a minimum limit of liability in the amount of $4,000,000 per occurrence as a combined single limit for bodily injury and property damage. Ensure the policy is endorsed to include Severability of Interest/Separation of Insureds clause. Ensure the policy names the State, its officers, employees, and agents as additional insured. Provide documentation from the insurance company that indicates the cost of the Owner's and Contractor's Protective Liability Insurance Policy.

Ensure the policy is endorsed to include per project aggregate.

6. Marine Liability Insurance.
SUBPART 8 IS ADDED:

8. Per project aggregate.

152.03.02 Railroad Protective Liability Insurance
THE FOLLOWING IS ADDED TO THE FIRST PARAGRAPH:

Ensure the policy is endorsed to include per project aggregate.

Procure and maintain insurance coverage for the following railroad(s):

New York Susquehanna & Western Railway Corporation (NYS&W)

It is estimated that less than one percent of the Project cost is located within or adjacent to the railroad right-of-way.

152.03.03 Pollution Liability Insurance
SUBPART 9 IS ADDED: TO THIRD PARAGRAPH

9. Per project aggregate.

152.04 MEASUREMENT AND PAYMENT
THE LAST PARAGRAPH IS CHANGED TO:

The Department will make initial payment for OWNER'S AND CONTRACTOR'S PROTECTIVE LIABILITY INSURANCE, RAILROAD PROTECTIVE LIABILITY INSURANCE, and POLLUTION LIABILITY INSURANCE at the lesser of the bid amount, or actual costs as documented from paid invoices. If the Bid amount is greater than the amount indicated on the documented paid invoices, the Department will make payment for any remainder, up to the Bid amount, with the final monthly Estimate.

SECTION 153 – PROGRESS SCHEDULE

153.03.01 CPM PROGRESS SCHEDULE
THE THIRD PARAGRAPH IS CHANGED TO:

The Contractor may propose alternate staging. Ensure that proposed alternate staging does not interfere with work done by Others without written concurrence from the affected Others. The Department may reject the proposed alternate staging if it causes an increase to the cost of work done by Others. The Contractor is responsible for the cost of changes or additional work required as a result of completing the work according to the proposed alternate staging.

1. Preliminary Schedule Submission.
THE SECOND PARAGRAPH IS CHANGED TO:

The RE may require 3 color paper copies of the preliminary schedule, Gantt Chart, as specified in 153.03.02.2.e, and a network diagram (PERT) printed on 36 × 22-inch plans detailing the activity relationships.

2. Baseline Schedule Submission.
THE LAST SENTENCE OF THE FIRST PARAGRAPH IS CHANGED TO:

The RE may require the Contractor to submit 3 color paper copies of the baseline schedule.

THE SECOND PARAGRAPH PART 3 IS CHANGED TO:

3. The RE may require 3 color paper copies of the tabular reports, as specified in 153.03.02.2, and a printed network diagram (PERT) on 36 × 22-inch sheets detailing the activity relationships.

153.03.02 CPM Progress Schedule Updates
THE LAST PARAGRAPH IS CHANGED TO:

If the project falls behind schedule for nonexcusable delays, so that the schedule indicates that the Work will not be completed by the Completion date, as specified in 108.10, take the necessary steps to improve progress. Under such circumstances, the RE may direct the Contractor to increase the number of shifts, begin overtime operations, work extra days including weekends and holidays, and supplement its construction plant. Furthermore, the RE may require the Contractor to submit for approval a recovery schedule showing how the Contractor proposes to meet the directed acceleration.

2. Tabular Reports.
THE FIRST SENTENCE OF THE FIRST PARAGRAPH IS CHANGED TO:

The RE may require 3 color paper copies of the longest path sort, total float sort, responsibility sort, area sort, and Gantt chart.

153.04 MEASUREMENT AND PAYMENT
THE THIRD PARAGRAPH IS CHANGED TO:

If the Contractor's CPM Progress Schedule update is not approved by the date of the progress meeting for the following update, the Department will assess liquidated damages to recover the Department's increased administrative costs. The Department will assess damages for each delinquent update as follows:

SECTION 155 – CONSTRUCTION FIELD OFFICE

155.03.01 Field Office

4. Communication Equipment.

a. Telephones. Provide _3_ cordless phones with auto-switching.

c. Cell Phones. Provide _6_ cellular phones. Ensure the cellular phone plan provides for unlimited mobile to mobile in-network usage, unlimited push-to-talk/ walkie-talkie usage and an anticipated monthly usage of 900 any-time minutes for each phone. Ensure the phones are on the same plan. Ensure the cellular phone plan has a home rate with no roaming charges within the state. Ensure each cellular phone has the following features:

1. Push to Talk / Walkie-Talkie capable
2. Camera with 1 megapixel picture capability
3. Battery life capable of 180 minutes of continuous use and 72 hours of standby use
4. Equipped with a hands-free headset
5. Base charger and car charger

d. Computer System. Provide a computer system meeting the following requirements:

_4_ computer configurations each meeting the following:

1. Equipped with an Intel Pentium _IV_ processor with Hyper Threading technology having a clock speed of _3.5_ GHz or faster, _4_ GB RAM, _512_ MB Video RAM, _200_ Gigabyte hard drive designated as drive C, one DVD (+/-) Writer Drive, one CD-R Recordable Drive. Ensure the system is USB 2.0 compatible and has at least two front USB ports. Include Keyboard, optical mouse and 2 piece desktop speakers.
2. Wired Router with appropriate number of ports and cables and a print server. Ensure there is at least one wired Ethernet switch.
3. High-speed broad band connection and service with a minimum speed of _3_ Megabytes per second (mbps) with dynamic IP address for the duration of the project.
4. 19 inch or larger Flat Screen LCD monitor with tilt/swivel capabilities.
5. _250_ Megabyte or larger Zip Drive internal or external with backup software for MS-Windows and DOS, and fifteen corresponding formatted data cartridges corresponding to the tape drive size.
6. _1_Flatbed USB version 2.0 or greater Color Scanner with automatic document feed.
7. Uninterruptible power supply (UPS).
8. Surge protector for the entire computer configuration to be used in conjunction with the UPS.
9. Computer workstation, chair, printer stand, and/or table having both appropriate surface and chair height.
10. One can of compressed air and screen cleaning solution every other month of the duration of the contract.

Ensure one computer has a 56K baud data/fax modem. If more than one computer configuration is specified, provide one network interface card for the base computer configuration and hardwire connections between computer configurations as directed by the RE.

Also provide:
_15_ USB _8_ GB Flash/Jump memory drives
_100_ CD-R _700_ MB (or larger) recordable CD's compatible with the CD drive and _100_ recordable DVD's.
_4_ CD/DVD Holder (each holds 50)

_1_ color laser printers and supplies as follows:

1. HP PCL 6 emulation, with a minimum of 192 Megabytes of expanded memory, printer cable, and legal size paper tray.
2. One set of printer ink cartridges every other month for the duration of the construction project for each printer.

Software as follows:

1. Microsoft Windows, latest version with future upgrades for the duration of the entire project. Ensure 1 computer has a Microsoft Windows XP; 32 Bit Operating System for ACES, Extra and Groupwise.
2. Microsoft Office Professional, latest version.
3. Norton's System Works for Windows, latest version, or compatible software package with future upgrades and latest virus patches.
4. Anti-Virus software, latest version with monthly updates for the duration of the contract.
5. Visio Professional Graphics Software for Windows, latest version
6. Primavera Project Management, latest version
7. Adobe Acrobat Professional, latest version, for Scanner

THE THIRD PARAGRAPH IS CHANGED TO:

When the computer system is no longer required by the RE, the Department will remove and destroy the hard drive, and return the computer system to the Contractor. The Department will retain other data storage media.

6. Office Equipment.

2. _1_ digital camera(s). Ensure each digital camera has auto-focus, with rechargeable batteries and charger, _256_MB memory card, USB Memory Card Reader compatible with camera and field office computer, 1.5 inch LCD monitor, _5_ mega pixel resolution, _10_X optical zoom lens, built in flash, image stabilization, computer connections, and a carrying case
3. _1_ video camcorder(s). Ensure each video camcorder is a mini DVD camcorder with _10__ optical zoom, 2" LCD monitor, USB 2.0 compatible and includes USB 2.0 connections.

7. Inspection Equipment.

1. _2_ Calculators with trigonometric capability
2. _2_ Date/ Received stamp and ink pad
3. _1_ Electronic Smart level, 4 foot
4. _1_ Electronic Smart level, 2 foot
5. _6_ Carpenter rulers
6. _2_ Steel tape, 100 feet
7. _2_ Cloth tape, 100 feet
8. _1_ Illuminated measuring wheel
9. _1_ Plumb bob and cord
10. _1_ Line level and cord
11. _2_ Surface thermometer
12. _2_ Concrete thermometer
13. _2_ Digital infrared asphalt thermometer
14. _0_ Direct Tension Indicator (DTI) Feeler Gage, 0.005 inch
15. _0_ Sledge hammer, 8lb
16. _1_ Self leveling laser level with range of 100 feet and an accuracy of ¼ inch per 100 feet
17. _6_ Hard hats - orange, reflectorized hard hats according to ANSI Z89.1.
18. _6_ Safety garments – orange, reflectorized, 360º high visibility safety garments according to ANSI/ISEA Class 3, Level 2 standards. To be replaced yearly for the duration of the contract.
19. _6_ Sets of rain gear with reflective sheeting
20. _6_ Sets of hearing protection with a NRR rating of 22 dB
21. _6_ Sets of eye protection according to ANSI Z87.1

22. _0_ Sets of fall arrest equipment according to ANSII Z359.1 standards consisting of a full body harness, lanyard and anchor.
23. _1_ Light meter - capable of measuring the level of luminance in foot-candles
24. _6_ Lantern flashlight, 6V with monthly battery replacements
25. _0_ Digital Psychrometer
26. _1_ Chain Drag according to ASTM D4580-86
27. _1_ Testing equipment and apparatus conforming to AASHTO T23, T119, T152
28. _6_ Hard Bound Daily Diaries, 5-½" X 8" minimum with one day per page. To be provided yearly for the duration of the contract.
29. _500_ Legal size hanging folders
30. _500_ Legal size manila file folders – three tab

155.03.03 Telephone Service
THIS SUBPART IS CHANGED TO:

Telephone service consists of monthly charges for telephone and cellular phones provided for the field office and materials field laboratory excluding set up charges.

155.04 MEASUREMENT AND PAYMENT
THE THIRD PARAGRAPH IS CHANGED TO:

The Department will make payment for TELEPHONE SERVICE for the actual costs of the charges as evidenced by paid bills submitted within 60 days of receipt from the service provider for telephone and cell phones.

SECTION 157 – CONSTRUCTION LAYOUT AND MONUMENTS

157.03.01 Construction Layout
THE SEVENTH PARAGRAPH IS CHANGED TO:

Provide the Utilities with the layout needed to install relocated utility facilities and coordinate the Work. Ensure that relocated facilities do not conflict with proposed construction, including High Voltage Proximity Act conflicts.

THE FOLLOWING IS ADDED AFTER THE NINTH PARAGRAPH:

For each bridge and sign structure within the Project Limits, provide the RE as-built measurements of the vertical under clearance at each lane line, shoulder line, curb line and edge of pavement line under a structure to the nearest inch. For each bridge structure, provide vertical under clearance measurements at each fascia beam.

157.04 MEASUREMENT AND PAYMENT
THE SECOND PARAGRAPH IS CHANGED TO:

The Department will adjust payment for CONSTRUCTION LAYOUT based on the final contract amount and will calculate as follows:

$$CL = \frac{CL_B \times (C_F - E_F)}{C_O - E_O}$$

Where:
CL = Adjusted payment for CONSTRUCTION LAYOUT.
CL_B = Bid price for CONSTRUCTION LAYOUT.
C_O = Original Contract Price.
C_F = Final Contract Price.
E_F = Total of CL_B and the final cost for PERFORMANCE BOND AND PAYMENT BOND, Incentive/Disincentives for completion/interim completion, and claim settlements.
E_O = Total of CL_B
E_O = Total of CL_B, and PERFORMANCE AND PAYMENT BOND.

SECTION 158 – SOIL EROSION AND SEDIMENT CONTROL AND WATER QUALITY CONTROL

158.03.02 SESC Measures

8. Inlet Filters. Provide Type 1 and Type 2 inlet filters as follows:

a. Type 1.

THE ENTIRE TEXT IS CHANGED TO:

For a new inlet structure without a casting, mold welded steel wire fabric around the inlet walls. Extend the welded steel wire a minimum of 6 inches down each side of the structure. Secure geotextile to the welded wire fabric. Place No. 2 coarse aggregate against the inlet structure to hold the inlet filter in place.

For an inlet structure with a casting and exposed exterior walls, place geotextile under the casting and extend it a minimum of 6 inches below the top of the exposed walls. Place No. 2 coarse aggregate around the drain hole opening.

For an existing inlet structure without exposed exterior walls, place geotextile under the grate and extend the geotextile for a minimum of 6 inches beyond the grate.

For an inlet with a curb piece and without exposed exterior walls, ensure that the opening in the curb piece has a height of 2 inches. If the opening is greater than 2 inches, achieve the 2 inch opening size by wrapping the geotextile around an appropriately sized piece of lumber. Place the lumber against the vertical opening.

19. Oil-Only Emergency Spill Kit.

THE SECOND SENTENCE OF THE FIRST PARAGRAPH IS CHANGED TO:

Include Oil-only Emergency Spill Kit, Type 1 consisting of the following:

SECTION 159 – TRAFFIC CONTROL

159.03.02 Traffic Control Devices

6. Traffic Control Truck with Mounted Crash Cushions.

THE LAST SENTENCE IS CHANGED TO:

Submit drawings to the RE detailing the manner of securing the ballast, signed and sealed by a Professional Engineer, certifying that it is capable of withstanding the impact forces for which the impact attenuator is rated.

159.04 MEASUREMENT AND PAYMENT

THE SECOND PARAGRAPH IS CHANGED TO:

For traffic control devices measured by the linear foot or unit basis that are specified in 159.03.02, the Department will make payment for the maximum quantity in service at one time as required by the Contract. For CONSTRUCTION SIGNS, the Department will make payment for the maximum quantity of specific sign types in service at one time as required by the Contract. If a particular sign type has more than one unique text, each sign with a unique text will be considered to be a specific sign type. The Department will make payment for 50 percent of the Contract bid price for traffic control devices specified in 159.03.02 that are measured on a linear foot, square foot or unit basis upon approved placement. The Department will prorate the balance of payment over the duration of the Contract.

SECTION 160 – PRICE ADJUSTMENTS

160.03.01 Fuel Price Adjustment
THROUGHOUT THIS SUBPART, TABLE 161.03.01-1 IS CHANGED TO TABLE 160.03.01-1

THE THIRD PARAGRAPH IS CHANGED TO:

If the as-built quantity of an Item listed in Table 160.03.01-1 differs from the sum of the quantities in the monthly Estimates, and the as-built quantity cannot be readily distributed among the months that the Item listed in Table 160.03.01-1 was constructed, then the Department will determine fuel price adjustment by distributing the difference in the same proportion as the Item's monthly Estimate quantity is to the total of the Item's monthly estimates.

THE 13 TH AND 15 TH LINE IN THE TABLE 160.03.01-1 IS CHANGED TO:

SOIL AGGREGATE BASE COURSE, ___ " THICK	1 Gallon per Cubic Yard
DENSE-GRADED AGGREGATE BASE COURSE, ___ " THICK	1 Gallon per Cubic Yard

THE 25 TH LINE IN THE TABLE 160.03.01-1 IS CHANGED TO:

HOT MIX ASPHALT ___ ___ ___ BASE COURSE	2.50 Gallons per Ton

THE FOLLOWING ARE ADDED TO TABLE 160.03.01-1

Items	**Fuel Usage Factor**
NON-VEGETATIVE SURFACE, HOT MIX ASPHALT	2.50 Gallons per Ton
COLOR-COATED NON-VEGETATIVE SURFACE, HOT MIX ASPHALT	2.50 Gallons per Ton

160.03.02 Asphalt Price Adjustment
NOTE 1 OF THE THIRD PARAGRAPH IS CHANGED TO:

1. The Department will determine the weight of asphalt binder for price adjustment by multiplying the percentage of new asphalt binder in the approved job mix formula by the weight of the item containing asphalt binder. If a Hot Mix Asphalt item has a payment unit other than ton, the Department will apply an appropriate conversion factor to determine the number of tons used.

