Appendix A: Project Planning and Development

A-5 Non-Standard Feature Justification

NON-STANDARD FEATURE JUSTIFICATION
(in accordance with HDM §2.8)

PIN:	1721.51	NHS (Y/N):	Yes
Route No. & Name:	I-287 WB Approach to W. Broadway	Functional Class:	Urban Principal Arterial Interstate
Project Type:	Reconstruction	Design Class:	Mainline
% Trucks:	12.4%	Terrain:	Rolling
ADT (ETC+30):	218,551*	Truck Access/Qualifying Hwy.	Yes

a. - Description of Non-Standard Feature

Type of Feature (e.g., Lane Width):	Lane Width		
Location:	I-287 WB Approach to W. Broadway (STA 828+13 to STA 842+51)		
Standard Value:	12 ft	Design Speed:	70 mph
Existing Value:	10.5 ft	Recommended Speed:	70 mph
Proposed Value:	10.5 ft	Recommended Speed:	70 mph

b. - Accident Analysis

Current Accident Rate:	
Statewide Rate:	0.07/mvm**
Is the non-standard feature a contributing factor?	No
Anticipated Accident Rates, Severity, and Costs:	

c. - Cost Estimates

Cost to Fully Meet Standards:	
Cost(s) For Incremental Improvements:	N/A

d. - Mitigation (e.g., increased superelevation and speed change lane length for a non-standard ramp radius):

Lane width is tapered to match existing lane widths at the project limit.

e. - Compatibility with Adjacent Segments & Future Plans:

Meets project objective of tying in the works without affecting Interchange 10 in Rockland and the Rt 9 South Broadway Bridge in Westchester

f. - Other Factors (e.g., Social, Economic & Environmental):

Minimizes property impacts adjacent to the I-287

g. - Proposed Treatment (i.e., Recommendation):

Tying to the existing lanes widths prior to Interchange 10 means no alterations need to be made to the Interchange ramps or the bridges

* Values were obtained from the 2010 NYSDOT Traffic Data Report and Traffic Data Viewer.
** The units are accidents per million of vehicles-miles.

NON-STANDARD FEATURE JUSTIFICATION
(in accordance with HDM §2.8)

PIN:	1721.51	NHS (Y/N):	Yes
Route No. & Name:	I-287 WB Approach to Cornelison Ave.	Functional Class:	Urban Principal Arterial Interstate
Project Type:	Reconstruction	Design Class:	Mainline
% Trucks:	12.4%	Terrain:	Rolling
ADT (ETC+30):	218,551*	Truck Access/Qualifying Hwy.	Yes

a. - Description of Non-Standard Feature

Type of Feature (e.g., Lane Width):	Shoulder Width		
Location:	I-287 WB Approach to W. Broadway (STA 828+13 to STA 836+66)		
Standard Value:	12 ft	Design Speed:	70 mph
Existing Value:	7 ft	Recommended Speed:	70 mph
Proposed Value:	7 ft	Recommended Speed:	70 mph

b. - Accident Analysis

Current Accident Rate:	
Statewide Rate:	0.07/mvm**
Is the non-standard feature a contributing factor?	No
Anticipated Accident Rates, Severity, and Costs:	

c. - Cost Estimates

Cost to Fully Meet Standards:	
Cost(s) For Incremental Improvements:	N/A

d. - Mitigation (e.g., increased superelevation and speed change lane length for a non-standard ramp radius):

Shoulder width is tapered to match existing shoulder widths at the project limit.

e. - Compatibility with Adjacent Segments & Future Plans:

Meets project objective of tying in the works without affecting Interchange 10 in Rockland and the Rt 9 South Broadway Bridge in Westchester

f. - Other Factors (e.g., Social, Economic & Environmental):

Minimizes property impacts adjacent to the I-287

g. - Proposed Treatment (i.e., Recommendation):

Tying in to the existing lanes widths prior to Interchange 10 means no alterations need to be made to the Interchange ramps or the bridges

* Values were obtained from the 2010 NYSDOT Traffic Data Report and Traffic Data Viewer.
** The units are accidents per million of vehicles-miles.

NON-STANDARD FEATURE JUSTIFICATION (in accordance with HDM §2.8)			
PIN:	1721.51	NHS (Y/N):	Yes
Route No. & Name:	I-287 WB Off TZB Bridge	Functional Class:	Urban Principal Arterial Interstate
Project Type:	Reconstruction	Design Class:	Mainline
% Trucks:	12.4%	Terrain:	Rolling
ADT (ETC+30):	218,551*	Truck Access/Qualifying Hwy.	Yes

a. - Description of Non-Standard Feature			
Type of Feature (e.g., Lane Width):	Shoulder Width		
Location:	I-287 WB Maintenance Ramp TZB intersection with River Road (STA 836+66 to STA 842+51)		
Standard Value:	12 ft	Design Speed:	70 mph
Existing Value:	6-7 ft	Recommended Speed:	70 mph
Proposed Value:	7ft-10ft	Recommended Speed:	70 mph