THE FOURTH PARAGRAPH IS CHANGED TO:

$$A = B \times [(MA - BA)/BA] \times C \times M \times G$$

Where:
A = Asphalt Price Adjustment
B = Bid Price for Tack Coat/Prime Coat
MA = Monthly Asphalt Price Index
BA = Basic Asphalt Price Index
C = Petroleum Content of the Tack Coat and Prime Coat in Percent by Volume:
Use 100% for cutbacks and Tack Coat 64-22
60% for Polymer Modified Tack Coat
60% for RS or similar type emulsions
M = Percentage of Bid Price Applicable to Materials Only: Use 82%
G = Gallons of Tack Coat and Prime Coat Furnished and Applied

DIVISION 200 – EARTHWORK

SECTION 201 – CLEARING SITE

201.04 MEASUREMENT AND PAYMENT
THE FOLLOWING IS ADDED:

The Department will not make payment for the Item CLEARING SITE in excess of $60,000 until Completion.

DIVISION 400 – PAVEMENTS

SECTION 401 – HOT MIX ASPHALT (HMA) COURSES

401.02.01 Materials
EMULSIFIED ASPHALT UNDER TACK COAT IS REVISED TO:

Emulsified Asphalt, Grade RS-1, CRS-1, SS-1, SS-1h, Grade CSS-1 or CSS-1h 902.01.03

401.02.02 Equipment
THE LAST PARAGRAPH IS CHANGED TO:

When an MTV is used, install a paver hopper insert with a minimum capacity of 14 tons in the hopper of the HMA paver.

401.03.01 Preparing Existing Pavement

A. Milling of HMA.

Stage	Max. time interval allowed
Various	0 hours

THE FOLLOWING IS ADDED AFTER THE FOURTH PARAGRAPH:

Sawcut at the limit of paving in driveways and at other limits requiring a neat edge between new and existing HMA.

D. Repairing HMA Pavement.
THE ENTIRE TEXT IS CHANGED TO:

If potholes are discovered, notify the RE immediately. The RE may immediately direct repairs of small areas. The RE may require further evaluation of a large area to determine the need for additional milling and paving.

Sawcut existing HMA pavement to a maximum depth of 10 inches, or to the full depth of bound layers, whichever is less. Sawcut lines parallel and perpendicular to the roadway baseline and 3 inches away, at the closest point, from the damaged area to be repaired.

Remove damaged and loose material to a depth of at least 3 and no more than 10 inches below the level of milling within the boundary of the sawcuts to form rectangular openings with vertical sides. Shape and compact the underlying surface to produce a firm, level base. Ensure that the remaining pavement is not damaged.

Apply polymerized joint adhesive or tack coat to the vertical surfaces of the openings. Spread and grade HMA in the opening as directed by the RE. Ensure that the temperature of the HMA when placed is at least 250 °F, and compact as specified in 401.03.03.F. Compact areas not accessible to rollers with a flat face compactor. Compact until the top of the patch is flush with the adjacent pavement surface.

Reuse removed material as specified in 202.03.07.A.

401.03.02 Tack Coat and Prime Coat
TABLE 401.03.02-1 IS CHANGED TO:

Table 401.03.02-1 Tack Coat Application

Material	Spraying Temp, °F	Gallons per Square Yard	Season
Cut-Back Asphalt:			
RC-70	120 to 190	0.05 to 0.15	Oct 15 to Apr 15
Emulsified Asphalt:			
RS-1	70 to 140	0.05 to 0.15	All year
CRS-1	125 to 185	0.05 to 0.15	All year
SS-1, SS-1h	70 to 140	0.05 to 0.15	All year
CSS-1, CSS-1h	70 to 140	0.05 to 0.15	All year

TABLE 401.03.02-2 IS CHANGED TO:

Table 401.03.02-2 Prime Coat Application

Cut-Back Asphalt	Spraying Temp, °F	Gallons per Square Yard	Season
MC-30	85 to 150	0.1 to 0.5	Oct 15 to Apr 15
MC-70	120 to 190	0.1 to 0.5	Oct 15 to Apr 15
Emulsified Asphalt:			
CSS-1	70 to 140	0.1 to 0.50	All year

401.03.03 HMA Courses

D. Transportation and Delivery of HMA.
THE FIRST PARAGRAPH IS CHANGED TO:

Deliver HMA using HMA trucks in sufficient quantities and at such intervals to allow continuous placement of the material. Do not allow trucks to leave the plant within 1 hour of sunset unless nighttime lighting is provided as specified in 108.06. The RE will reject HMA if the HMA trucks do not meet the requirements specified in 1009.02. The RE will suspend construction operations if the Contractor fails to maintain a continuous paving operation. Before the truck leaves the plant, obtain a weigh ticket from a fully automatic scale. Before unloading, submit for each truckload a legible weigh ticket that includes the following:

1. Name and location of the HMA plant.
2. Project title.
3. Load time and date.
4. Truck number.
5. Mix designation.
6. Plant lot number.
7. Tare, gross, and net weight.

E. Spreading and Grading.

THE THIRD PARAGRAPH IS CHANGED TO:

Use an MTV for the construction of intermediate and surface course in the traveled way. Ensure that the MTV independently delivers HMA from the HMA trucks to the HMA paver. Operate the MTV to ensure that the axle loading does not damage structures, roadway, or other infrastructure.

H. Air Void Requirements.

THE FOLLOWING IS ADDED AFTER THE THIRD PARAGAPH:

If areas of existing shoulders are found to be insufficient to support the proposed HMA pavement and the required compaction cannot be achieved, notify the RE immediately. The RE may either direct additional milling and paving to provide a suitable base to pave the proposed HMA or waive coring and air void requirements in such shoulder areas.

J. Ride Quality Requirements.

THIS ENTIRE SUBPART IS CHANGED TO:

The Department will evaluate the final riding surface using the International Roughness Index (IRI) according to ASTM E 1926. The Department will use the measured IRI to compute the appropriate pay adjustment (PA). The PA will be positive for superior quality work or negative for inferior quality work.

The Department will calculate the PA as specified in Table 401.03.03-7(A) and will base PA on lots of 0.01 mile length for each lane, ramp, and shoulder and 0.005 mile for each overlaid bridge structure.

1. **Smoothness Measurement.** The Department will test the longitudinal profile of the final riding surface for ride quality with a Class 1 Inertial Profiling System according to AASHTO MP 11. The Department will not measure locations where the traffic striping includes turn lanes that cause the through traffic lane to cross over a longitudinally paved joint. Ramps and lanes such as acceleration and deceleration lanes of less than 1000′ of continuous through treatment will not be measured. If project conditions preclude the use of the Class 1 Inertial Profiling System, the Department will use a Class 1 walking profiler or lightweight profiler.

   The Department will test the full extent of each wheel path of each lane in the longitudinal direction of travel. The wheel path is defined as being located approximately 3 feet on each side of the centerline of the lane and extending for the full length of the lane. For the purposes of this specification, lanes are defined by striping.

   The IRI value reported for each lot is the average of 3 runs of each wheel path, unless otherwise directed by the Department.

2. **Control Testing.** Perform control testing during material placement to ensure compliance with the ride quality requirements specified in Table 401.03.03-7(A).

3. **Preparation for IRI Testing.** Provide traffic control when the Department performs IRI testing. Perform mechanical sweeping of the surface before IRI testing. To facilitate auto triggering on laser profilers, place a single line of preformed traffic marking tape perpendicular to the roadway baseline 300 feet before the beginning and after the end of each lane, shoulder, and ramp to be tested or at the direction of the Department. Submit the actual stationing for each traffic marking tape location to the RE.

4. **Acceptance.** The Department will determine acceptance and provide PA based on the following:

   a. Pay Adjustment. The pay equations in Table 401.03.03-7(A) express the PA in dollars per lot of 0.01 mile and 0.005 mile respectively. The number of lots for final pay adjustment will be reduced by the number of lots representative of a length equal to the total length of the impediments that are present within the areas to be tested. Lots excluded from final PA will be those with the highest recorded IRI numbers for respective roadway and bridge deck segments. The number of lots to be excluded for each segment is shown in Table 401.03.03-7(A).

Impediments include the following:

1. Metal impediments, such as utility covers, manholes, catch basins and inlets, located in the lane and in shoulders within 5 LF of the lane. The exclusion length for metal impediments is 20 LF each.

2. Transverse joints that separate the new pavement from an existing pavement, intersections, railroad crossings, and other features in the pavement deemed by the designer to be a potential impediment to achieving a smooth ride quality. The exclusion length is the length of the feature plus 10 LF before and 10 LF after each feature.

3. Bridge decks, approach slabs and transition slabs on structures which are not overlaid.

b. Removal and Replacement. If the final IRI is greater than the RRV, remove and replace the lot. Replacement work is subject to the same requirements as the initial work.

If less than 8 percent of paving lots exceeds the RRV, submit a plan for corrective action. If the corrective action plan is not approved by the RE, remove and replace the designated lots. If the corrective action plan is approved and the lots are reworked, the lots are subject to the requirements of section 401.03.03.J Ride Quality Requirements except the lots are not eligible for positive PA. The RE may allow the lots to remain in place and apply the pay adjustment as computed in Table 401.03.03-7(A).

401.03.05 Core Samples
THE LAST SENTENCE OF THE 2ND PARAGRAPH IS CHANGED TO THE FOLLOWING:

Apply an even coating of tack coat to sides of the hole. Place HMA in maximum lifts of 4 inches in the hole and compact each lift. Ensure that the final surface is 1/4 inch above the surrounding pavement surface.

401.04 MEASUREMENT AND PAYMENT
THE FOLLOWING IS ADDED:

The Department will make a payment adjustment for HMA air void quality by the following formula:

Pay Adjustment = Q x BP x PPA

Where:
BP = Bid Price
Q= Air Void Lot Quantity
PPA= air void PPA as specified in 401.03.03H.

The Department will make a payment adjustment for HMA thickness quality by the following formula:

Pay Adjustment = Q x BP x PPA

Where:
BP = Bid Price
Q= Thickness Lot Quantity
PPA= thickness PPA as specified in 401.03.03I

The Department will make a payment adjustment for HMA ride quality, as specified in 401.03.03J.

SECTION 404 – STONE MATRIX ASPHALT (SMA)

404.03.01 SMA

H. Air Void Requirements.
THIS PART IS CHANGED TO:

Drill cores as specified in 401.03.05.

Mainline lots are defined as the area covered by a day's paving production of the same job mixed formula between 1000 and 4000 tons for the traveled way and auxiliary lanes. The RE will combine daily production areas less than 1000 tons with previous or subsequent production areas to meet the minimum lot requirements. When the maximum lot requirement is exceeded in a day's production, the RE will divide the area of HMA placed into 2 lots with approximately equal areas.

Ramp pavement lots are defined as approximately 10,000 square yards of pavement in ramps. The RE may combine ramps with less than the minimum area into a single lot. If 2 or more ramps are included in a single lot, the RE will require additional cores to ensure that at least 1 core is taken from each ramp.

Other pavement lots are defined as approximately 10,000 square yards of pavement in shoulders and other undefined areas.

The ME will calculate the percent defective (PD) as the percentage of the lot outside the acceptable range of 2 percent air voids to 7 percent air voids. The acceptable quality limit is 10 percent defective. For lots in which PD < 10, the Department will award a positive pay adjustment. For lots in which PD > 10, the Department will assess a negative pay adjustment.

The ME will determine air voids from 5 cores taken from each lot in random locations. The ME will determine air voids of cores from the values for the maximum specific gravity of the mix and the bulk specific gravity of the core. The ME will determine the maximum specific gravity of the mix according to NJDOT B-3 and AASHTO T 209, except that minimum sample size may be waived in order to use a 6-inch diameter core sample. The ME will determine the bulk specific gravity of the compacted mixture by testing each core according to AASHTO T 331.

The ME will calculate pay adjustments based on the following:

1. **Sample Mean ($\overline{X}$) and Standard Deviation (S) of the N Test Results (X_1, X_2,..., X_N).**

$$\overline{X} = \frac{(X_1 + X_2 + ... + X_N)}{N}$$

$$S = \sqrt{\frac{(X_1 - \overline{X})^2 + (X_2 - \overline{X})^2 + ... + (X_N - \overline{X})^2}{N - 1}}$$

2. **Quality Index (Q).**

$$Q_L = \frac{(\overline{X} - 2.0)}{S}$$

$$Q_U = \frac{(7.0 - \overline{X})}{S}$$

3. **Percent Defective (PD).** Using NJDOT ST for the appropriate sample size, the Department will determine PD_L and PD_U associated with Q_L and Q_U, respectively. $PD = PD_L + PD_U$

4. **Percent Pay Adjustment (PPA).** Calculate the PPA for traveled way and ramp lots as specified in Table 401.03.03-3.

Table 404.03.01-1 PPA for Mainline Lots and Ramp Lots

	Quality	PPA
Surface	PD < 10	PPA = 4 – (0.4 PD)
	10 ≤ PD < 30	PPA = 1 – (0.1 PD)
	PD ≥ 30	PPA = 40 – (1.4 PD)
Intermediate and Base	PD < 30	PPA = 1 – (0.1 PD)
	PD ≥ 30	PPA = 40 – (1.4 PD)

Calculate the PPA for other pavement lots as specified in Table 401.03.03-4.

Table 404.03.01-2 PPA for Other Pavement Lots

	Quality	PPA
All Courses	PD < 50	PPA = 1 – (0.1 PD)
	PD ≥ 50	PPA = 92 – (1.92 PD)

5. **Outlier Detection.** The ME will screen all acceptance cores for outliers using a statistically valid procedure. If an outlier is detected, replace that core by taking an additional core at the same offset and within 5 feet of the original station. The following procedure applies only for a sample size of 5.

    1. The ME will arrange the 5 core results in ascending order, in which X_1 represents the smallest value and X_5 represents the largest value.
    2. If X_5 is suspected of being an outlier, the ME will calculate:

$$R = \frac{X_5 - X_4}{X_5 - X_1}$$

    3. If X_1 is suspected of being an outlier, the ME will calculate:

$$R = \frac{X_2 - X_1}{X_5 - X_1}$$

    4. If $R > 0.642$, the value is judged to be statistically significant and the core is excluded.

6. **Retest.** If the initial series of 5 cores produces a percent defective value of PD ≥ 30 for mainline or ramp lots, or PD ≥ 50 for other pavement lots, the Contractor may elect to take an additional set of 5 cores at random locations chosen by the ME. Take the additional cores within 15 days of receipt of the initial core results. If the additional cores are not taken within the 15 days, the ME will use the initial core results to determine the PPA. If the additional cores are taken, the ME will recalculate the PPA using the combined results from the 10 cores.

7. **Removal and Replacement.** If the final lot PD ≥ 75 (based on the combined set of 10 cores or 5 cores if the Contractor does not take additional cores), remove and replace the lot and all overlying work. The replacement work is subject to the same requirements as the initial work.

404.04 MEASUREMENT AND PAYMENT
THE FOLLOWING IS ADDED:

The Department will make a payment adjustment for HMA air void quality by the following formula:

Pay Adjustment = Q x BP x PPA

Where:
BP = Bid Price
Q= Air Void Lot Quantity
PPA= air void PPA as specified in 401.03.03H.

The Department will make a payment adjustment for HMA thickness quality by the following formula:

Pay Adjustment = Q x BP x PPA

Where:
BP = Bid Price
Q= Thickness Lot Quantity
PPA= thickness PPA as specified in 401.03.03I

The Department will make a payment adjustment for HMA ride quality, as specified in 401.03.03J

THE FOLLOWING SECTION IS ADDED TO DIVISION 400:

SECTION 406 – HIGH PERFORMANCE THIN OVERLAY (HPTO)

406.01 DESCRIPTION

This Section describes the requirements for constructing high performance thin overlay (HPTO).

406.02 MATERIALS

406.02.01 Materials

Provide materials as specified:

Tack Coat:
Emulsified Asphalt, Grade RS-1, SS-1, SS-1h, Grade CSS-1 or CSS-1h 902.01.03
HPTO 902.08

406.02.02 Equipment

Provide equipment as specified:

Materials Transfer Vehicle (MTV)..... 1003.01
HMA Paver..... 1003.03
Ultra-Thin Paver..... 1003.04
HMA Compactor..... 1003.05
HMA Plant 1009.01
HMA Trucks..... 1009.02

406.03 CONSTRUCTION

406.03.01 High Performance Thin Overlay (HPTO)

A. Paving Plan. At least 20 days before the start of placing the HPTO, submit a detailed plan of operation to the RE for approval as specified in 401.03.03.A.

B. Weather Limitations. If within the 3 hours before paving the National Weather Service locally forecasts a 50 percent chance or greater of precipitation during the scheduled placement, postpone the placement of HPTO. Do not place HPTO if it is precipitating and do not allow trucks to leave the plant when precipitation is imminent. The Contractor may resume paving operations when the chance of precipitation is less than 50 percent and the surface is dry.