b. - Accident Analysis	
Current Accident Rate:	
Statewide Rate:	1.10/mvm**
Is the non-standard feature a contributing factor?	No
Anticipated Accident Rates, Severity, and Costs:	

c. - Cost Estimates	
Cost to Fully Meet Standards:	
Cost(s) For Incremental Improvements:	N/A

d. - Mitigation (e.g., increased superelevation and speed change lane length for a non-standard ramp radius):
Shoulder width is tapered to match existing shoulder widths at the project limit.
e. - Compatibility with Adjacent Segments & Future Plans:
The Thruways existing ramp is actually of a lesser standard so the new ramp will improve conditions.
f. - Other Factors (e.g., Social, Economic & Environmental):
Minimizes property impacts adjacent to the I-287
g. - Proposed Treatment (i.e., Recommendation):
Tying the WB maintenance ramp within the available space minimizes impacts to adjacent properties.

* Values were obtained from the 2010 NYSDOT Traffic Data Report and Traffic Data Viewer.
** The units are accidents per million of vehicles-miles.

NON-STANDARD FEATURE JUSTIFICATION
(in accordance with HDM §2.8)

PIN:		NHS (Y/N):	Yes
Route No. & Name:	I-287 WB Tappan Zee Bridge	Functional Class:	Urban Principal Arterial Interstate
Project Type:	Reconstruction	Design Class:	Mainline
% Trucks:	12.4%	Terrain:	Rolling
ADT (ETC+30):	218,551*	Truck Access/Qualifying Hwy.	Yes

a. - Description of Non-Standard Feature

Type of Feature (e.g., Lane Width):	Shoulder width - right		
Location:	WB Tappan Zee Bridge (STA 842+51 to STA 1009+58)		
Standard Value:	12ft	Design Speed:	70 mph
Existing Value:	0ft	Recommended Speed:	70 mph
Proposed Value:	10ft	Recommended Speed:	70 mph

b. - Accident Analysis

Current Accident Rate:	
Statewide Rate:	1.10/mvm**
Is the non-standard feature a contributing factor?	No
Anticipated Accident Rates, Severity, and Costs:	

c. - Cost Estimates

Cost to Fully Meet Standards:	
Cost(s) For Incremental Improvements:	N/A

d. - Mitigation (e.g., increased superelevation and speed change lane length for a non-standard ramp radius):

As per NYSDOT's instructions, 10ft shoulder to be provided on the right side of the bridge.

e. - Compatibility with Adjacent Segments & Future Plans:

Allows enough space for drainage puddle width

f. - Other Factors (e.g., Social, Economic & Environmental):

g. - Proposed Treatment (i.e., Recommendation):

* Values were obtained from the 2010 NYSDOT Traffic Data Report and Traffic Data Viewer.
** The units are accidents per million of vehicles-miles.

NON-STANDARD FEATURE JUSTIFICATION
(in accordance with HDM §2.8)

PIN:		NHS (Y/N):	Yes
Route No. & Name:	I-287 WB Off Tappan Zee Bridge	Functional Class:	Urban Principal Arterial Interstate
Project Type:	Reconstruction	Design Class:	Mainline
% Trucks:	12.4%	Terrain:	Rolling
ADT (ETC+30):	218,551*	Truck Access/Qualifying Hwy.	Yes

a. - Description of Non-Standard Feature

Type of Feature (e.g., Lane Width):	Shoulder width - left		
Location:	I-287 WB Tappan Zee Bridge (STA 828+13 to STA 839+00)		
Standard Value:	12ft	Design Speed:	70 mph
Existing Value:	0ft	Recommended Speed:	70 mph
Proposed Value:	24ft	Recommended Speed:	70 mph

b. - Accident Analysis

Current Accident Rate:	
Statewide Rate:	0.07/mvm**
Is the non-standard feature a contributing factor?	No
Anticipated Accident Rates, Severity, and Costs:	

c. - Cost Estimates

Cost to Fully Meet Standards:	
Cost(s) For Incremental Improvements:	N/A

d. - Mitigation (e.g., increased superelevation and speed change lane length for a non-standard ramp radius):

As per NYSDOT's instructions, 24ft shoulder to be provided on the left side of bridge.

e. - Compatibility with Adjacent Segments & Future Plans:

f. - Other Factors (e.g., Social, Economic & Environmental):

g. - Proposed Treatment (i.e., Recommendation):

* Values were obtained from the 2010 NYSDOT Traffic Data Report and Traffic Data Viewer.
** The units are accidents per million of vehicles-miles.