Do not pave if the surface temperature of the underlying pavement is below 50 °F.

C. Test Strip. At least 14 days prior to production of the HPTO, construct a test strip as specified in 401.03.03.C except for the allowance to continue paving. Submit test strip results to the RE. The RE will analyze the test strip results in conjunction with the ME's results from the HMA plant to approve the test strip. Do not proceed with production paving until receiving written permission from the RE.

If paving HPTO only on a bridge deck, then the test strip is not required.

D. Transportation and Delivery of HMA. Transport and deliver HMA as specified in 401.03.03.D.

E. Spreading and Grading. Do not start paving of the HPTO until the RE has approved the underlying surface. Apply tack coat as specified in 401.03.02. Place HPTO at the laydown temperature recommended by the supplier of the asphalt binder or the supplier of the asphalt modifier without exceeding 330 ºF maximum discharge temperature. Spread and grade HPTO as specified in 401.03.03.E. Do not exceed the maximum lift thickness of 1 ¼".

F. Compacting. Compact as specified in 401.03.03.F. If vibratory compaction causes aggregate breakdown, forces liquid asphalt to the surface or creates a surface with undesirable ride quality, then operate rollers in static mode only. If compacting HPTO on a bridge deck, then operate rollers in static mode only.

G. Opening to Traffic. Remove loose material from the traveled way before opening to traffic. Do not allow construction equipment or traffic on the HPTO until the mat cools to a temperature of less than 140 °F.

H. Air Void Requirements on Roadway. Mainline lots are defined as the area covered by a day's paving production of the same job mixed formula between 500 and 2000 tons for the traveled way and auxiliary lanes. The RE will combine daily production areas less than 500 tons with previous or subsequent production areas to meet the minimum lot requirements. When the maximum lot requirement is exceeded in a day's production, the RE may divide the area of HMA placed into 2 lots with approximately equal areas.

Ramp pavement lots are defined as approximately 10,000 square yards of pavement in ramps. The RE may combine ramps with less than the minimum area into a single lot. If 2 or more ramps are included in a single lot, the RE will require additional cores to ensure that at least 1 core is taken from each ramp.

Other pavement lots are defined as approximately 10,000 square yards of pavement in shoulders and other undefined areas.

The ME will calculate the percent defective (PD) as the percentage of the lot outside the acceptable range of 2 percent air voids to 7 percent air voids. The acceptable quality limit is 10 percent defective. For lots in which PD<10, the Department will award a positive pay adjustment. For lots in which PD > 10, the Department will assess a negative pay adjustment.

The ME will determine air voids from 5 cores taken from each lot in random locations. The ME will determine air voids of cores from the values for the maximum specific gravity of the mix and the bulk specific gravity of the core. The ME will determine the maximum specific gravity of the mix according to NJDOT B-3 and AASHTO T 209, except that minimum sample size may be waived in order to use a 6-inch diameter core sample. The ME will determine the bulk specific gravity of the compacted mixture by testing each core according to AASHTO T 166.

The ME will calculate pay adjustments based on the following:

1. Sample Mean ($\overline{X}$) and Standard Deviation (S) of the N Test Results (X1, X2,..., XN).

$$\overline{X} = \frac{(X_1 + X_2 + ... + X_N)}{N}$$

$$S = \sqrt{\frac{(X_1 - \overline{X})^2 + (X_2 - \overline{X})^2 + ... + (X_N - \overline{X})^2}{N - 1}}$$

2. Quality Index (Q).

$$Q_L = \frac{(\overline{X} - 2.0)}{S}$$

$$Q_U = \frac{(7.0 - \overline{X})}{S}$$

3. Percent Defective (PD). Using NJDOT ST for the appropriate sample size, the Department will determine PD_L and PD_U associated with Q_L and Q_U, respectively. $PD = PD_L + PD_U$

4. **Percent Pay Adjustment (PPA).** Calculate the PPA for traveled way and ramp lots as specified in Table 401.03.03-3.

Table 406.03.01-1 PPA for Mainline Lots and Ramp Lots

	Quality	PPA
Surface	PD < 10	PPA = 4 – (0.4 PD)
	10 ≤ PD < 30	PPA = 1 – (0.1 PD)
	PD ≥ 30	PPA = 40 – (1.4 PD)
Intermediate and Base	PD < 30	PPA = 1 – (0.1 PD)
	PD ≥ 30	PPA = 40 – (1.4 PD)

Calculate the PPA for other pavement lots as specified in Table 401.03.03-4.

Table 406.03.01-2 PPA for Other Pavement Lots

	Quality	PPA
All Courses	PD < 50	PPA = 1 – (0.1 PD)
	PD ≥ 50	PPA = 92 – (1.92 PD)

5. **Outlier Detection.** The ME will screen all acceptance cores for outliers using a statistically valid procedure. If an outlier is detected, replace that core by taking an additional core at the same offset and within 5 feet of the original station. The following procedure applies only for a sample size of 5.

    1. The ME will arrange the 5 core results in ascending order, in which X1 represents the smallest value and X5 represents the largest value.
    2. If X5 is suspected of being an outlier, the ME will calculate:

$$R = \frac{X_5 - X_4}{X_5 - X_1}$$

    3. If X1 is suspected of being an outlier, the ME will calculate:

$$R = \frac{X_2 - X_1}{X_5 - X_1}$$

    4. If R > 0.642, the value is judged to be statistically significant and the core is excluded.

6. **Retest.** If the initial series of 5 cores produces a percent defective value of PD ≥ 30 for mainline or ramp lots, or PD ≥ 50 for other pavement lots, the Contractor may elect to take an additional set of 5 cores at random locations chosen by the ME. Take the additional cores within 15 days of receipt of the initial core results. If the additional cores are not taken within the 15 days, the ME will use the initial core results to determine the PPA. If the additional cores are taken, the ME will recalculate the PPA using the combined results from the 10 cores.

7. **Removal and Replacement.** If the final lot PD ≥ 75 (based on the combined set of 10 cores or 5 cores if the Contractor does not take additional cores), remove and replace the lot and all overlying work. The replacement work is subject to the same requirements as the initial work.

I. Air Void Requirements on Bridge Deck. The RE may waive the coring of HPTO constructed on a bridge deck or may require that the Contractor to test bridge decks with the thin lift nuclear density gauge. If required by RE, perform nuclear density gauge testing according to ASTM D 2950 at 5 random locations per bridge deck. Use the maximum specific gravity determined at the HMA plant according to AASHTO T 209 to determine percent air voids. If the average air voids for the bridge deck are 8 percent or greater, the RE will require a revised paving plan for any subsequent bridge deck placement of HPTO and may require the HPTO to be removed and replaced.

J. Ride Quality Requirements. The Department will evaluate the HPTO as specified in 401.03.03.J.

406.04 MEASUREMENT AND PAYMENT

The Department will measure and make payment for Items as follows:

Item	*Pay Unit*
HIGH PERFORMANCE THIN OVERLAY	TON

The Department will measure HIGH PERFORMANCE THIN OVERLAY by the ton as indicated on the certified weigh tickets, excluding unused material.

The Department will make payment for TACK COAT as specified in 401.04.

The Department will make payment for CORE SAMPLES, HOT MIX ASPHALT as specified in 401.04.

DIVISION 450 – CONCRETE PAVEMENT REHABILITATION

SECTION 453 – FULL DEPTH CONCRETE PAVEMENT REPAIR

453.03.01 Full Depth Repair Using Concrete

C. Setting Forms, Joint Ties, and Dowels.

THE THIRD SENTENCE OF THE SEVENTH PARAGRAPH IS CHANGED TO:

Slowly withdraw the tube as the hole is filled.

DIVISION 550 – STRUCTURE REHABILITATION

SECTION 551 – BRIDGE DECK REHABILITATION

551.01 DESCRIPTION
THE FIRST PARAGRAPH IS CHANGED TO:

This section describes the requirements for repairing or scarifying existing concrete bridge decks and reconstructing abutment headers

551.02.01 Materials
THE FOLLOWING IS ADDED:

Corrosion Inhibitor Admixture 903.02.05

Use quick-setting patch material specified in 903.07.

551.03 CONSTRUCTION

551.03.01 Repair of Concrete Deck
THE FOLLOWING SUBPARTS ARE ADDED:

E. Header Reconstruction.

1. **Sawcut and Removal.**

   Remove concrete from areas of existing abutment headers and pilasters to be reconstructed to the limits shown on the Plans. Ensure that the remaining concrete is not damaged and that the reinforcement that is to remain is not damaged or debonded during concrete removal. The Contractor may remove concrete with power chipping or hand tools. Do not use pneumatic hammers heavier than 30 pounds (exclusive of bit) when demolishing concrete with 6 inches of existing concrete that is to remain.

   Submit technical data sheets for the proposed pneumatic hammers and concrete saws to the RE for approval.

2. **Reinforcing Steel.** Clean existing reinforcing steel that is to remain by sandblasting, waterblasting, or wire brushing. Cut and bend existing reinforcing steel as indicated on the Plans in accordance with 504.03.01. Core drill holes in existing concrete for the installation of new reinforcing steel that is to be drilled and grouted in place. The diameter, depth and preparation of the core drilled holes shall be in accordance with the epoxy grout manfacturer's specifications for the size of reinforcing bar being installed. Locate existing reinforcing steel with a pachometer, or other method approved by the RE, prior to coring holes for embedment of new reinforcing steel. Position holes to avoid existing reinforcing steel. Stop drilling immediately if existing reinforcing steel is encountered, and relocate the hole to clear the reinforcement.

   Holes shall be surface dry and all foreign and loose materials shall be removed from the holes immediately prior to grout placement. Reinforcing bars shall be clean and dry prior to insertion into the grouted holes. Place the epoxy grout and install the reinforcing bar in accordance with the grout manufacturer's specifications.

   Place all new reinforcing steel as specified in 504.03.01.

3. **Reconstruction.** Set form work and reconstruct the abutment headers, including pilasters, as indicated on the Plans. Install forms and falswork and place concrete as specified in 504.03.02.

551.04 MEASUREMENT AND PAYMENT
THE FOLLOWING ITEM IS ADDED:

Item	*Pay Unit*
HEADER RECONSTRUCTION	LINEAR FOOT

THE FOLLOWING IS ADDED:

SECTION 555 – BRIDGE DECK ASPHALT OVERLAYS

555.01 DESCRIPTION

This Section describes the requirements for constructing bridge deck waterproof surface course (BDWCS) and retrofit strip seal joint system.

555.02 MATERIALS

555.02.01 Materials

Tack Coat 64-22, PG 64-22 ..... 902.01.01
Tack Coat:
Cut-Back Asphalt, Grade RC-70 ..... 902.01.02
Emulsified Asphalt, Grade RS-1, SS-1, SS-1h, Grade CSS-1 or CSS-1h 902.01.03
Joint Sealer, Hot Poured 914.02
Polymerized Joint Adhesive 914.03

A. BDWSC. Provide BDWSC mixture that is produced at an HMA plant that is listed on the QPL and meets the requirements specified in 1009.01. Ensure that the BDWSC mixture meets the following requirements:

1. Composition of Mixtures. Composition of the mixture for BDWSC is coarse aggregate, fine aggregate, and asphalt binder, and may also include mineral filler and crumb rubber. Do not use Reclaimed Asphalt Pavement (RAP), Ground Bituminous Shingle Material, Remediated Petroleum Contaminated Soil Aggregate, or Crushed Recycled Container Glass (CRCG) in BDWSC.

Use an asphalt binder that is storage-stable, pre-blended, homogeneous, polymer modified asphalt cement using Styrene-Butadiene (SB), Styrene-Butadiene-Styrene (SBS), or Styrene-Butadiene-Rubber (SBR) formulations. Modified binders that graded out as a PG 82-34 were found to be adequate to produce mixtures that pass the mixture performance tests. Similar modified asphalts that are at least a PG 76-28 and that produce mixtures that meet the mixture performance tests are permitted. Alternately, the Contractor may use a concentrated thermoplastic polymeric asphalt modifier, integrated during the hot mix asphalt mixing process.

Use coarse aggregate that conforms to 901.05.01 and is classified as argillite, gneiss, granite, quartzite, or trap rock as defined in 901.03.01. Use fine aggregate that is stone sand as specified in 901.05.02 and has an uncompacted void content of at least 45 percent when tested according to AASHTO T 304, Method A. In addition, ensure that the minimum sand equivalent is 45 percent when tested according to AASHTO T 176. Ensure that mineral filler, if used, conforms to 901.05.03.

2. Mix Design. At least 45 days before initial production, submit a JMF for the BDWSC on forms supplied by the Department. Include a statement naming the source of each component and a report confirming the results meet the criteria specified in Tables 555.02.01-1 and 555.02.01-2. Establish the percentage of dry weight of aggregate passing each required sieve size and an optimum percentage of asphalt binder based upon the weight of the total mix. Determine the optimum percentage of asphalt binder according to AASHTO R 35 and M 323 with an N_{des} of 50 gyrations. Before maximum specific gravity testing or compaction of specimens, condition the mix for 2 hours according to the requirements for conditioning for volumetric mix design in AASHTO R 30, Section 7.1. If the absorption of the combined aggregate is more than 1.5 percent according to AASHTO T 84 and T 85, short term condition the mix for 4 hours according to AASHTO R 30,

Section 7.2 prior to compaction of specimens (AASHTO T 312) and determination of maximum specific gravity (AASHTO T 209). Ensure that the JMF is within the master range specified in, Table 555.02.01-1.

Ensure that the mixture meets a minimum tensile strength ratio (TSR) of 90 percent when tested according to AASHTO T 283 with the following exceptions:

1. Before compaction, condition the mixture for 2 hours according to AASHTO R 30 Section 7.1.
2. Compact specimens with 40 gyrations according to AASHTO T 312.
3. Extrude specimens as soon as possible without damaging.
4. Use AASHTO T 269 to determine void content.
5. Record the void content of the specimens.
6. If less than 55 percent saturation is achieved, the procedure does not need to be repeated, unless the difference in tensile strength between duplicate specimens is greater than 25 pounds per square inch.
7. If visual stripping is detected, modify or readjust the mix.

For each mix design, submit 3 gyratory specimens and one loose sample corresponding to the composition of the JMF, including the design asphalt content, with the mix design forms. The ME will use these samples for verification of the properties of the job mix formula. Compact the specimens to the design number of gyrations (N_{des}). To be acceptable, all three gyratory specimens must comply with the gradation and asphalt content requirements in Table 555.02.01-1 and with the control requirements in Table 555.02.01-2. The ME reserves the right to be present at the time of molding the gyratory specimens.

In addition, submit 6 gyratory specimens and two (2) 5-gallon buckets of loose mix to the ME. The ME will use these additional samples for performance testing of the BDWSC mix. Ensure that the additional gyratory specimens are compacted according to AASHTO T 312, are 77 mm high, and have an air void content of 1.5 ± 0.5 percent. The ME will test the specimens using an Asphalt Pavement Analyzer according to AASHTO TP 63 at 64°C, 100 psi hose pressure, and 100 lb. wheel load. The ME will use the supplied loose mix to compact two (2) samples to an air void content of 1.5 ± 0.5 percent for Flexural Beam Fatigue testing. The ME will test the fatigue specimens according to AASHTO T 321 at 15°C, 10 Hz loading frequency, and 1,500 micro-strains. The ME will approve the JMF if the average rut depth for the 6 specimens in the asphalt pavement analyzer testing is not more than 3 mm in 8,000 loading cycles and the fatigue life, as determined by AASHTO T 321, is greater than 100,000 cycles. If the JMF does not meet the APA and Flexural Beam Fatigue criteria, redesign the BDWSC mix and submit for retesting.

The JMF for the BDWSC mixture is in effect until modification is approved.

When unsatisfactory results for any specified characteristic of the work make it necessary, the Contractor may establish a new JMF for approval. In such instances, if corrective action is not taken, the ME may require an appropriate adjustment to the JMF.

Should a change in sources be made or a change in the properties of materials occurs, the ME will require that a new JMF be established and approved before production can continue.