NON-STANDARD FEATURE JUSTIFICATION
(in accordance with HDM §2.8)

PIN:		NHS (Y/N):	Yes
Route No. & Name:	I-287 EB New York State Thruway Toll Road	Functional Class:	Urban Principal Arterial Interstate
Project Type:	Reconstruction	Design Class:	Mainline
% Trucks:	12.4%	Terrain:	Rolling
ADT (ETC+30):	218,551*	Truck Access/Qualifying Hwy.	Yes

a. - Description of Non-Standard Feature

Type of Feature (e.g., Lane Width):	Shoulder width-left		
Location:	I-287 EB New York State Thruway Toll Road (STA 1015+40 to STA 1018+35)		
Standard Value:	12ft	Design Speed:	70 mph
Existing Value:	0ft	Recommended Speed:	70 mph
Proposed Value:	6ft	Recommended Speed:	70 mph

b. - Accident Analysis

Current Accident Rate:	
Statewide Rate:	1.10/mvm**
Is the non-standard feature a contributing factor?	No
Anticipated Accident Rates, Severity, and Costs:	

c. - Cost Estimates

Cost to Fully Meet Standards:	$ 3million to rebuild the Rt 9 South Broadway Bridge
Cost(s) For Incremental Improvements:	N/A

d. - Mitigation (e.g., increased superelevation and speed change lane length for a non-standard ramp radius):

Shoulder width is tapered to match existing shoulder widths at the project limit.

e. - Compatibility with Adjacent Segments & Future Plans:

f. - Other Factors (e.g., Social, Economic & Environmental):

g. - Proposed Treatment (i.e., Recommendation):

Tying to the existing lanes widths prior to the Rt 9 South Broadway Bridge in Westchester mean no alterations need to be made to the existing bridge.

* Values were obtained from the 2010 NYSDOT Traffic Data Report and Traffic Data Viewer.
** The units are accidents per million of vehicles-miles.

NON-STANDARD FEATURE JUSTIFICATION
(in accordance with HDM §2.8)

PIN:		NHS (Y/N):	Yes
Route No. & Name:	I-287 EB New York State Thruway Toll Road	Functional Class:	Urban Principal Arterial Interstate
Project Type:	Reconstruction	Design Class:	Mainline
% Trucks:	12.4%	Terrain:	Rolling
ADT (ETC+30):	218,551*	Truck Access/Qualifying Hwy.	Yes

a. - Description of Non-Standard Feature

Type of Feature (e.g., Lane Width):	Shoulder width-right		
Location:	I-287 EB New York State Thruway Toll Road & South Broadway (STA 1015+89 to STA 1018+66)		
Standard Value:	12ft	Design Speed:	70 mph
Existing Value:		Recommended Speed:	70 mph
Proposed Value:	0ft	Recommended Speed:	70 mph

b. - Accident Analysis

Current Accident Rate:	
Statewide Rate:	1.10/mvm**
Is the non-standard feature a contributing factor?	No
Anticipated Accident Rates, Severity, and Costs:	

c. - Cost Estimates

Cost to Fully Meet Standards:	$ 3million to rebuild the Rt 9 South Broadway Bridge
Cost(s) For Incremental Improvements:	N/A

d. - Mitigation (e.g., increased superelevation and speed change lane length for a non-standard ramp radius):

Mitigation consisting of no shoulder warning signs. Full 12ft shoulder maintained east of South Broadway bridge.

e. - Compatibility with Adjacent Segments & Future Plans:

Full width shoulder is not possible due to the existing Rt 9 South Broadway Bridge in Westchester. The shoulder width has been reduced as per NYDOT instruction.

f. - Other Factors (e.g., Social, Economic & Environmental):

g. - Proposed Treatment (i.e., Recommendation):

Tying to the existing lanes widths prior to the Rt 9 South Broadway Bridge in Westchester mean no alterations need to be made to the existing bridge.

* Values were obtained from the 2010 NYSDOT Traffic Data Report and Traffic Data Viewer.
** The units are accidents per million of vehicles-miles.

NON-STANDARD FEATURE JUSTIFICATION
(in accordance with HDM §2.8)

PIN:		NHS (Y/N):	Yes
Route No. & Name:	I-287 WB Off Tappan Zee Bridge	Functional Class:	Urban Principal Arterial Interstate
Project Type:	Reconstruction	Design Class:	Mainline
% Trucks:	12.4%	Terrain:	Rolling
ADT (ETC+30):	218,551*	Truck Access/Qualifying Hwy.	Yes

a. - Description of Non-Standard Feature

Type of Feature (e.g., Lane Width):	Stopping Stop Distance		
Location:	I-287 WB Off Tappan Zee Bridge (STA 836+86 to STA 842+51)		
Standard Value:	730ft	Design Speed:	70 mph
Existing Value:	600ft	Recommended Speed:	70 mph
Proposed Value:	571ft	Recommended Speed:	70 mph

b. - Accident Analysis

Current Accident Rate:	
Statewide Rate:	0.07/mvm**
Is the non-standard feature a contributing factor?	No
Anticipated Accident Rates, Severity, and Costs:	

c. - Cost Estimates

Cost to Fully Meet Standards:	
Cost(s) For Incremental Improvements:	N/A

d. - Mitigation (e.g., increased superelevation and speed change lane length for a non-standard ramp radius):

Required to fit re-aligned highway within highway boundary with minimal land take and property impact

e. - Compatibility with Adjacent Segments & Future Plans:

f. - Other Factors (e.g., Social, Economic & Environmental):

Minimizes land take and property impacts

g. - Proposed Treatment (i.e., Recommendation):

Tying in to the existing lanes widths prior to Interchange 10 means no alterations need to be made to the Interchange ramps or the bridges

* Values were obtained from the 2010 NYSDOT Traffic Data Report and Traffic Data Viewer.
** The units are accidents per million of vehicles-miles.

NON-STANDARD FEATURE JUSTIFICATION (in accordance with HDM §2.8)			
PIN:		NHS (Y/N):	Yes
Route No. & Name:	I-287 WB Tappan Zee Bridge	Functional Class:	Urban Principal Arterial Interstate
Project Type:	Reconstruction	Design Class:	Mainline
% Trucks:	12.4%	Terrain:	Rolling
ADT (ETC+30):	218,551*	Truck Access/Qualifying Hwy.	Yes

a. - Description of Non-Standard Feature			
Type of Feature (e.g., Lane Width):	Stopping Stop Distance		
Location:	I-287 WB Tappan Zee Bridge (STA 842+51 to STA 871+29)		
Standard Value:	730ft	Design Speed:	70 mph
Existing Value:	600ft	Recommended Speed:	70 mph
Proposed Value:	586ft	Recommended Speed:	70 mph

b. - Accident Analysis	
Current Accident Rate:	
Statewide Rate:	0.07/mvm**
Is the non-standard feature a contributing factor?	No
Anticipated Accident Rates, Severity, and Costs:	

c. - Cost Estimates	
Cost to Fully Meet Standards:	
Cost(s) For Incremental Improvements:	N/A

d. - Mitigation (e.g., increased superelevation and speed change lane length for a non-standard ramp radius):	
	Required to fit re-aligned highway within highway boundary with minimal land take and property impact

e. - Compatibility with Adjacent Segments & Future Plans:	

f. - Other Factors (e.g., Social, Economic & Environmental):	
	Minimizes land take and property impacts

g. - Proposed Treatment (i.e., Recommendation):	
	Tying in to the existing lanes widths prior to Interchange 10 means no alterations need to be made to the Interchange ramps or the bridges

* Values were obtained from the 2010 NYSDOT Traffic Data Report and Traffic Data Viewer.
** The units are accidents per million of vehicles-miles.

NON-STANDARD FEATURE JUSTIFICATION (in accordance with HDM §2.8)			
PIN:		NHS (Y/N):	Yes
Route No. & Name:	I-287 WB @ S. Broadway Bridge	Functional Class:	Urban Principal Arterial Interstate
Project Type:	Reconstruction	Design Class:	Mainline
% Trucks:	12.4%	Terrain:	Rolling
ADT (ETC+30):	218,551*	Truck Access/Qualifying Hwy.	Yes

a. - Description of Non-Standard Feature			
Type of Feature (e.g., Lane Width):	Stopping Stop Distance		
Location:	I-287 WB Toll Plaza Approach @ Rt 9 South Broadway Bridge (Westchester) (STA 1015+29 to STA 1018+66)		
Standard Value:	730ft	Design Speed:	70 mph
Existing Value:	472ft	Recommended Speed:	70 mph
Proposed Value:	571ft	Recommended Speed:	70 mph

b. - Accident Analysis	
Current Accident Rate:	
Statewide Rate:	1.10/mvm**
Is the non-standard feature a contributing factor?	No
Anticipated Accident Rates, Severity, and Costs:	

c. - Cost Estimates	
Cost to Fully Meet Standards:	$3 million to rebuild the Rt 9 South Broadway Bridge
Cost(s) For Incremental Improvements:	N/A

d. - Mitigation (e.g., increased superelevation and speed change lane length for a non-standard ramp radius):	
	Required to fit re-aligned highway within highway boundary with minimal land take and property impact

e. - Compatibility with Adjacent Segments & Future Plans:	

f. - Other Factors (e.g., Social, Economic & Environmental):	

g. - Proposed Treatment (i.e., Recommendation):	
	Tying to the existing lanes widths prior to the Rt 9 South Broadway Bridge in Westchester mean no alterations need to be made to the existing bridge.

* Values were obtained from the 2010 NYSDOT Traffic Data Report and Traffic Data Viewer.
** The units are accidents per million of vehicles-miles.

NON-STANDARD FEATURE JUSTIFICATION (in accordance with HDM §2.8)			
PIN:		NHS (Y/N):	Yes
Route No. & Name:	I-287 EB Tappan Zee Bridge Approach	Functional Class:	Urban Principal Arterial Interstate
Project Type:	Reconstruction	Design Class:	Mainline
% Trucks:	12.4%	Terrain:	Rolling
ADT (ETC+30):	218,551*	Truck Access/Qualifying Hwy.	Yes

a. - Description of Non-Standard Feature			
Type of Feature (e.g., Lane Width):	Stopping Stop Distance		
Location:	I-287 EB Bridge Approach (STA 835+39 to STA 858+61)		
Standard Value:	730ft	Design Speed:	70 mph
Existing Value:	385ft	Recommended Speed:	70 mph
Proposed Value:	599ft	Recommended Speed:	70 mph

b. - Accident Analysis	
Current Accident Rate:	
Statewide Rate:	0.05/mvm**
Is the non-standard feature a contributing factor?	No
Anticipated Accident Rates, Severity, and Costs:	

c. - Cost Estimates	
Cost to Fully Meet Standards:	
Cost(s) For Incremental Improvements:	N/A

d. - Mitigation (e.g., increased superelevation and speed change lane length for a non-standard ramp radius):	
	Required to fit re-aligned highway within highway boundary with minimal land take and property impact

e. - Compatibility with Adjacent Segments & Future Plans:	

f. - Other Factors (e.g., Social, Economic & Environmental):	

g. - Proposed Treatment (i.e., Recommendation):	
	Tying in to the existing lanes widths prior to Interchange 10 means no alterations need to be made to the Interchange ramps or the bridges

* Values were obtained from the 2010 NYSDOT Traffic Data Report and Traffic Data Viewer.
** The units are accidents per million of vehicles-miles.