Table 555.02.01-1 Job Mix Formula Requirements for BDWSC

Sieve Size	Percent Passing by Mass
½"	100
3/8"	80-100
#4	55-85
#8	32-42
#16	20-30
#30	12-22
#50	7-16
#100	3-12
#200	2.0-6.0
Minimum Percent Asphalt Binder by Mass of Total Mix	7.0

Table 555.02.01-2 Volumetric Requirements for Design and Control of BDWSC					
	Required Density (% of Max Sp. Gr.)	**Voids Filled with Asphalt**	**Voids in Mineral Aggregate**	**Dust to Binder Ratio**	**Draindown AASHTO T 305**
	N_{des} (50 gyrations)	**(VFA)**	**(VMA)**		
Design Requirements	99	90 - 100	≥ 18.0 %	0.3 – 0.9	≤ 0.1 %
Control Requirements	98 - 100	90 - 100	≥ 18.0 %	0.3 – 0.9	≤ 0.1 %

Table 555.02.01-3 Performance Testing Requirements for BDWSC	
Test	**Requirement**
APA @ 8,000 loading cycles (AASHTO TP 63)	< 3 mm
Flexural Fatigue Life (AASHTO T 321)	> 100,000 cycles

3. Sampling and Testing

a. General Acceptance Requirements. The RE or ME may reject and require disposal of any batch or shipment that is rendered unfit for its intended use due to contamination, segregation, improper temperature, lumps of cold material, or incomplete coating of the aggregate. For other than improper temperature, visual inspection of the material by the RE or ME is considered sufficient grounds for such rejection.

Ensure that the temperature of the mix at discharge from the plant or storage silo meets the recommendation of the supplier of the asphalt binder or supplier of the asphalt modifier.

Combine and mix the aggregates and asphalt binder to ensure that at least 95 percent of the coarse aggregate particles are entirely coated with asphalt binder as determined according to AASHTO T 195. If the ME determines that there is an on-going problem with coating, the ME may obtain random samples from 5 trucks and will determine the adequacy of the mixing on the average of particle counts made on these 5 test portions. If the requirement for 95 percent coating is not met on each sample, modify plant operations, as necessary, to obtain the required degree of coating.

b. Sampling. Perform sampling as specified in 902.02.04.B.

c. Quality Control Testing. Perform quality control testing as specified in 902.02.04.C.

d. Acceptance Testing and Requirements. The ME will determine volumetric properties at N_{des} for acceptance from samples taken, compacted, and tested at the HMA plant. The ME will compact HMA to the 50 design gyrations (N_{des}), using equipment according to AASHTO T 312. The ME will determine bulk specific gravity of the compacted sample according to AASHTO T 166. The ME will use the most current QC maximum specific gravity test result in calculating the volumetric properties of the BDWSC.

The ME will determine the dust-to-binder ratio from the composition results as tested by the QC technician.

Ensure that the HMA mixture conforms to the requirements specified in Table 555.02.01-1 and 555.02.01-2. If 2 samples in a lot fail to conform to the gradation or volumetric requirements, immediately initiate corrective action.

The ME will test a minimum of 1 sample per lot for moisture, basing moisture determinations on the weight loss of an approximately 1600-gram sample of mixture heated for 1 hour in an oven at 280 ± 5°F. Ensure that the moisture content of the mixture at discharge from the plant does not exceed 1.0 percent.

e. Performance Testing. Provide five (5) 5-gallon buckets of loose mix to the ME for testing in the Asphalt Pavement Analyzer (APA) and the Flexural Beam Fatigue device. Ensure that the first sample is taken in the first lot of production. Thereafter, sample every second lot. The ME may stop production of BDWSC if a sample does not meet the design criteria for performance testing as detailed in Table 555.02.01-3.

Use a strip seal joint system that builds up the joint using elastomeric or polymer concrete and seals the joint using a strip seal expansion joint. Ensure that the joint system includes a method for securing the strip seal with the elastomeric or polymer concrete.

Ensure that the strip seal joint system is capable of being constructed within the allowable lane closure hours for the project and compatible with installation in an asphalt overlay.

Use strip seal gland that is a neoprene strip seal gland according to 914.04.02.B or a preformed silicon strip seal meeting the criteria in Table 555.02.01-4.

Table 555.02.01-4 Requirements for Preformed Silicon Strip Seal

Property	Test Method	Requirement
Durometer (Shore A)	ASTM D 2240	55 ± 5
Tensile (psi)	ASTM D 412	550 minimum
Elongation	ASTM D 412	350% minimum
Tear (die B ppi)	ASTM D 624	80 minimum
Compression Set @ 350°F, 22 hrs.	ASTM D 395	30% maximum
Operating Temperature Range[1]		– 60°F to + 450°F
Specific Gravity		1.51
Color		Black

1. The heat age data at temperatures above 300°F does not apply in this application but in general, tested at 302°F and 437°F, no degradation occurs causing functional concern. The operating temperature range indicates the material remains elastomeric in nature at the above temperatures.

555.02.02 Equipment

Provide equipment as specified:

HMA Paver.....1003.03
HMA Compactor.....1003.05
Bituminous Material Distributor.....1003.07
Sealer Application System.....1003.08
Mechanical Sweeper.....1008.03
Hot-Air Lance.....1008.06
HMA Plant.....1009.01
HMA Trucks.....1009.02

Provide a thin-lift nuclear density gauge according to ASTM D 2950.

555.03 CONSTRUCTION

555.03.01 BDWSC

A. Paving Plan. At least 20 days before the start of placing the BDWSC, submit to the RE for approval a detailed plan of operation as specified in 401.03.03.A. Include in the paving plan a proposed location for the test strip.

B. Weather Limitations. Do not place BDWSC if it is precipitating. Do not allow trucks to leave the plant when precipitation is imminent. The Contractor may resume operations when the precipitation has stopped and the surface is free of water.

Do not pave if the base temperature is below 50 °F.

C. Test Strip. Construct a test strip of the BDWSC at a location agreed upon with the RE. Ensure that the tack coat or prime coat has been placed as specified in 555.03.01.D, before placing BDWSC. Transport and deliver, spread and grade, and compact as specified in 555.03.01.E, 555.03.01.F, and 555.03.01.G, respectively, and according to the approved paving plan. Construct a test strip of at least 60 Tons. While constructing the test strip, record the following information and submit to the RE:

1. **Ambient Temperature.** Measure ambient temperature at the beginning and end of each day's paving operation.
2. **Base Temperature.** Measure the surface temperature of the existing base before paving.
3. **HMA Temperature.** Measure the temperature of the HMA immediately after placement.
4. **Roller Pattern.** Provide details on the number of rollers, type, and number of passes used on the test strip.
5. **Nuclear Density Gauge Readings.** Obtain the maximum density from the plant, and input it into the nuclear density gauge. Use the nuclear density gauge to read the bulk density and percent air voids.
6. **Quality Control Core Density Test Results.** Take 5 randomly selected quality control cores to test for the bulk specific gravity and the maximum specific gravity.

   Use drilling equipment with a water-cooled, diamond-tipped, masonry drill bit that shall produce 6-inch nominal diameter cores for the full depth of the pavement. Remove the core from the pavement without damaging it. After removing the core, remove all water from the hole. Fill the hole with HMA or cold patching material, and compact the material so that it is 1/4 inch above the surrounding pavement surface.

   Compare the nuclear density gauge readings and the core test results to establish a correlation. Use this correlation as a guide for the continued use of the nuclear density gauge for density control.

If the test strip does not meet requirements, make adjustments and construct a second test strip. If the second test strip does not meet requirements, suspend paving operations until written approval to proceed is received.

Before making adjustments to the paving operations, notify the RE in writing.

D. Tack Coat. Clean the surface and apply tack coat as specified in 401.03.02. Use the same tack coat material as required for adjacent roadway paving on the Project. Ensure that the tack coat is full cured prior to placing the BDWSC. Apply a 1/8-inch thick, uniform coating of polymerized joint adhesive to vertical contact surfaces of curbing, gutters, scuppers, parapets and other structures before the placing of the BDWSC against them. Apply the polymerized joint adhesive slowly to ensure an even coating thickness.

E. Transportation and Delivery of HMA. Transport and deliver BDWSC as specified in 401.03.03.D except that the use of an MTV is not required.

F. Spreading and Grading. Ensure that required deck repairs have been completed before placing the BDWSC. Place BDWSC at the lay down temperature recommended by the supplier of the asphalt binder or the supplier of the asphalt modifier if the dry mix modified process is used. Spread and grade BDWSC as specified in 401.03.03.E.

G. Compacting. Compact as specified in 401.03.03.F. Operate rollers in static mode only.

H. Opening to Traffic. Remove loose material from the traveled way, shoulder, and auxiliary lanes before opening to traffic. Do not allow traffic or construction equipment on the BDWSC until the surface temperature is less than 170 °F.

I. Air Void Requirements. Use a thin-lift nuclear density gauge to measure in-place bulk specific gravity. Correct the reading using correction factor developed during the test strip. Calculate the air voids using the maximum

specific gravity supplied by the QC technician at the HMA plant. Compact the mixture so that the air voids are a maximum of 3 percent.

J. Ride Quality Requirements. The Department may evaluate the surface course placed in the traveled way as specified in 401.03.03.J using the equations for ramps and shoulders in Table 401.03.03-7.

K. Treatment of Fixed-End Deck Joints. Verify that the fixed-end joint and the type of header.

1. If the joint is an armored joint, affix a 1/8 inch thick galvanized steel plate over the open joint using intermittent welding of at least 1 inch in every 12 inches on the leading edge just before placing the BDWSC. Ensure that the plate is wide enough to extend at least 2 inches over the opening of the armored joint. After the BDWSC is installed, saw and seal over the trailing edge of the plate. Perform the sawcutting and sealing according to 401.03.04 except make the width of cut 1/2 inch and the depth of cut 1 1/2 inches.

2. If the joint is not armored, repair the concrete header and end of the deck, if necessary. Use Hilti gun or some other means to attach plate to concrete header or deck on the leading edge. Ensure that the plate is wide enough to extend at least 2 inches over the opening of the joint. After the BDWSC is installed, saw and seal over the trailing edge of the plate. Perform the sawcutting and sealing according to 401.03.04 except make the width of cut 1/2 inch and the depth of cut 1 1/2 inches.

3. If there is no header, repair the end of the deck before the BDWSC overlay. After the BDWSC overlay, saw and seal the overlay over the joint interface between the end of the deck and the roadway HMA. Perform the sawcutting and sealing according to 401.03.04 except make the width of cut 1/2 inch and the depth of cut 1 1/2 inches.

555.03.02 Retrofit Strip Seal Joint System

A. Working Drawings. Submit working drawings for certification for the retrofit strip seal joint system as per section 105.05. As a minimum include the following information of the working drawings:

1. Manufacturer's requirements for materials in the joint system.
2. Method of installation including sequence of installation, temperature restrictions, materials handling requirements.
3. Ensure that the removal and reinstallation of the strip seal can be accomplished from above the joint without full closure of the roadway.
4. Method to be used to ensure that the strip seal does not protrude above the top of the joint.

B Manufacturer's Representative and Recommendations. Submit two copies of written installation procedures and material certifications two weeks prior to the first scheduled installation to the RE. Arrange with the manufacturer of the joint system to assign a representative who is completely knowledgeable and competent in all aspects with the joint systems materials and installation procedures.

Ensure that the representative is present during each joint system installation to assure proper construction, material preparation, installation and curing. The representative is responsible to advise the RE and the Contractor that the correct installation methods are being followed, to train assigned personnel in the correct methods of installation, and to verify proper installation of the joint in writing to the RE.

C. Weather Limitations. Follow the manufacturer's recommendations regarding weather limitations.

D. Preparation. Center the joint installation over the existing expansion joint gap and to the width determined by the manufacturer. Variation in the width of the joint may be necessary to accommodate site conditions.

Saw cut the pavement transversely at the determined width along the joint to a two (2) inch minimum depth. To permit the new joint system to be installed, remove all material, including wearing surface, masking or covering material, waterproofing membrane, concrete header, and old joint material between the saw cuts. If it is necessary to remove concrete, use only hand held tools. Remove existing materials without damaging existing sound concrete that is to remain. Use elastomeric or polymer concrete to repair any damage to sound concrete.

Grit blast all joint surfaces, dry and free of dust, dirt, grease, loose materials and any other matter that will inhibit bonding. Clean the concrete surface to the satisfaction of the manufacturer's representative.

E. Installation Elastomeric or Polymer Concrete. Form the joint and install hardware, if necessary. If hardware is installed to mechanically hold the strip seal gland, ensure that it is placed at the proper depth for the joint. Mix and place the elastomeric or polymer concrete according to the manufacturer's recommendations. Open to traffic according to the manufacturer's recommendations.

F. Installation Strip Seal Gland. Prepare the surfaces and the strip seal gland according to manufacturer's recommendations. Install the strip seal gland according to manufacturer's recommendations. Ensure that the strip seal gland is installed to the proper depth and does not protrude above the top of the joint. Open to traffic according to the manufacturer's recommendations.

555.04 MEASUREMENT AND PAYMENT
THE FOLLOWING ITEMS ARE ADDED:

Item	*Pay Unit*
BRIDGE DECK WATERPROOF SURFACE COURSE	TON
RETROFIT STRIP SEAL JOINT SYSTEM	LINEAR FOOT

DIVISION 600 – MISCELLANEOUS CONSTRUCTION

SECTION 602 - DRAINAGE STRUCTURES

602.01 DESCRIPTION
THE FOLLOWING IS ADDED:

This describes the requirement for installing Inlet Face Plate to the existing inlet curb piece.

602.02.01 Materials
THE FOLLOWING IS ADDED:

Ensure that each Inlet Face Plate is ERS Faceplate as manufactured by Campbell Foundry Company or an approved equal as shown in the plans. Ensure that each Inlet Face Plate is fabricated from ¼" thick Cor-Ten Weathering Steel conforming to ASTM A588. Ensure that each Inlet Face Plate has a "badge" in accordance with USEPA guidelines. Ensure that each unit has a snowplow brake, has tamper proof installation, and is burr-free finished.

602.03.07 Curb Pieces
THE FOLLOWING IS ADDED:

Install Inlet Face Plate in accordance with the manufacturer's instructions at the various locations as shown in plans.

602.04 MEASUREMENT AND PAYMENT

THE FOLLOWING IS ADDED:

Item	*Pay Unit*
INLET FACE PLATE	UNIT

SECTION 610 – TRAFFIC STRIPES, TRAFFIC MARKINGS, AND RUMBLE STRIPS

610.03.04 Removal of RPMs
THE ENTIRE TEXT IS CHANGED TO:

Remove RPMs as directed by the RE. Dispose of RPMs as specified in 201.03.09. If directed by the RE, fill the hole with HMA patch as specified in 159.03.07 except sawcutting is not required.

610.03.06 Ground Mounted Flexible Delineators
THE FIRST PARAGRAPH IS CHANGED TO:

Use white retroreflective sheeting for delineators located on the right side when facing in the direction of traffic. Use yellow retroreflective sheeting for delineators located on the left side when facing in the direction of traffic.

610.04 MEASUREMENT AND PAYMENT
THE FOLLOWING ITEM IS DELETED:

Item	*Pay Unit*
RPM, BI-DIRECTIONAL, WHITE LENS	UNIT

DIVISION 650 – UTILITIES

SECTION 651 – WATER

651.04 MEASUREMENT AND PAYMENT
THE LAST PARAGRAPH IS DELETED.

SECTION 653 – GAS

653.04 MEASUREMENT AND PAYMENT
THE LAST PARAGRAPH IS DELETED.

DIVISION 900 – MATERIALS

SECTION 901 – AGGREGATES

901.11 SOIL AGGREGATE

1. Composition of Soil Aggregate.

THE FOLLOWING IS ADDED TO THE LAST PARAGRAPH:

For Designation I-14, the Contractor may use up to 30 percent steel slag by weight of the coarse aggregate portion of the soil aggregate. Obtain steel slag from a source listed on the QPL as specified in 901.01. Use steel slag that was produced as a co-product of the steel making process. Ensure that the steel slag consists of tough, durable pieces that are uniform in density and quality. Stockpile steel slag as specified in 901.02. Ensure steel slag for blending with I-14 Soil Aggregate does not exceed 0.50 percent expansion from hydration when tested according to ASTM D 4792.

SECTION 902 – ASPHALT

902.02.02 Composition of Mixtures

TABLE 902.02.02-2 IS CHANGED TO:

Table 902.02.02-2 Additional Fine Aggregate Requirements for HMA

Tests	Test Method	Minimum Percent
Uncompacted Void Content of Fine Aggregate	AASHTO T 304, Method A	45
Sand Equivalent	AASHTO T 176	45

902.03.02 Mix Design

THE FOURTH PARAGRAGH IS CHANGED TO:

The ME will test 2 specimens to verify that the final JMF produces a mixture that has a minimum void content as specified in Table 902.03.03-1. The ME will determine percent air voids according to AASHTO T 209, and either NJDOT B-6 or AASHTO T 331.

902.03.03 Sampling and Testing

THE FOLLOWING IS ADDED TO THE FIRST PARAGRAPH:

Ensure that the mix meets the requirements as specified in 902.02.04.A, otherwise the RE or ME will reject the material.