NON-STANDARD FEATURE JUSTIFICATION (in accordance with HDM §2.8)			
PIN:		NHS (Y/N):	Yes
Route No. & Name:	I-287 EB to Tappan Zee Bridge	Functional Class:	Urban Principal Arterial Interstate
Project Type:	Reconstruction	Design Class:	Mainline
% Trucks:	12.4%	Terrain:	Rolling
ADT (ETC+30):	218,551*	Truck Access/Qualifying Hwy.	Yes

a. - Description of Non-Standard Feature			
Type of Feature (e.g., Lane Width):	Stopping Stop Distance		
Location:	I-287 EB to Tappan Zee Bridge (STA 858+61 to STA 871+29)		
Standard Value:	730ft	Design Speed:	70 mph
Existing Value:	385ft	Recommended Speed:	70 mph
Proposed Value:	629ft	Recommended Speed:	70 mph

b. - Accident Analysis	
Current Accident Rate:	
Statewide Rate:	0.05/mvm**
Is the non-standard feature a contributing factor?	No
Anticipated Accident Rates, Severity, and Costs:	

c. - Cost Estimates	
Cost to Fully Meet Standards:	
Cost(s) For Incremental Improvements:	N/A

d. - Mitigation (e.g., increased superelevation and speed change lane length for a non-standard ramp radius):	
	Required to fit re-aligned highway within highway boundary with minimal land take and property impact

e. - Compatibility with Adjacent Segments & Future Plans:	

f. - Other Factors (e.g., Social, Economic & Environmental):	

g. - Proposed Treatment (i.e., Recommendation):	
	Tying in to the existing lanes widths prior to Interchange 10 means no alterations need to be made to the Interchange ramps or the bridges

* Values were obtained from the 2010 NYSDOT Traffic Data Report and Traffic Data Viewer.
** The units are accidents per million of vehicles-miles.

NON-STANDARD FEATURE JUSTIFICATION (in accordance with HDM §2.8)			
PIN:		NHS (Y/N):	Yes
Route No. & Name:	I-287 EB Off Tappan Zee Bridge	Functional Class:	Urban Principal Arterial Interstate
Project Type:	Reconstruction	Design Class:	Mainline
% Trucks:	12.4%	Terrain:	Rolling
ADT (ETC+30):	218,551*	Truck Access/Qualifying Hwy.	Yes

a. - Description of Non-Standard Feature			
Type of Feature (e.g., Lane Width):	Stopping Stop Distance		
Location:	I-287 EB Off Tappan Zee Bridge (STA 968+52 to STA 983+00)		
Standard Value:	730ft	Design Speed:	70 mph
Existing Value:	440ft	Recommended Speed:	70 mph
Proposed Value:	569ft	Recommended Speed:	70 mph

b. - Accident Analysis	
Current Accident Rate:	
Statewide Rate:	0.07/mvm**
Is the non-standard feature a contributing factor?	No
Anticipated Accident Rates, Severity, and Costs:	

c. - Cost Estimates	
Cost to Fully Meet Standards:	
Cost(s) For Incremental Improvements:	N/A

d. - Mitigation (e.g., increased superelevation and speed change lane length for a non-standard ramp radius):
Required to fit re-aligned highway within highway boundary with minimal land take and property impact

e. - Compatibility with Adjacent Segments & Future Plans:

f. - Other Factors (e.g., Social, Economic & Environmental):
In order to complete the tie in to the Toll Plaza, and to meet the temporary staging, the highway alignment is constrained from both the Rockland and Westchester approaches, and these constraints combine to yield a reduction in Stopping Sight Distance. Whilst the revised distance is less than the standard value, it is an improvement on the existing value.

g. - Proposed Treatment (i.e., Recommendation):

* Values were obtained from the 2010 NYSDOT Traffic Data Report and Traffic Data Viewer.
** The units are accidents per million of vehicles-miles.