THE SECOND PARAGRAPH IS CHANGED TO:

During production, the ME will take one random acceptance sample from each 700 tons of production to verify composition. Conduct air voids and draindown tests as directed by the ME.

THE FOURTH PARAGRAPH IS CHANGED TO:

The ME will perform sampling according to NJDOT B-2 or ASTM D 3665, and will perform testing for composition according to AASHTO T 308 or NJDOT B-5. Perform testing for air voids according to AASHTO T 209 and either NJDOT B-6 or AASHTO T 331. Perform testing for draindown according to NJDOT B-7 or NJDOT B-8.

902.04.03 Sampling and Testing
THE FIRST PARAGRAPH IS CHANGED TO:

Ensure that the mix meets the requirements as specified in 902.02.04.A, otherwise the RE or ME will reject the material. Maintain the temperature of the mix between 300 °F and 330 °F. Perform and meet requirements for quality control testing as specified in 902.02.04.C.

THE SECOND PARAGRAPH IS CHANGED TO:

During production, the ME will take one random acceptance sample from each 700 tons of production to verify composition. Conduct draindown tests as directed by the ME.

902.05.01 Composition of Mixture
THE FIFTH PARAGRAPH IS CHANGED TO:

For fine aggregate, use stone sand conforming to 901.05.02. Ensure that the combined fine aggregate in the mixture conforms to the requirements in Table 902.02.02-2.

902.05.02 Mix Design
THE FIRST PARAGRAPH IS CHANGED TO:

Design the SMA to meet the requirements in Table 902.05.02-1 and Table 902.05.02-2. Prepare the JMF according to AASHTO R 46. Determine the JMF at 4 percent air voids and 75 gyrations of the Superpave gyratory compactor.

TABLE 902.05.02-2 IS CHANGED TO:

Table 902.05.02-2 SMA Mixtures Volumetrics For Design and Plant Production

Property	Production Control Tolerances	Requirement
Air Voids	±1%	4.0%
Voids in Mineral Aggregate (VMA)	–	17.0% minimum
VCA_{mix}	–	Less than VCA_{dry}
Draindown @ production temperature	–	0.30% maximum
Asphalt Binder Content (NJDOT B-5)	±0.15%	6% minimum
Asphalt Binder Content (AASHTO T 308)	±0.40%	6% minimum
Tensile Strength Ratio (AASHTO T 283)	–	80% minimum

902.05.03 Sampling and Testing
THE FOLLOWING IS ADDED TO THE FIRST PARAGRAPH:

Ensure that the mix meets the requirements as specified in 902.02.04.A, otherwise the RE or ME will reject the material.

THE SECOND PARAGRAPH IS CHANGED TO:

During production at the plant, the ME will take a sample from each 700 tons of production to verify composition and air voids. Conduct draindown, VCAmix, VCAdry, and VMA testing as directed by the ME. Perform tests according to AASHTO R 46.

THE FOURTH PARAGRAPH IS CHANGED TO:

The ME will perform sampling according to NJDOT B-2 or ASTM D 3665, and will perform testing for composition according to AASHTO T 308, or NJDOT B-5. The ME will determine bulk specific gravity of the compacted sample according to AASHTO T 166 or AASHTO T 331. The ME will use the most current QC maximum specific gravity test result, obtained according to AASHTO T 209, in calculating the volumetric properties of the SMA. Perform testing for draindown according to AASHTO T 305.

902.06.03 Sampling and Testing

THE FOLLOWING IS ADDED TO THE FIRST PARAGRAPH:

Ensure that the mix meets the requirements as specified in 902.02.04.A, except that the temperature of the mix at discharge is required to be between 230 °F and 275 °F, otherwise the RE or ME will reject the material.

THE SECOND PARAGRAPH IS CHANGED TO:

During production, the ME will take one random acceptance sample from each 700 tons of production to verify composition. Conduct draindown tests as directed by the ME.

THE FOLLOWING SUBSECTION IS ADDED:

902.08 HIGH PERFORMANCE THIN OVERLAY (HPTO)

902.08.01 Composition of Mixture

Mix HPTO in a plant that is listed on the QPL and conforms to the requirements for HMA Plants as specified in 1009.01. The composition of the mixture for HPTO is coarse aggregate, fine aggregate, and asphalt binder, and may also include mineral filler. Do not use Reclaimed Asphalt Pavement (RAP), Ground Bituminous Shingle Material, Remediated Petroleum Contaminated Soil Aggregate, or Crushed Recycled Container Glass (CRCG). Use asphalt binder and aggregates that meet the following requirements:

1. For the asphalt binder, use PG 76-22 as specified in 902.01.01.
2. Use coarse aggregate that is argillite, gneiss, granite, quartzite, or trap rock and conforms to 901.05.01.
3. For fine aggregate, use stone sand conforming to 901.05.02 and has an uncompacted void content of at least 45 percent when tested according to AASHTO T 304, Method A. In addition, the minimum sand equivalent is 45 percent when tested according to AASHTO T 176.
4. If necessary, use mineral filler as specified in 901.05.03.

902.08.02 Mix Design

At least 45 days before initial production, submit a job mix formula for the HPTO on forms supplied by the Department. Include a statement naming the source of each component and a report showing the results meet the criteria specified in Tables 902.08.03-1 and 902.08.03-2.

For the job mix formula for the HPTO mixture, establish the percentage of dry weight of aggregate passing each required sieve size and an optimum percentage of asphalt binder based upon the weight of the total mix. Determine the optimum percentage of asphalt binder according to AASHTO R 35 and M 323 with an Ndes of 50 gyrations. Before maximum specific gravity testing or compaction of specimens, condition the mix for 2 hours according to the requirements for conditioning for volumetric mix design in AASHTO R 30, Section 7.1. If the absorption of the combined aggregate is more than 1.5 percent according to AASHTO T 84 and T 85, condition the mix for 4 hours according to AASHTO R 30, Section 7.2 prior to compaction of specimens (AASHTO T 312) and determination of maximum specific gravity (AASHTO T 209). Ensure that the job mix formula is within the master range specified in, Table 902.08.03-1.

Ensure that the job mix formula provides a mixture that meets a minimum tensile strength ratio (TSR) of 85 percent when prepared according to AASTHO T 312 and tested according to AASHTO T 283 with the following exceptions:

1. Before compaction, condition the mixture for 2 hours according to AASHTO R 30 Section 7.1.
2. Compact specimens with 40 gyrations.
3. Extrude specimens as soon as possible without damaging.
4. Use AASHTO T 269 to determine void content.
5. Record the void content of the specimens.
6. If less than 55 percent saturation is achieved, the procedure does not need to be repeated, unless the difference in tensile strength between duplicate specimens is greater than 25 pounds per square inch.
7. If visual stripping is detected, modify or readjust the mix.

For each mix design, submit three gyratory specimens and one loose sample corresponding to the composition of the job mix formula, including the design asphalt content. The ME will use these samples for verification of the properties of the job mix formula. Compact the specimens to the design number of gyrations (Ndes). To be acceptable all three gyratory specimens must comply with the gradation and asphalt content requirements in Table 902.08.03-1 and with the control requirements in Table 902.08.03-2. The ME reserves the right to be present at the time of molding the gyratory specimens.

In addition, submit 6 gyratory specimens and a 5 gallon bucket of loose mix to the ME. Compact the additional gyratory specimens according to AASHTO T 312. Ensure that the 6 gyratory specimens are 77 millimeters high and have an air void content of 5.0 ± 0.5 percent. The ME will use the additional samples for performance testing of the HPTO mix. The ME will test the specimens using an Asphalt Pavement Analyzer according to AASHTO TP 63 at 64 °C, 100 pounds per square inch hose pressure, and 100 pound wheel load. The ME will approve the job mix formula if the average rut depth for the 6 specimens in the asphalt pavement analyzer testing is not more than 4 millimeters in 8,000 loading cycles. If the job mix formula does not meet the APA criteria, redesign the HPTO mix.

If unsatisfactory results for any specified characteristic of the work make it necessary, establish a new job mix formula for approval. In such instances, if corrective action is not taken, the ME may require an appropriate adjustment.

If a change in sources is made or a change in the properties of materials occurs, the ME will require that a new job mix formula be established and approved before production can continue.

902.08.03 Sampling and Testing

A. General Acceptance Requirements. The RE or ME may reject and require disposal of any batch or shipment that is rendered unfit for its intended use due to contamination, segregation, improper temperature, lumps of cold material, or incomplete coating of the aggregate. For other than improper temperature, visual inspection of the material by the RE or ME is considered sufficient grounds for such rejection.

Ensure that the temperature of the HPTO at discharge from the plant or surge and storage bins is maintained between 300 and 330 °F.

Combine and mix the aggregates and asphalt binder to ensure that at least 95 percent of the coarse aggregate particles are entirely coated with asphalt binder as determined according to AASHTO T 195. If the ME determines that there is an on-going problem with coating, the ME may obtain random samples from 5 trucks and will determine the adequacy of the mixing on the average of particle counts made on these 5 test portions. If the requirement for 95 percent coating is not met on each sample, modify plant operations, as necessary, to obtain the required degree of coating.

B. Sampling. The ME will take 5 stratified random samples of HPTO for volumetric acceptance testing from each lot of approximately 3500 tons of a mix. When a lot of HPTO is less than 3500 tons, the ME will take samples at random for each mix at the rate of one sample for each 700 tons. The ME will perform sampling according to AASHTO T 168, NJDOT B-2, or ASTM D 3665.

Use a portion of the samples taken for composition testing, unless composition is determined by hot bin analysis. If using hot bin analysis at a fully automated batch plant, take 5 samples from each lot corresponding to the volumetric acceptance samples, under the supervision of the ME.

C. Quality Control Testing. The HMA producer is required to provide a quality control (QC) technician who is certified by the Society of Asphalt Technologists of New Jersey as an Asphalt Technologist, Level 2. The QC technician may substitute equivalent technician certification by the Mid-Atlantic Region Technician Certification Program (MARTCP). Ensure that the QC technician is present during periods of mix production for the sole purpose of quality control testing and to assist the ME. The ME will not perform the quality control testing or other routine test functions in the absence of, or instead of, the QC technician.

The QC technician is required to perform sampling and testing according to the approved quality control plan, to keep the mix within the limits specified for the HPTO mix being produced. The QC technician may use acceptance test results or perform additional testing as necessary to control the mix.

To determine the composition, perform ignition oven testing according to AASHTO T 308. For fully automated plants, the QC technician may determine composition using hot bin analysis according to NJDOT B-5. Use only one method for determining composition within a lot.

For each acceptance test, perform maximum specific gravity testing according to AASHTO T 209 on a test portion of the sample taken by the ME. Sample and test coarse aggregate, fine aggregate, mineral filler, and RAP according to the approved quality control plan for the plant.

D. Acceptance Testing and Requirements. The ME will determine volumetric properties at Ndes for acceptance from samples taken, compacted, and tested at the HMA plant. The ME will compact HPTO to 50 gyrations, using equipment according to AASHTO T 312. The ME will determine bulk specific gravity of the compacted sample according to AASHTO T 166. The ME will use the most current QC maximum specific gravity test result in calculating the volumetric properties of the HPTO.

The ME will determine the dust-to-binder ratio from the composition results as tested by the QC technician.

Ensure that the HMA mixture conforms to the requirements specified in Table 902.08.03-2, and to the gradation requirements in Table 902.08.03-1. If 2 samples in a lot fail to conform to the gradation or volumetric requirements, immediately initiate corrective action.

The ME will test a minimum of 1 sample per lot for moisture, basing moisture determinations on the weight loss of an approximately 1600-gram sample of mixture heated for 1 hour in an oven at 280 ± 5 °F. Ensure that the moisture content of the mixture at discharge from the plant does not exceed 1.0 percent.

E. Performance Testing. Provide 6 gyratory specimens and a 5 gallon bucket of loose mix to the ME. Compact the additional gyratory specimens according to AASHTO T 312. Ensure that the 6 gyratory specimens are 77 millimeters high and have an air void content of 5.0 ± 0.5 percent. The first sample is required to be taken in the first lot of production. Thereafter, every third lot is required to be sampled. The ME will use the samples for performance testing of the HPTO mix. The ME will test the specimens using an Asphalt Pavement Analyzer according to AASHTO TP 63 at 64 °C, 100 pounds per square inch hose pressure, and 100 pounds wheel load. If the HPTO mix exceeds the APA criteria of 4 mm in 8000 loading cycles, the ME may stop production until corrective action is taken. If the HPTO mix exceeds the APA criteria of 12 mm in 8000 loading cycles, the RE may require removal and replacement of the lot of HPTO.

Table 902.08.03-1 HPTO Grading of Total Aggregate

Sieve Size	Percent Passing by Mass
3/8”	100
#4	65-85
#8	33-55
#16	20-35
#30	15-30
#50	10-20
#100	5-15
#200	5.0-8.0
Minimum Percent Asphalt by Mass of Total Mix	7

Table 902.08.03-2 Volumetric Requirements for Design and Control of HPTO

	Required Density (% of Max. Sp. Gr.)		Voids in Mineral Aggregate	Dust to Binder Ratio	Draindown AASHTO T 305
	N_{des} (50 gyrations)	N_{max} (100 gyrations)	(VMA)		
Design Requirements	96.5	≤ 99.0	≥ 18.0 %	0.6 - 1.2	≤ 0.1 %
Control Requirements	95.5 - 97.5	≤ 99.0	≥ 18.0 %	0.6 – 1.3	≤ 0.1 %

SECTION 903 – CONCRETE

903.03.06 Tables

Table 903.03.06-2 Requirements for Structural Concrete Items
THE SEVENTH LINE UNDER CAST-IN-PLACE ITEMS IS CHANGED TO:

Table 903.03.06-2 Requirements for Structural Concrete Items

	Concrete Class	Slump[1] (inches)	Percent Air Entrainment for Coarse Aggregate[1]	
			No. 57 & No. 67	No. 8
Decks, Sidewalks, Curbs, Parapets, Concrete Patch	A	3 ± 1	6.0 ± 1.5	7.0 ± 1.5

903.05.04 Control and Acceptance Testing Requirements
THE SUPERSCRIPT REFERENCE NO. 4 UNDER TABLE 903.05.04-1 IS CHANGED TO:

4. For chloride permeability testing, the ME will mold 4 additional cylinders, taking 2 cylinders each from 2 randomly selected delivery trucks for testing at 56-days.

THE FOURTH PARAGRAPH IS CHANGED TO:

If, upon testing at 56 days, 1 or more individual test results exceed 2000 coulombs, the RE may:

1. Require that the Contractor remove and replace the defective lot, or
2. Allow the Contractor to submit a corrective action plan for approval.

SECTION 912 – PAINTS, COATINGS, TRAFFIC STRIPES, AND TRAFFIC MARKINGS

912.03.01 Epoxy Traffic Stripes

B. Glass Beads.
THE FOLLOWING IS ADDED TO THE FIRST PARAGRAPH:

Ensure that glass beads do not contain more than 200 ppm of lead, 200 ppm of antimony, or 200 ppm of arsenic.

912.03.02 Thermoplastic Traffic Markings
THE FOLLOWING IS ADDED TO THE FIRST PARAGRAPH:

Ensure that glass beads do not contain more than 200 ppm of lead, 200 ppm of antimony, or 200 ppm of arsenic.

912.04.01 Latex Paint
THE FOLLOWING IS ADDED TO THE SECOND PARAGRAPH:

Ensure that glass beads do not contain more than 200 ppm of lead, 200 ppm of antimony, or 200 ppm of arsenic.

SECTION 914 – JOINT MATERIALS

914.04.01 Preformed Elastomeric (Compression Type)

B. Joint Sealer.
THE LAST SENTENCE OF THE SECOND PARAGRAPH IS CHANGED TO:

If splicing of a sealer is allowed, ensure that the sealer at the splice point has no significant misalignment at its sides or top and that misalignment at the bottom does not exceed half of the bottom wall thickness.

DIVISION 1000 – EQUIPMENT

SECTION 1009 – HMA PLANT EQUIPMENT

1009.01 HMA PLANT

A. Requirements for HMA Mixing Plants.

THE FOLLOWING IS ADDED AFTER THE SECOND PARAGRAGH:

The HMA producer is required to have a quality control (QC) program plan approved annually by the ME as per Materials Approval Procedure MAP-102. The HMA producer is required to ensure that the QC plan conforms to the requirements outlined in the report entitled "Hot Mix Asphalt Quality Control Program Plan" prepared by the Department of Transportation and New Jersey Asphalt Paving Association. Failure to follow these requirements will result in rejection of HMA materials supplied by the HMA producer and removal of the HMA supplier from the QPL.