NON-STANDARD FEATURE JUSTIFICATION (in accordance with HDM §2.8)			
PIN:		NHS (Y/N):	Yes
Route No. & Name:	I-287 EB Toll Plaza Approach	Functional Class:	Urban Principal Arterial Interstate
Project Type:	Reconstruction	Design Class:	Mainline
% Trucks:	12.4%	Terrain:	Rolling
ADT (ETC+30):	218,551*	Truck Access/Qualifying Hwy.	Yes

a. - Description of Non-Standard Feature			
Type of Feature (e.g., Lane Width):	Stopping Stop Distance		
Location:	I-287 EB Toll Plaza Approach (STA 983+00 to STA 995+00)		
Standard Value:	730ft	Design Speed:	70 mph
Existing Value:	440ft	Recommended Speed:	70 mph
Proposed Value:	617ft	Recommended Speed:	70 mph

b. – Accident Analysis	
Current Accident Rate:	
Statewide Rate:	0.05/mvm**
Is the non-standard feature a contributing factor?	No
Anticipated Accident Rates, Severity, and Costs:	

c. – Cost Estimates	
Cost to Fully Meet Standards:	
Cost(s) For Incremental Improvements:	N/A

d. – Mitigation (e.g., increased superelevation and speed change lane length for a non-standard ramp radius):
Required to fit re-aligned highway within highway boundary with minimal landtake and property impact

e. – Compatibility with Adjacent Segments & Future Plans:

f. – Other Factors (e.g., Social, Economic & Environmental):
In order to complete the tie in to the Toll Plaza, and to meet the temporary staging, the highway alignment is constrained from both the Rockland and Westchester approaches, and these constraints combine to yield a reduction in Stopping Sight Distance. Whilst the revised distance is less than the standard value, it is an improvement on the existing value.

g. – Proposed Treatment (i.e., Recommendation):

* Values were obtained from the 2010 NYSDOT Traffic Data Report and Traffic Data Viewer.
** The units are accidents per million of vehicles-miles.

NON-STANDARD FEATURE JUSTIFICATION (in accordance with HDM §2.8)			
PIN:		NHS (Y/N):	Yes
Route No. & Name:	I-287 EB Westchester South Broadway Bridge Approach	Functional Class:	Urban Principal Arterial Interstate
Project Type:	Reconstruction	Design Class:	Mainline
% Trucks:	12.4%	Terrain:	Rolling
ADT (ETC+30):	218,551*	Truck Access/Qualifying Hwy.	Yes

a. – Description of Non-Standard Feature			
Type of Feature (e.g., Lane Width):	Stopping Stop Distance		
Location:	I-287 EB Westchester South Broadway Bridge Approach (STA 1011+34 to STA 1018+34)		
Standard Value:	730ft	Design Speed:	70 mph
Existing Value:	618ft	Recommended Speed:	70 mph
Proposed Value:	677ft	Recommended Speed:	70 mph

b. – Accident Analysis	
Current Accident Rate:	
Statewide Rate:	1.10/mvm**
Is the non-standard feature a contributing factor?	No
Anticipated Accident Rates, Severity, and Costs:	

c. – Cost Estimates	
Cost to Fully Meet Standards:	$ 3million to rebuild the Rt 9 South Broadway Bridge
Cost(s) For Incremental Improvements:	N/A

d. – Mitigation (e.g., increased superelevation and speed change lane length for a non-standard ramp radius):	
	Required to fit re-aligned highway within highway boundary with minimal land take and property impact

e. – Compatibility with Adjacent Segments & Future Plans:	

f. – Other Factors (e.g., Social, Economic & Environmental):	

g. – Proposed Treatment (i.e., Recommendation):	
	Tying to the existing lanes widths prior to the Rt 9 South Broadway Bridge in Westchester mean no alterations need to be made to the existing bridge.

* Values were obtained from the 2010 NYSDOT Traffic Data Report and Traffic Data Viewer.
** The units are accidents per million of vehicles-miles.

NON-STANDARD FEATURE JUSTIFICATION (in accordance with HDM §2.8)			
PIN:		NHS (Y/N):	Yes
Route No. & Name:	I-287 EB @ Westchester S. Broadway Bridge	Functional Class:	Urban Principal Arterial Interstate
Project Type:	Reconstruction	Design Class:	Mainline
% Trucks:	12.4%	Terrain:	Rolling
ADT (ETC+30):	218,551*	Truck Access/Qualifying Hwy.	Yes

a. – Description of Non-Standard Feature			
Type of Feature (e.g., Lane Width):	Minimum Horizontal Clearance		
Location:	I-287 EB at Westchester South Broadway Bridge (STA 1018+17 to STA 1019+26)		
Standard Value:	Not Less than shoulder	Design Speed:	70 mph
Existing Value:		Recommended Speed:	70 mph
Proposed Value:	0ft	Recommended Speed:	70 mph

b. - Accident Analysis	
Current Accident Rate:	
Statewide Rate:	1.10/mvm**
Is the non-standard feature a contributing factor?	No
Anticipated Accident Rates, Severity, and Costs:	

c. - Cost Estimates	
Cost to Fully Meet Standards:	$ 3million to rebuild the Rt 9 South Broadway Bridge
Cost(s) For Incremental Improvements:	N/A

d. - Mitigation (e.g., increased superelevation and speed change lane length for a non-standard ramp radius):
Mitigation consisting of no shoulder warning signs. Full 12ft shoulder maintained east of South Broadway bridge.

e. - Compatibility with Adjacent Segments & Future Plans:

f. - Other Factors (e.g., Social, Economic & Environmental):

g. - Proposed Treatment (i.e., Recommendation):
Tying to the existing lanes widths prior to the Rt 9 South Broadway Bridge in Westchester mean no alterations need to be made to the existing bridge.