NJDOT TEST METHODS

THE FOLLOWING TEST METHOD IS ADDED:

NJDOT B-10 – OVERLAY TEST FOR DETERMINING CRACK RESISTANCE OF HMA

A. Scope. This test method is used to determine the susceptibility of HMA specimens to fatigue or reflective cracking. This test method measures the number of cycles to failure.

B. Apparatus. Use the following apparatus:

1. Overlay Tester. An electro-hydraulic system that applies repeated direct tension loads to specimens. The machine features two blocks, one is fixed and the other slides horizontally. The device automatically measures and records a time history of load versus displacement every 0.1 sec at a selected test temperature.

   The sliding block applies tension in a cyclic triangular waveform to a constant maximum displacement of 0.06 cm (0.025 in.). This sliding block reaches the maximum displacement and then returns to its initial position in 10 sec. (one cycle).

2. Temperature Control System. The temperature chamber must be capable of controlling the test temperature with a range of 32 to 95 ^{o}F (0 to 35 ^{o}C).
3. Measurement System. Fully automated data acquisition and test control system. Load, displacement, and temperature are simultaneously recorded every 0.1 sec.
4. Linear Variable Differential Transducer (LVDT). Used to measure the horizontal displacement of the specimen (+/- 0.25 in.). Refer to manufacturer for equipment accuracy for LVDT.
5. Electronic Load Cell. Used to measure the load resulting from the displacement (5000 lb capacity). Refer to manufacturer for equipment accuracy for load cell.
6. Specimen Mounting System. Used two stainless steel base plates to restrict shifting of the specimen during testing. The mounting jig holds the two stainless steel base plates for specimen preparation.
7. Cutting Template.
8. Two Part Epoxy. Two part epoxy with a minimum 24 hour tensile strength of 600 psi (4.1 MPa) and 24 hour shear strength of 2,000 psi (13.8 MPa).
9. 10 lb weight (4.5 kg). Used to place on top of specimens while being glued to specimen platens**.**
10. ¼ inch Width Adhesive Tape. Placed over gap in plates to prevent the epoxy from bonding the plates together.
11. Paint or Permanent Marker. Used to outline specimens on platens for placement of epoxy.
12. 3/8-in. Socket Drive Handle with a 3-in. (7.6 cm) extension.

C. Procedure. Perform the following steps:

1. Sample Preparation.

a. Laboratory Molded Specimens - Use cylindrical specimens that have been compacted using the gyratory compactor (AASHTO T 312). Specimen diameter must be 6 inches (150 mm) and a specimen height must be 4.5 inches +/- 0.2 inches (115 +/- 5 mm).

Note 1 - Experience has shown that molded laboratory specimens of a known density usually result in a greater density (or lower air voids) after being trimmed. Therefore, it is recommended that the laboratory technician produce molded specimens with an air void level slightly higher than the targeted trimmed specimen. Determine the density of the final trimmed specimen in accordance with AASHTO T 166.

b. Core Specimens – Specimen diameter must be 6 inches +/- 0.1 inch (150 mm +/- 2 mm). Determine the density of the final trimmed specimen in accordance with AASHTO T166.

2. Trimming of Cylindrical Specimen. Before starting, refer to the sawing device manufacturer's instructions for cutting specimens.

a. Place the cutting template on the top surface of the laboratory molded specimen or roadway core. Trace the location of the first two cuts by drawing lines using paint or a permanent maker along the sides of the cutting template.

b. Trim the specimen ends by cutting the specimen perpendicular to the top surface following the traced lines. Discard specimen ends.

c. Trim off the top and bottom of the specimen to produce a sample with a height of (1.5 inches +/- 0.02 inches (38 mm +/- 0.5 mm).

d. Measure the density of the trimmed specimen in accordance with AASHTO T 166. If the specimen does not meet the density requirement as specified for performance testing for the mix being tested, then discard it and prepare a new specimen.

e. Air dry the trimmed specimen to constant mass, where constant mass is defined as the weight of the trimmed specimen not changing by more than 0.05% in a 2 hour interval.

3. Mounting Trimmed Specimen to Base Plates (Platens).

a. Mount and secure the base plates (platens) to the mounting jig. Cut a piece of adhesive tape approximately 4.0 inches (102 mm) in length. Center and place the piece of tape over the gap between the base plates.

b. Prepare the epoxy following manufacturer's instructions.

c. Cover a majority of the base plates (platens) with epoxy, including the tape. Glue the trimmed specimen to the base plates.

d. Place a 10 lb (4.5 kg) weight on top of the glued specimen to ensure full contact of the trimmed specimen to the base plates. Allow the epoxy to cure for the time recommended by the manufacturer. Remove the weight from the specimen after the epoxy has cured.

e. Turn over the glued specimen so the bottom of the base plates faces upward. Using a hacksaw, cut a notch through the epoxy which can be seen through the gap in the base plates. The notch should be cut as evenly as possible and should just begin to reach the specimen underneath the epoxy. Great care should be taken not to cut more than 1/16 inch (1.58 mm) into the specimen.

f. Place the test sample assembly in the Overlay Tester's environmental chamber for a minimum of 1 hour before testing.

4. Start Testing Device. Please refer to manufacturer's equipment manual prior to operating equipment.

a. Turn on the Overlay Tester. Turn on the computer and wait to ensure communication between the computer and the Overlay Tester occurs.

b. Turn on the hydraulic pump using the Overlay Tester's software. Allow the pump to warm up for a minimum of 20 minutes.

c. Turn the machine to load control mode to mount the sample assembly.

5. Mounting Specimen Assembly to Testing Device. Enter the required test information into the Overlay Tester software for the specimen to be tested.

a. Mount the specimen assembly onto the machine according to the manufacturer's instructions and the following procedural steps.

1. Clean the bottom of the base plates and the top of the testing machine blocks before placing the specimen assembly into the blocks. If all four surfaces are not clean, damage may occur to the machine, the specimen, or the base plates when tightening the base plates.
2. Apply 15 lb-in of torque for each screw when fastening the base plates to the machine.

6. Testing Specimen.

a. Perform testing at a constant temperature recommended by the New Jersey Department of Transportation for the mixture in question. This is typically either 59 °F (15 °C) or 77 °F (25 °C).

Note 3 – Ensure the trimmed specimen has also reached the constant temperature required.

b. Start the test by enabling the start button on the computer control program. Perform testing until a 93% reduction or more of the maximum load measured from the first opening cycle occurs. If 93% is not reached, run the test until a minimum of 1,200 cycles.

c. After the test is complete, remove the specimen assembly from the Overlay Tester machine blocks.

D. Report. Include the following items in the report:

1. Date and time molded or cored.
2. NJDOT mixture identification.
3. Trimmed specimen density.
4. Starting Load.
5. Final Load.
6. Percent decline (or reduction) in Load.
7. Number of cycles until failure.
8. Test Temperature

ATTACHMENTS

STATE ATTACHMENT NO. 1

STATE OF NEW JERSEY EQUAL EMPLOYMENT OPPORTUNITY SPECIAL PROVISIONS FOR CONSTRUCTION CONTRACTS FUNDED BY WHOLLY OR PARTIALLY STATE FUNDS

I. GENERAL

It is the policy of the New Jersey Department of Transportation (hereafter "NJDOT") that its contracts should create a workforce that reflects the diversity of the State of New Jersey. Therefore, contractors engaged by the NJDOT to perform under a construction contract shall put forth a good faith effort to engage in recruitment and employment practices that further the goal of fostering equal opportunities to minorities and women.

The contractor must demonstrate to the NJDOT's satisfaction that a good faith effort was made to ensure that minorities and women have been afforded equal opportunity to gain employment under the NJDOT's contract with the contractor. Payment may be withheld from a contractor's contract for failure to comply with these provisions.

Evidence of a "good faith effort" includes, but is not limited to:

1. The Contractor shall recruit prospective employees through the State Job bank website, managed by the Department of Labor and Workforce Development, available online at http://NJ.gov/jobCentralNJ;

   Note: Posting shall not be required where the employer intends to fill the job opening with a present employee, a laid-off former employee, or a job candidate from a previous recruitment, where pre-existing legally binding collective bargaining agreements provide otherwise, or where an exception has been granted to the NJDOT by the Department of Labor and Workforce Development.

2. The Contractor shall keep specific records of its efforts, including records of all individuals interviewed and hired, including the specific numbers of minorities and women;

3. The Contractor shall actively solicit and shall provide the NJDOT with proof of solicitation for employment, including but not limited to advertisements in general circulation media, professional service publications and electronic media; and

4. The Contractor shall provide evidence of efforts described at 2 above to the NJDOT no less frequently than once every 12 months.

5. The Contractor shall comply with the requirements set forth at N.J.A.C. 17:27.

The Contractor is required to implement and maintain a specific Affirmative Action Compliance Program of Equal Employment Opportunity in support of the New Jersey "*Law Against Discrimination*", N.J.S.A. 10:5-31 et seq., and according to the Affirmative Action Regulations set forth at N.J.A.C. 17:27-1.1 et seq.

The provisions of N.J.S.A. 10:2-1 through 10:2-4 and N.J.S.A. 10:5-31 et seq., as amended and supplemented) dealing with discrimination in employment on public contracts, and the rules and regulations promulgated pursuant thereunto, are hereby made a part of this contract and are binding upon the Contractor.

Noncompliance by the Contractor with the requirements of the Affirmative Action program for Equal Employment Opportunity may be cause for delaying or withholding monthly and final payments pending corrective and appropriate measures by the Contractor to the satisfaction of the Department.

The Contractor will cooperate with the state agencies in carrying out its Equal Employment Opportunity obligations and in their review of its activities under the contract.

The Contractor and all its subcontractors, not including material suppliers, holding subcontracts of $2,500 or more, will comply with the following minimum specific requirement activities of Equal Opportunity and Affirmative Action set forth in these special provisions. The Contractor will include these requirements in every subcontract of $2,500 or more with such modification of language in the provisions of such contracts as is necessary to make them binding on the subcontractor.

During the performance of this contract, the contractor agrees as follows:

1. The Contractor or subcontractor, where applicable, will not discriminate against any employee or applicant for employment because of age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex. Except with respect to affectional or sexual orientation and gender identity or expression, the Contractor will ensure that equal employment opportunity is afforded to such applicants in recruitment and employment, and that employees are treated during employment, without regard to their age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex. Such equal employment opportunity shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Public Agency Compliance Officer setting forth provisions of this nondiscrimination clause.
2. The Contractor or subcontractor, where applicable will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex.
3. The Contractor or subcontractor, where applicable, will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency contracting officer advising the labor union or workers' representative of the contractor's commitments under this act and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
4. The Contractor or subcontractor, where applicable, agrees to comply with any regulations promulgated by the Treasurer pursuant to N.J.S.A. 10:5-31 et seq., as amended and supplemented from time to time and the Americans with Disabilities Act.
5. When hiring or scheduling workers in each construction trade, the Contractor or subcontractor agrees to make good faith efforts to employ minority and women workers in each construction trade consistent with the targeted employment goal prescribed by N.J.A.C. 17:27-7.2; provided, however, that the The Division of Public Contracts Equal Employment Opportunity Compliance (hereafter "Division") may, in its discretion, exempt a Contractor or subcontractor from compliance with the good faith procedures prescribed by the following provisions, a, b, and c, as long as the Division is satisfied that the Contractor or subcontractor is employing workers provided by a union which provides evidence, in accordance with standards prescribed by the Division, that its percentage of active "card carrying" members who are minority and women workers is equal to or greater than the targeted employment goal established in accordance with N.J.A.C. 17:27-7.2. The Contractor or subcontractor agrees that a good faith effort shall include compliance with the following procedures:

a. If the Contractor or subcontractor has a referral agreement or arrangement with a union for a construction trade, the Contractor or subcontractor shall, within three business days of the contract award, seek assurances from the union that it will cooperate with the Contractor or subcontractor as it fulfills its affirmative action obligations under this contract and in accordance with the rules promulgated by the Treasurer pursuant to N.J.S.A. 10:5-31 et. seq., as supplemented and amended from time to time and the Americans with Disabilities Act. If the Contractor or subcontractor is unable to obtain said assurances from the construction trade union at least five business days prior to the commencement of construction work, the Contractor or subcontractor agrees to afford equal employment opportunities to minority and women workers directly, consistent with this chapter. If the Contractor's or subcontractor's prior experience with a construction trade union, regardless of whether the union has provided said assurances, indicates a significant possibility that the trade union will not refer sufficient minority and women workers consistent with affording equal employment opportunities as specified in this chapter, the Contractor or subcontractor agrees to be prepared to provide such opportunities to minority and women workers directly, consistent with this chapter, by complying with the hiring or scheduling procedures prescribed under (b) below; and the Contractor or subcontractor further agrees to take said action immediately if it determines or is so notified by the Division that the union is not referring minority and women workers consistent with the equal employment opportunity goals set forth in this chapter.

b. If good faith efforts to meet targeted employment goals have not or cannot be met for each construction trade by adhering to the procedures of (a) above, or if the Contractor does not have a referral agreement or arrangement with a union for a construction trade, the Contractor or subcontractor agrees to take the following actions:
   (1) To notify the Public Agency Compliance Officer, the Division, and minority and women referral organizations listed by the Division pursuant to N.J.A.C. 17:27-5.3, of its workforceneeds, and request referral of minority and women workers;
   (2) To notify any minority and women workers who have been listed with it as awaiting available vacancies;
   (3) Prior to commencement of work, to request that the local construction trade union refer minority and women workers to fill job openings, provided the Contractor or subcontractor has a referral agreement or arrangement with a union for the construction trade;
   (4) To leave standing requests for additional referral to minority and women workers with the local construction trade union, provided the Contractor or subcontractor has a referral agreement or arrangement with a union for the construction trade, the State Training and Employment Service and other approved referral sources in the area;
   (5) If it is necessary to lay off some of the workers in a given trade on the construction site, layoffs shall be conducted in compliance with the equal employment opportunity and non-discrimination standards set forth in this regulation, as well as with applicable State and Federal court decisions;
   (6) To adhere to the following procedure when minority and women workers apply or are referred to the Contractor or subcontractor:
      (i) The contractor or subcontractor shall interview the referred minority or women worker.
      (ii) If said individuals have never previously received any document or certification signifying a level of qualification lower than that required in order to perform the work of the construction trade, the Contractor or subcontractor shall in good faith determine the qualifications of such individuals. The Contractor or subcontractor shall hire or schedule those individuals who satisfy appropriate qualification standards in conformity with the equal employment opportunity and non-discrimination principles set forth in this chapter. However a Contractor or subcontractor shall determine that the individual at least possesses the requisite skills and experience recognized by a union, apprentice program or a referral agency, provided the referral agency is acceptable to the Division. If necessary, the Contractor or subcontractor shall hire or schedule minority and women workers who qualify as trainees pursuant to these rules. All of the requirements, however, are limited by the provisions of (c) below.

(iii) The name of any interested women or minority individual shall be maintained on a waiting list, and shall be considered for employment as described in paragraph (i) above whenever vacancies occur. At the request of the Division, the Contractor or subcontractor shall provide evidence of its good faith efforts to employ women and minorities from the list to fill vacancies.

(iv) If, for any reason, said Contractor or subcontractor determines that a minority individual or a woman is not qualified or if the individual qualifies as an advanced trainee or apprentice, the Contractor or subcontractor shall inform the individual in writing of the reasons for the determination, maintain a copy of the determination in its files, and send a copy to the Public Agency Compliance Officer and to the Division.

(7) To keep a complete and accurate record of all requests made for the referral of workers in any trade covered by the contract, and on forms made available by the Division and submitted promptly to the Division upon request.

c. The Contractor or subcontractor agrees that nothing contained in (b) above shall preclude the Contractor or subcontractor from complying with the hiring hall or apprenticeship policies in any applicable collective bargaining agreement or union hiring hall arrangement, and, where required by custom or agreement, it shall send journeymen and trainees to the union for referral, or to the apprenticeship program for admission, pursuant to such agreement or arrangement. However, where practices of a union or apprenticeship program will result in the exclusion of minorities and women or the failure to refer minorities and women consistent with the targeted county employment goal, the contractor or subcontractor shall consider for employment persons referred pursuant to (b) above without regard to such agreement or arrangement; provided further, however, that the Contractor or subcontractor shall not be required to employ women and minority advanced trainees and trainees in numbers which result in the employment of advanced trainees and trainees as a percentage of the total workforce for the construction trade, which percentage significantly exceeds the apprentice to journey worker ratio specified in the applicable collective bargaining agreement, or in the absence of a collective bargaining agreement, exceeds the ratio established by practice in the area for said construction trade. Also, the Contractor or subcontractor agrees that, in implementing the procedures of (b) above, it shall, where applicable, employ minority and women workers residing within the geographical jurisdiction of the union.