* Values were obtained from the 2010 NYSDOT Traffic Data Report and Traffic Data Viewer.
** The units are accidents per million of vehicles-miles.

NON-STANDARD FEATURE JUSTIFICATION (in accordance with HDM §2.8)			
PIN:		NHS (Y/N):	Yes
Route No. & Name:	I-287 Westchester South Broadway W/B Merge	Functional Class:	Urban Principal Arterial Interstate
Project Type:	Reconstruction	Design Class:	Ramp
% Trucks:	12.4%	Terrain:	Rolling
ADT (ETC+30):	218,551*	Truck Access/Qualifying Hwy.	Yes

a. - Description of Non-Standard Feature			
Type of Feature (e.g., Lane Width):	Horizontal Curvature		
Location:	Westchester South Broadway W/B Merge (STA 3+47 to STA 5+86)		
Standard Value:	230ft	Design Speed:	30 mph
Existing Value:		Recommended Speed:	30 mph
Proposed Value:	210ft	Recommended Speed:	30 mph

b. – Accident Analysis	
Current Accident Rate:	
Statewide Rate:	0.05/mvm**
Is the non-standard feature a contributing factor?	No
Anticipated Accident Rates, Severity, and Costs:	

c. – Cost Estimates	
Cost to Fully Meet Standards:	
Cost(s) For Incremental Improvements:	N/A

d. – Mitigation (e.g., increased superelevation and speed change lane length for a non-standard ramp radius):
Matches existing radius. Ramp to be rebuilt at current location within the highway boundary, with no property impact.

e. – Compatibility with Adjacent Segments & Future Plans:

f. – Other Factors (e.g., Social, Economic & Environmental):

g. – Proposed Treatment (i.e., Recommendation):

* Values were obtained from the 2010 NYSDOT Traffic Data Report and Traffic Data Viewer.
** The units are accidents per million of vehicles-miles.

NON-STANDARD FEATURE JUSTIFICATION (in accordance with HDM §2.8)			
PIN:		NHS (Y/N):	Yes
Route No. & Name:	I-287 Westchester South Broadway W/B Merge	Functional Class:	Urban Principal Arterial Interstate
Project Type:	Reconstruction	Design Class:	Ramp
% Trucks:	12.4%	Terrain:	Rolling
ADT (ETC+30):	218,551*	Truck Access/Qualifying Hwy.	Yes

a. – Description of Non-Standard Feature			
Type of Feature (e.g., Lane Width):	Stopping Sight Distance		
Location:	Westchester South Broadway W/B Merge (STA 3+47 to STA 5+86)		
Standard Value:	200ft	Design Speed:	30 mph
Existing Value:		Recommended Speed:	30 mph
Proposed Value:	175ft	Recommended Speed:	30 mph

b. - Accident Analysis	
Current Accident Rate:	
Statewide Rate:	0.05/mvm**
Is the non-standard feature a contributing factor?	No
Anticipated Accident Rates, Severity, and Costs:	

c. - Cost Estimates	
Cost to Fully Meet Standards:	
Cost(s) For Incremental Improvements:	N/A

d. - Mitigation (e.g., increased superelevation and speed change lane length for a non-standard ramp radius):
Matches existing Stopping Sight Distance. Ramp to be rebuilt at current location within the highway boundary, with no property impact.

e. - Compatibility with Adjacent Segments & Future Plans:

f. - Other Factors (e.g., Social, Economic & Environmental):

g. - Proposed Treatment (i.e., Recommendation):

* Values were obtained from the 2010 NYSDOT Traffic Data Report and Traffic Data Viewer.
** The units are accidents per million of vehicles-miles.

NON-STANDARD FEATURE JUSTIFICATION
(in accordance with HDM §2.8)

PIN:		NHS (Y/N):	Yes
Route No. & Name:	South Broadway (Rockland) STA 2+28 to STA 3+49	Functional Class:	Urban Collector
Project Type:	Reconstruction	Design Class:	Mainline
% Trucks:	0.984	Terrain:	Rolling
ADT (ETC+30):	3,075	Truck Access/Qualifying Hwy.	Yes

a. - Description of Non-Standard Feature

Type of Feature (e.g., Lane Width):	Horizontal Curvature		
Location:	South Broadway (Rockland) (STA 2+28 to STA 3+49)		
Standard Value:	250ft	Design Speed:	30 mph
Existing Value:		Recommended Speed:	30 mph
Proposed Value:	140ft	Recommended Speed:	30 mph

b. - Accident Analysis

Current Accident Rate:	
Statewide Rate:	
Is the non-standard feature a contributing factor?	No
Anticipated Accident Rates, Severity, and Costs:	

c. - Cost Estimates

Cost to Fully Meet Standards:	2 additional properties would need to be displaced to meet full standards
Cost(s) For Incremental Improvements:	N/A

d. - Mitigation (e.g., increased superelevation and speed change lane length for a non-standard ramp radius):

Matches existing Stopping Sight Distance. Road to be rebuilt near to current location within the highway boundary, with minimal property impact.

e. - Compatibility with Adjacent Segments & Future Plans:

f. - Other Factors (e.g., Social, Economic & Environmental):

g. - Proposed Treatment (i.e., Recommendation):

Additional signage to be provided on the approach to the curve

* Values were obtained from the 2010 NYSDOT Traffic Data Report and Traffic Data Viewer.
** The units are accidents per million of vehicles-miles.