After notification of award, but prior to signing a construction contract, the Contractor shall submit to the Public Agency Compliance Officer and the Division an initial project workforce report (Form AA 201) provided to the public agency by the Division for distribution to and completion by the contractor, in accordance with N.J.A.C. 17:27-7.

The Contractor and each subcontractor must submit monthly employment and wage data to the Department via a web based application using electronic Form CC-257R. Instructions for registering and receiving the authentication code to access the web based application can be found at:

http://www.state.nj.us/transportation/business/procurement/ConstrServ/documents/NJ_StimulusReportingNotification-Contractor.pdf

Instructions on how to complete Form CC-257R are provided in the web application. Submit Form CC-257R through the web based application within 10 days following the end of the reporting month.

All employment and wage data must be accurate and consistent with the certified payroll records. The Contractor is responsible for ensuring that their subcontractors comply with these reporting requirements. Failure by the Contractor to submit Monthly Employment Utilization Reports may impact the contractor's prequalification rating with the Department.

d. The Contractor and its subcontractors shall furnish such reports or other documents to the Division of Public Contracts Equal Employment Opportunity Compliance as may be requested by the Division from time to time in order to carry out the purposes of these regulations, and public agencies shall furnish such information as may be requested by the Division of Public

Contracts Equal Employment Opportunity Compliance for conducting a compliance investigation pursuant to **Subchapter 10 of the Administrative Code (NJAC 17:27)**.

e. The Contractor agrees to cooperate with the public agency in the payment of budgeted funds, as is necessary, for on-the-job and off-the-job programs for outreach and training of minority and female trainees employed on the construction projects.

II. EQUAL EMPLOYMENT OPPORTUNITY POLICY

The Contractor agrees that it will accept and implement during the performance of this contract as its operating policy the following statement which is designed to further the provision of Equal Employment Opportunity to all persons without regard to their age, race, color, religion, creed, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex and to promote the full realization of Equal Employment Opportunity through a positive continuing program:

> "It is the policy of this company that it will not discriminate against any employee or applicant for employment because of age, race, creed, color, national origin, ancestry, martial status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex and that it will take Affirmative Action to ensure that applicants are recruited and employed and that employees are treated during employment without regard to their age, race, creed, color, national origin, ancestry, martial status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship."

III. EQUAL EMPLOYMENT OPPORTUNITY OFFICER

The Contractor will designate and make known to the Department contracting officers an Equal Employment Opportunity Officer (hereafter "EEO Officer") who will have the responsibility for and must be capable of effectively administering and promoting an active Equal Employment Opportunity program and be assigned adequate authority and responsibility to do so.

IV. DISSEMINATION OF POLICY

A. All members of the Contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, will be made fully cognizant of, and will implement, the Contractor's Equal Employment Opportunity Policy and contractual responsibilities to provide Equal Employment Opportunity in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

1. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every 6 months, at which time the Contractor's Equal Employment Opportunity Policy and its implementation will be reviewed and explained. The EEO Officer or other knowledgeable company official will conduct the meetings.

2. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer or other knowledgeable company official covering all major aspects of the Contractor's Equal Employment Opportunity obligations within 30 days following their reporting for duty with the Contractor.

3. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer or appropriate company official in the Contractor's Procedures for locating and hiring minority and women workers.

B. In order to make the Contractor's Equal Employment Opportunity Policy known to all employees, prospective employees and potential sources of employees, i.e., schools, employment agencies, labor unions (where appropriate), college placement officers, etc., the Contractor will take the following actions:

1. Notices and posters setting forth in the Contractor's Equal Employment Opportunity policy, as set forth in Section 2 of these Equal Employment Opportunity Special Provisions will be placed in conspicuous places readily accessible to employees, applicants for employment and potential employees.
2. The Contractor's Equal Employment Opportunity Policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate channels.

V. RECRUITMENT

A. In all solicitations and advertisements for employees placed by or on behalf of the Contractor, the Contractor will state that all qualified applicants will receive consideration for employment without regard to age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex. All such advertisements will be published in newspapers or other publications having a large circulation among minorities and women in the area from which the project workforce would normally be derived.

B. The Contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minority and women applicants, including, but not limited to state employment agencies, schools, colleges and minority and women organizations. To meet this requirement, the Contractor will, through his/her EEO Officer, identify sources of potential minority and women employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the Contractor for employment consideration.

C. In the event the Contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, he is expected to observe the provisions of that agreement to the extent that the system permits the Contractor's compliance with Equal Employment Opportunity contract provisions. (The US Department of Labor has held that where implementations of such agreements have the effect of discriminating against minorities or women, or obligates the Contractor to do the same; such implementation violates Executive Order 11246, as amended).

D. In the event that the process of referrals established by such a bargaining agreement fails to provide the Contractor with a sufficient number of minority and women referrals within the time period set forth in such an agreement, the Contractor shall comply with the provisions of "Section IX Unions" of the EEO Special Provisions.

VI. ESTABLISHMENT OF GOALS FOR CONSTRUCTION CONTRACTORS

A. The New Jersey Department of Transportation has established, pursuant to N.J.A.C. 17:27-7.2, the minority and women goals for each construction contractor and subcontractor based on availability statistics as reported by the New Jersey Department of Labor, Division of Planning and Research, in its report, "EEO Tabulation - Detailed Occupations by Race/Hispanic Groups" as follows:

MINORITY AND WOMEN EMPLOYMENT GOAL OBLIGATIONS FOR CONSTRUCTION CONTRACTORS AND SUBCONTRACTORS

COUNTY	MINORITY % PERCENTAGE	WOMEN % PERCENTAGE
Atlantic	18	6.9
Bergen	22	6.9
Burlington	15	6.9
Camden	19	6.9
Cape May	5	6.9
Cumberland	27	6.9
Essex	53	6.9
Gloucester	9	6.9
Hudson	60	6.9
Hunterdon	3	6.9
Mercer	30	6.9
Middlesex	24	6.9
Monmouth	15	6.9
Morris	16	6.9
Ocean	7	6.9
Passaic	36	6.9
Salem	10	6.9
Somerset	20	6.9
Sussex	4	6.9
Union	45	6.9
Warren	5	6.9

The Division of Public Contracts Equal Employment Opportunity Compliance has interpreted Section 7.2 of the State of New Jersey Affirmative Action Regulations as applicable to work hour goals for minority and women participation.

If a project is located in more than one county, the minority work hour goal will be determined by the county which serves as the primary source of hiring or, if workers are obtained equally from one or more counties, the single minority goal shall be the average of the individual goal for the affected counties.

B. The State Division of Public Contracts Equal Employment Opportunity Compliance may designate a regional goal for minority membership for a union that has regional jurisdiction. No regional goals shall apply to this project unless specifically designated elsewhere herein.

C. When hiring workers in the construction trade, the Contractor and/or subcontractor agree to attempt, in good faith, to employ minority and women workers in each construction trade, consistent with the applicable county or, in special cases, regional goals.

D. It is understood that the goals are not quotas. If the Contractor or subcontractor has attempted, in good faith, to satisfy the applicable goals, he will have complied with his obligations under these EEO Special Provisions. It is further understood that if the Contractor shall fail to attain the goals applicable to this project, it will be the Contractor's obligation to establish to the satisfaction of the Department of Transportation that it has made a good faith effort to satisfy such goals. The

Contractor or subcontractor agrees that a good faith effort to achieve the goals set forth in these special provisions shall include compliance with the following procedures:

1. Requests shall be made by the Contractor or subcontractor to each union or collective bargaining unit with which the Contractor or subcontractor has a referral agreement or arrangement for the referral of minority and women workers to fill job openings. Requests shall also be made for assurances for the referral of minority and women workers to fill job openings. Requests shall also be made for assurances from such unions or collective bargaining units that they will cooperate with the Contractor or subcontractor in fulfilling the Affirmative Action obligations of the Contractor or subcontractor under this contract. Such requests shall be made prior to the commencement of construction under the contract.
2. The Contractor and its subcontractors shall comply with Section IX, Unions of these EEO Special Provisions and, in particular, with Section IX, Paragraph D, if the referral process established in any collective bargaining arrangement is failing to provide the Contractor or subcontractor with a sufficient number of minority and women referrals.
3. The Contractor and its subcontractors shall notify the Department's Compliance Officer, the Division of Public Contracts Equal Employment Opportunity Compliance of the Department of Treasury and at least one approved minority referral organization of the Contractor's or subcontractors work force needs and of the Contractor's or subcontractor's desire for assistance in attaining the goals set forth herein. The notifications should include a request for referral of minority and women workers.
4. The Contractor and its subcontractors shall notify the Department's Compliance Officer and the Division of Public Contracts Equal Employment Opportunity Compliance of the Department of Treasury in the event that a union or collective bargaining unit is not making sufficient minority and women referrals to enable the Contractor or subcontractor to attain the workforce goals for the Project.
5. The Contractor and its subcontractors shall make standing requests to all local construction unions, the state training and employment service and other approved referral sources for additional referrals of minority and women workers until such time as the project workforce is consistent with the work hour goals for the project.
6. The Contractor and its subcontractors shall make standing requests to all local construction unions, the state training and employment service and other approved referral sources for additional referrals of minority and women workers until such time as the project workforce is consistent with the work hour goals for the project.
7. In the event that it is necessary to lay off some of the workers in a given trade on the construction site, the Contractor and its subcontractors shall ensure that fair layoff practices are followed regarding minority, women and other workers.
8. The Contractor and its subcontractors shall comply with the other requirements of these EEO Special Provisions.

VII. PERSONNEL ACTIONS

Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to age, race, color, creed, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex. The following procedures shall be followed:

A. The Contractor will conduct periodic inspections of project sites to ensure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

B. The Contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

C. The Contractor will periodically review selected personnel actions in-depth to determine whether there is evidence of discrimination. Where evidence is found, the Contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

D. The Contractor will promptly investigate all complaints of alleged discrimination made to the Contractor in connection with his/her obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the Contractor will inform every complainant of all of his/her avenues of appeal.

VIII. TRAINING AND PROMOTION

The Contractor will assist in locating, qualifying, and increasing the skills of minority group and women workers, and applicants for employment.

Consistent with the Contractor's workforce requirements and as permissible under State regulations, the Contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs, for the geographical area of contract performance. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training.

The Contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

The Contractor will periodically review the training and promotion potential of minority group and women workers and will encourage eligible employees to apply for such training and promotion.

IX. UNIONS

If the Contractor relies in whole or in part upon unions as a source of employees, the Contractor will use his/her best efforts to obtain the cooperation of such unions to increase opportunities for minority groups and women within the unions, and to effect referrals by such unions of minority and women workers. Actions by the Contractor either directly or through a Contractor's association acting, as agent will include the procedures set forth below:

A. The Contractor will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract of understanding, a notice advising the labor union or workers' representative of the Contractor's commitments under both the law against discrimination and this contract and shall post copies of the notice in conspicuous places readily accessible to employees and applicants for employment. Further, the notice will request assurance from the union or worker's representative that such union or worker's representative will cooperate with the Contractor in complying with the Contractor's Equal Employment Opportunity and Affirmative Action obligations.

B. The Contractor will use their best efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minority group members and women for membership in the unions and increasing the skills of minority group employees and women so that they may qualify for higher paying employment.

C. The Contractor will use their best efforts to incorporate an Equal Employment Opportunity clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their age, race, color, creed, sex, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, or nationality.

D. The Contractor is to obtain information as to the referral practices and policies of the labor union except to the extent that such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the Contractor, the Contractor shall so certify to the NJDOT and shall set forth what efforts have been made to obtain such information.

E. In the event the union is unable to provide the Contractor with a reasonable flow of minority and women referrals within the time limit set forth in the collective bargaining agreement, the Contractor

will, through independent recruitment efforts, fill the employment vacancies without regard to age, race, color, creed, sex, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, or nationality making full efforts to obtain qualified and/or qualifiable minority group persons and women. (The US Department of Labor has held that it shall be no excuse that the union with which the Contractor has a collective bargaining agreement providing for exclusive referral failed to refer minority employees). In the event the union referral practice prevents the Contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these Special Provisions, such Contractor shall immediately notify the NJDOT.

X. SUBCONTRACTING

A. The Contractor will use his best efforts to solicit bids from and to utilize minority group and women subcontractors or subcontractors with meaningful minority group and women representation among their employees. Contractors may use lists of minority owned and women owned construction firms as issued by the NJDOT and/or the New Jersey Unified Certification Program (NJUCP).

B. The Contractor will use his best efforts to ensure subcontractor compliance with their Equal Employment Opportunity obligations.

XI. RECORDS AND REPORTS

A. The Contactor will keep such records as are necessary to determine compliance with the Contractor's Equal Employment Opportunity obligations. The records kept by the Contractor will be designed to indicate:

1. The work hours of minority and non-minority group members and women employed in each work classification on the project;
2. The progress and efforts being made in cooperation with unions to increase employment opportunities for minorities and women (applicable only to Contractors who rely in whole or in part on unions as a source of their workforce);
3. The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority and women workers; and
4. The progress and efforts being made in securing the services of minority group and women subcontractors or subcontractors with meaningful minority and women representation among their employees.

B. All such records must be retained for a period of 3 years following completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of the NJDOT.

C. The Contractor shall submit monthly reports to the NJDOT after construction begins for the duration of the project, indicating the work hours of minority, women, and non minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on a form supplied by the NJDOT.

XII SPECIAL CONTRACT PROVISIONS FOR INVESTIGATING, REPORTING AND RESOLVING EMPLOYMENT DISCRIMINATION AND SEXUAL HARASSMENT COMPLAINTS

The Contractor hereby agrees to the following requirements in order to implement fully the nondiscrimination provisions of the Supplemental Specifications:

The Contractor agrees that in instances when it receives from any person working on the project site a verbal or written complaint of employment discrimination, prohibited under N.J.S.A. 10:5-1 et seq. 10:2-1 et seq., 42 U.S.C. 2000 (d) et seq., 42 U.S.C. 2000(e) et seq. And Executive Order 11246, it shall take the following actions:

1. Within one (1) working day commence an investigation of the complaint, which will include but not be limited to interviewing the complainant, the respondent, and all possible witnesses to the alleged act or acts of discrimination or sexual harassment.

2. Prepare and keep for its use and file a detailed written investigation report which includes the following information:

   a) Investigatory activities and findings.

   b) Dates and parties involved and activities involved in resolving the complaint.

   c) Resolution and corrective action taken if discrimination or sexual harassment is found to have taken place.

   d) A signed copy of resolution of complaint by complainant and Contractor.

   (In addition to keeping in its files the above-noted detailed written investigative report, the Contractor shall keep for possible future review by the NJDOT all other records, including, but not limited to, interview memos and statements.)

3. Upon the request of the NJDOT provides to the NJDOT within ten (10) calendar days a copy of its detailed written investigative report and all other records on the complaint investigation and resolution.

4. Take appropriate disciplinary actions against any Contractor employee, official or agent who has committed acts of discrimination or sexual harassment against any Contractor employee or person working on the project. If the person committing the discrimination is a subcontractor employee, then the Contractor is required to attempt to effectuate corrective and/or disciplinary action by the subcontractor in order to establish compliance with project's contract requirements.

5. Take appropriate disciplinary action against any Contractor employee, official or agent who retaliates, coerces or intimidates any complainant and/or person who provides information or assistance to any investigation of complaints of discrimination or sexual harassment. If the person retaliating, coercing or intimidating a complainant or other person assisting in an investigation is a subcontractor's employee, then the Contractor is required to attempt to effectuate corrective and/or disciplinary action taken by the subcontractor in order to establish compliance with the project's contract requirements.

6. Ensure to the maximum extent possible that the privacy interests of all persons who give confidential information in aid of the Contractor's employment discrimination investigation are protected.

7. In conjunction with the above requirements, the Contractor herein agrees to develop and post a written sexual harassment policy for its workforce.

8. The Contractor also agrees that its failure to comply with the above requirements may be cause for the New Jersey Department of Transportation to institute against the Contractor any and all enforcement proceedings and/or sanctions authorized by the contract or by state and/or federal law.

STATE ATTACHMENT NO. 2

PAYROLL REQUIREMENTS FOR 100% STATE PROJECTS

1. Each contractor and subcontractor shall furnish the Resident Engineer with payroll reports for each week of contract work. Such reports shall be submitted within 7 days of the date of payment covered thereby and shall contain the following information:

   A. Each employee's full name, address, and social security number. The employee's full name, and social security number need only appear on the first payroll on which his name appears. The employee's address need only be shown on the first submitted payroll on which his name appears; unless a change of address necessitates a submittal to reflect the new address.

   B. Each employee's specific work classification (s).

   C. Entries indicating each employee's basis hourly wage rate(s) and, where applicable, the overtime hourly wage rate(s). Any fringe benefits paid to the employee in cash must be indicated.

   D. Each employee's daily and weekly hours worked in each classification, including actual overtime hours worked (not adjusted).

   E. Each employee's gross wage.

   F. The itemized deductions made.

   G. The net wages paid.

2. Each contractor or subcontractor shall furnish a statement each week to the Resident Engineer with respect to the wages paid each of its employees engaged in contract work covered by the New Jersey Prevailing Wage Act during the preceding weekly payroll period. The statement shall be executed by the contractor or subcontractor or by an authorized officer or employee of the contractor or subcontractors who supervises the payment of wages. Contractors and subcontractors must use the certification set forth on New Jersey Department of Transportation Form FA-7 "Statement of Compliance," or the same certification set forth on (1) U.S. Department of Labor Form WH-348, (2) the reverse side of U. S. Department of Labor Form WH-347, or (3) any form with identical wording.

STATE ATTACHMENT NO. 3

AMERICANS WITH DISABILITIES ACT
100% STATE FUNDED CONTRACTS

Equal Opportunity For Individuals With Disabilities.

The CONTRACTOR and the STATE do hereby agree that the provisions of Title II of the American With Disabilities Act of 1990 (the "ACT") (42 U.S.C. Section 12101 et seq.), which prohibits discrimination on the basis of disability by public entities in all services, programs, and activities provided or made available by public entities, and the rules and regulations promulgated pursuant thereunto, are made a part of this contract. In providing any aid, benefit, or service on behalf of the STATE pursuant to this contract, the CONTRACTOR, agrees that the performance shall be in strict compliance with the Act. In the event that the CONTRACTOR, its agents, servants, employees, or subcontractors violate or are alleged to have violated the Act during the performance of this contract, the CONTRACTOR shall defend the STATE in any action or administrative proceeding commenced pursuant to this Act. The CONTRACTOR shall indemnify, protect, and save harmless the STATE, its agents, servants, and employees from and against any and all suits, claims, losses, demands, or damages of whatever kind or nature arising out of or claimed to arise out of the alleged violation. The CONTRACTOR shall, at its own expense, appear, defend, and pay any and all charges for legal services and all costs and other expenses arising from such action or administrative proceeding or incurred in connection therewith. In any and all complaints brought pursuant to the STATE'S grievance procedure, the CONTRACTOR agrees to abide by any decision of the STATE which is rendered pursuant to said grievance procedure. If any action or administrative proceeding results in an award of damages against the STATE or if the STATE incurs any expense to cure a violation of the ADA which has been brought pursuant to its grievance procedure, the CONTRACTOR shall satisfy and discharge the same at its own expense.

The STATE shall, as soon as practicable after a claim has been made against it, give written notice thereof to the CONTRACTOR along with full and complete particulars of the claim. If any action or administrative proceeding is brought against the STATE or any of its agents, servants, and employees, the STATE shall expeditiously forward or have forwarded to the CONTRACTOR every demand, complaint, notice, summons, pleading, or other process received by the STATE or its representatives.

It is expressly agreed and understood that any approval by the STATE of the services provided by the CONTRACTOR pursuant to this contract will not relieve the CONTRACTOR of the obligation to comply with the Act and to defend, indemnify, protect, and save harmless the STATE pursuant to this paragraph.

It is further agreed and understood that the STATE assumes no obligation to indemnify or save harmless the CONTRACTOR, its agents, servants, employees and subcontractors for any claim which may arise out of their performance of this Agreement. Furthermore, the CONTRACTOR expressly understands and agrees that the provisions of this indemnification clause shall in no way limit the CONTRACTOR'S obligations assumed in this Agreement, nor shall they be construed to relieve the CONTRACTOR from any liability, nor preclude the STATE from taking any other actions available to it under any other provisions of this Agreement or otherwise at law.

STATE ATTACHMENT NO. 4

SMALL BUSINESS ENTERPRISE UTILIZATION ATTACHMENT
100% STATE-FUNDED CONTRACTS

I. UTILIZATION OF SMALL BUSINESS ENTERPRISE (SBE) BUSINESSES AS CONTRACTORS, MATERIAL SUPPLIERS AND EQUIPMENT LESSORS.

The New Jersey Department of Transportation advises each contractor or subcontractor that failure to carry out the requirements set forth in this attachment shall constitute a breach of contract and, after notification to the applicable State agency, may result in termination of the agreement or contract by the Department or such remedy as the Department deems appropriate. Requirements set forth in this section shall also be included in all subcontract agreements in accordance with State of New Jersey requirements.

II. POLICY

It is the policy of the New Jersey Department of Transportation that Small Business Enterprises, as defined in N.J.A.C. 12A: 10A-1.2 et seq., and N.J.A.C. 17:14-1.2 et seq., shall have the maximum opportunity to participate in the performance of contracts financed wholly with 100% state funds.

III. CONTRACTOR'S SMALL BUSINESS OBLIGATION

The New Jersey Department of Transportation and its Contractor agree to ensure that Small Business Enterprises (SBE), as defined in N.J.A.C. 12A: 10A-1.2 et seq., and N.J.A.C. 17:14-1.2 et seq., have maximum opportunity to participate in the performance of contracts and subcontracts financed wholly with 100% state funds. In this regard, the New Jersey Department of Transportation and all Contractors shall take all necessary and reasonable steps to ensure that Small Business Enterprises are utilized on, compete for, and perform on NJDOT construction contracts. The New Jersey Department of Transportation and its Contractors shall not discriminate on the basis of race, color, national origin, or sex in the award and performance of State-funded contracts.

IV. COMPLIANCE

To signify and affirm compliance with the provisions of this attachment, the bidder shall complete the Schedule of Small Business Participation "Form A" included in the Proposal and all forms and documents required in Sections VII and VIII of these provisions which will be made a part of the resulting contract.

V. SMALL BUSINESS GOALS FOR THIS PROJECT

NOTE: SUBCONTRACTING GOALS ARE NOT APPLICABLE IF THE PRIME CONTRACTOR IS A REGISTERED SMALL BUSINESS ENTERPRISE (SBE) FIRM.

A. This project includes a goal of awarding _5_ % percent of the total contract value to subcontractors qualifying as **SMALL BUSINESSES.**

B. Only Small Business Enterprises registered prior to the date of bid, or prospective Small Business Enterprises that have submitted to the New Jersey Commerce and Economic Growth Commission on or before the day of bid, a completed "State of New Jersey Small Business Vendor Registration Form" and all the required support documentation, will be considered in determining whether the contractor has met the established goals for the project. Early submission of required documentation is encouraged.

C. If a prospective Small Business Enterprise fails to meet the eligibility standards for participation the department's Small Business Program, the contractor shall, prior to the award, make reasonable outreach efforts to replace that ineligible subcontractor with a registered Small Business whose participation is sufficient to meet the goal for the contract.

D. Prospective Small Businesses whose registration applications are denied or rejected by the New Jersey Commerce and Growth Commission are ineligible for participation on the project to meet Small Business goals, regardless of any pending appeal action in progress.

E. A directory of registered Small Businesses Enterprise firms is available upon request to the New Jersey Commerce and Growth Commission or the New Jersey Department of Transportation, Division of Civil Rights/Affirmative Action. The directory is to be used as a source of information only and does not relieve the Contractor of their responsibility to seek out Small Businesses Enterprises not listed.

VI. COUNTING SMALL BUSINESS ENTERPRISE PARTICIPATION

A. Each Small Business Enterprise (SBE) is subject to a registration procedure to ensure their SBE eligibility prior to the award of contract. In order to facilitate this process, it is advisable for the bidder to furnish the names of proposed SBEs to the Department before bid opening. Once a firm is determined to be a bona fide SBE by the New Jersey Commerce and Growth Commission, the total dollar value of the contract awarded to the SBE is counted toward the applicable goal.

B. The Contractor may count toward its SBE goal only expenditures to SBEs that perform a commercially useful function in the work of a contract. A SBE is considered to perform a commercially useful function when it is responsible for execution of a distinct element of the work of a contract and carrying out its responsibility by actually performing, managing and supervising the work involved. To determine whether a SBE is performing a commercially useful function, the Contractor shall evaluate the amount of work subcontracted, industry practice and other relevant factors.

C. If an SBE does not perform or exercise responsibility for at least 30 percent of the total cost of its contract with its own work force, or the SBE subcontracts a greater portion of the work of a contract than would be expected on the basis of normal industry practice for the type of work involved, you must presume that it is not performing a commercially useful function.

D. If a Contractor is part of a Joint Venture and one or more of the Sole Proprietorships, Partnerships, Limited Liability companies or Corporations comprising the Joint Venture is a registered SBE, the actual payments made to the Joint Venture for work performed by the SBE member, will be applied toward the goal. Payments made to the Joint Venture for work performed by a non-small business firm will not be applied toward the applicable goal.

E. If the Contractor is a registered SBE, payments made to the Contractor for work performed by the Contractor will be applied toward the SBE goal. Payments made to the Contractor for work performed by non-SBE's will not be applied toward the goal.

F. When a SBE subcontracts part of the work of its contract to another firm, the value of the subcontracted work may be counted towards the SBE goals only if the SBE's subcontractor is also a SBE. Work that a SBE subcontracts to a non-SBE firm does not count toward the assigned goal.

VII. SUBMISSION OF CONTRACTOR'S AFFIRMATIVE ACTION PLANS

A. Contractors are required to submit annually on their due date, their firm's Affirmative Action Program to the Division of Civil Rights/Affirmative Action. Contractors must have an **approved** Affirmative Action Program in the Division of Civil Rights/Affirmative Action no later than seven (7) State business days after receipt of bids. No recommendations to award will be made without an approved Affirmative Action Program on file in the Division of Civil Rights/Affirmative Action.

B. The Annual Affirmative Action Program will include, but is not limited to the following:

1. The name of the company's Liaison Officer who will administer the Small Business Enterprise Program.

2. An explanation of the affirmative action methods used in seeking out and considering Small Business Enterprises as subcontractors, material suppliers or equipment lessors.

3. An explanation of affirmative action methods which will be used in seeking out future Small Business Enterprises as subcontractors, material suppliers or equipment lessors after the award of the contract and for the duration of said project.

C. The following shall be submitted either with the bid or to the Division of Civil Rights/Affirmative Action no later than seven (7) state business days after the receipt of bids.

1. SBE "FORM A" - Schedule of SBE Participation. The Contractor shall list all SBEs that will participate in the contract including scope of work, actual dollar amount and percent of total contract to be performed. This form should be submitted only if the goal level established for the contract have been met or exceeded;

   Note: If a change occurs to the Contractor's original Form A submission which was previously approved by the Division of Civil Rights/Affirmative Action, a Revised Form A must be submitted naming the replacement Small Business Enterprise subcontractors. A written explanation should be included with the submission of the revised Form A.

2. Request for Exemption - In the event the Contractor is unable to meet the specified goal level, that Contractor must submit a written request for a partial or full exemption from the SBE goal. This request shall include the names of all SBE firms that the contractor will utilize on the contract and shall describe the specific work to be performed by each SBE together with the actual dollar amount of that work. Additionally, this request must address the Contractor's efforts to make Reasonable Outreach Efforts as enumerated in Section VIII.

3. Additional Information - The Department in its sole discretion may request additional information from the Contractor prior to award of the contract in order to evaluate the Contractor's compliance with the SBE requirements of the bid proposal. Such information must be provided within the time limits established by the department. The Contractor shall, prior to the award of the contract, submit a completed SBE "Form A", even if it has been granted an exemption from the SBE goal.

VIII. REASONABLE OUTREACH EFFORTS

If a Contractor fails to meet the goal for Small Business Enterprise participation, the Contractor shall document its reasonable outreach efforts to meet the SBE goal. Reasonable outreach shall include, but not be limited to the following:

A. Attendance at a pre-bid meeting, if any, scheduled by the Department to inform SBE's of subcontracting opportunities under a given solicitation.

B. Advertisement in general circulation media, trade association publications, and small business enterprise-focus media for at least 20 days before bids are due. If 20 days are not available, publication for a shorter reasonable time is acceptable.

C. Written notification to SBE's that their interest in the contract is solicited;

D. Efforts made to select portions of the work proposed to be performed by SBEs in order to increase the likelihood of achieving the stated goal;

E. Efforts made to negotiate with SBE's for specific sub-bids including at a minimum

1. The names, addresses and telephone numbers of SBE's that were contacted;

2. A description of the information provided to SBE's regarding the plans and specifications for portions of the work to be performed; and

3. A statement of why additional agreements with SBE's were not reached;

F. Information regarding each SBE the bidder contacted and rejected as unqualified and the reasons for the bidder's conclusion;

G. Efforts made to assist the SBE in obtaining bonding or insurance required by the Bidder or the Department.

IX. ADMINISTRATIVE RECONSIDERATION

A. If the Division of Civil Rights/Affirmative Action determines that the apparent successful bidder has failed to make reasonable outreach efforts to meet the requirements of this section, the Department must, before awarding the contract, provide the bidder an opportunity for administrative reconsideration.

B. As part of this reconsideration, the bidder will have the opportunity to provide written documentation or argument concerning the issue of whether it met the goal or made adequate good faith efforts to do so. NJDOT will send the bidder a written decision on reconsideration, explaining the basis for finding that the bidder did or did not meet the SBE goal or make an adequate good faith effort to do so.

C. Within seven (7) State business days of being informed by the Division of Civil Rights/Affirmative Action that it is not a responsible bidder because it has not made or documented sufficient outreach efforts to SBEs, a bidder may make a request in writing to the Director, Division of Procurement, PO Box 605, Trenton, New Jersey, 08625-0605; Telephone (609) 530-6355. The Director, Division of Procurement, does not participate in the initial determination of whether reasonable outreach was performed by the Contractor.

X. RESPONSIBILITY AFTER AWARD OF THE CONTRACT

If at any time following the award of contract, the Contractor intends to sublet any portion(s) of the work under said contract, or intends to purchase material or lease equipment not contemplated during preparation of bids, said Contractor shall take affirmative action:

A. To notify the Resident Engineer, in writing, of the type and approximate value of the Contractor intends to accomplish by such subcontract, purchase order or lease.

B. To signify and affirm compliance with the provisions of this Section, the Contractor shall submit the Post-Award SBE Certification Form to the Regional Supervising Engineer with his application to sublet or prior to purchasing material or leasing equipment. Post Award SBE forms may be obtained from the Resident Engineer.

C. To give small business enterprise firms equal consideration with non-small business firms in negotiation for any subcontracts, purchase orders or leases.

XI. CONSENT BY DEPARTMENT TO SUBLETTING

A. The Department will not approve any subcontracts proposed by the Contractor unless and until said contractor has complied with the terms of this SBE Utilization Attachment.

B. The Contractor shall provide the Resident Engineer with a listing of firms, organizations or enterprises to be used as subcontractors on the proposed project. Such listing shall clearly delineate which firms are classified as SBEs.

C. Notification of a subcontractor's termination shall be sent to the Department by the Contractor through the Resident Engineer.

XII. CONCILIATION

In cases of alleged discrimination regarding these and all equal employment opportunity provisions and guidelines, investigations and conciliation will be undertaken by the Division of Civil Rights/Affirmative Action, New Jersey Department of Transportation.

XIII. DOCUMENTATION

A. Records and Reports

The Contractor shall keep such records as are necessary to determine compliance with its Small Business Enterprise Utilization obligations. The records kept by the Contractor will be designed to indicate:

1. The names of the small business enterprise subcontractors, equipment lessors and material suppliers contacted for work on this project.
2. The type of work to be done, materials to be utilized or services to be performed other than by the prime contractor on the project.
3. The actual dollar amount of work awarded to SBE's.
4. The progress and efforts being made in seeking out and utilizing Small Business Enterprise firms. This would include solicitations, quotes and bids regarding project work items, supplies, leases, etc.
5. Documentation of all correspondence, contacts, telephone calls, etc, to obtain the services of Small Business Enterprise firms on this project.

B. The contractor shall submit reports, as required by the Department, on those contracts and other business transactions executed with Small Business Enterprise firms in such form and manner as may be prescribed by the Department.

C. All such records must be maintained for a period of three (3) years following acceptance of final payment and will be available for inspection by the Department.

XIV. PAYMENT TO SUBCONTRACTORS

The Contractor agrees to pay its subcontractors in accordance with the Specifications.

XV. SANCTIONS

Failure of a Contractor to comply with these provisions may result in bid rejection, reduced classification, suspension, debarment, or the institution of other appropriate action by the New Jersey Department of Transportation.