NON-STANDARD FEATURE JUSTIFICATION (in accordance with HDM §2.8)			
PIN:		NHS (Y/N):	Yes
Route No. & Name:	South Broadway (Rockland) STA 6+62 to STA 7+11	Functional Class:	Urban Collector
Project Type:	Reconstruction	Design Class:	Mainline
% Trucks:	0.984	Terrain:	Rolling
ADT (ETC+30):	3,075	Truck Access/Qualifying Hwy.	Yes

a. - Description of Non-Standard Feature			
Type of Feature (e.g., Lane Width):	Horizontal Curvature		
Location:	South Broadway (STA 6+62 to STA 7+11)		
Standard Value:	250ft	Design Speed:	30 mph
Existing Value:		Recommended Speed:	30 mph
Proposed Value:	117.5ft	Recommended Speed:	30 mph

b. - Accident Analysis	
Current Accident Rate:	
Statewide Rate:	
Is the non-standard feature a contributing factor?	No
Anticipated Accident Rates, Severity, and Costs:	

c. - Cost Estimates	
Cost to Fully Meet Standards:	2 additional properties would need to be displaced to meet full standards
Cost(s) For Incremental Improvements:	N/A

d. - Mitigation (e.g., increased superelevation and speed change lane length for a non-standard ramp radius):	
	Matches existing Stopping Sight Distance. Road to be rebuilt near to current location within the highway boundary, with minimal property impact.

e. - Compatibility with Adjacent Segments & Future Plans:	

f. - Other Factors (e.g., Social, Economic & Environmental):	

g. - Proposed Treatment (i.e., Recommendation):	
	Additional signage to be provided on the approach to the curve

* Values were obtained from the 2010 NYSDOT Traffic Data Report and Traffic Data Viewer.
** The units are accidents per million of vehicles-miles.

NON-STANDARD FEATURE JUSTIFICATION (in accordance with HDM §2.8)			
PIN:		NHS (Y/N):	Yes
Route No. & Name:	South Broadway (Rockland) STA 2+28 to STA 3+44	Functional Class:	Urban Collector
Project Type:	Reconstruction	Design Class:	Mainline
% Trucks:	0.984	Terrain:	Rolling
ADT (ETC+30):	3,075	Truck Access/Qualifying Hwy.	Yes

a. - Description of Non-Standard Feature			
Type of Feature (e.g., Lane Width):	Stopping Sight Distance		
Location:	South Broadway (STA 2+23 to STA 3+44)		
Standard Value:	200ft	Design Speed:	30 mph
Existing Value:		Recommended Speed:	30 mph
Proposed Value:	109ft	Recommended Speed:	30 mph

b. - Accident Analysis	
Current Accident Rate:	
Statewide Rate:	
Is the non-standard feature a contributing factor?	No
Anticipated Accident Rates, Severity, and Costs:	

c. - Cost Estimates	
Cost to Fully Meet Standards:	
Cost(s) For Incremental Improvements:	N/A

d. - Mitigation (e.g., increased superelevation and speed change lane length for a non-standard ramp radius):	
	Matches existing Stopping Sight Distance. Road to be rebuilt near to current location within the highway boundary, with minimal property impact.

e. - Compatibility with Adjacent Segments & Future Plans:	

f. - Other Factors (e.g., Social, Economic & Environmental):	
	2 additional properties would need to be displaced to meet full standards

g. - Proposed Treatment (i.e., Recommendation):	
	Additional signage to be provided on the approach to the curve

* Values were obtained from the 2010 NYSDOT Traffic Data Report and Traffic Data Viewer.
** The units are accidents per million of vehicles-miles.

NON-STANDARD FEATURE JUSTIFICATION (in accordance with HDM §2.8)			
PIN:		NHS (Y/N):	Yes
Route No. & Name:	South Broadway (Rockland) STA 5+75 to STA 7+60	Functional Class:	Urban Collector
Project Type:	Reconstruction	Design Class:	Mainline
% Trucks:	0.984	Terrain:	Rolling
ADT (ETC+30):	3,075	Truck Access/Qualifying Hwy.	Yes

a. - Description of Non-Standard Feature			
Type of Feature (e.g., Lane Width):	Stopping Sight Distance		
Location:	South Broadway (STA 5+75 to STA 7+60)		
Standard Value:	200ft	Design Speed:	30mph
Existing Value:		Recommended Speed:	30 mph
Proposed Value:	177ft	Recommended Speed:	30 mph

b. - Accident Analysis	
Current Accident Rate:	
Statewide Rate:	
Is the non-standard feature a contributing factor?	No
Anticipated Accident Rates, Severity, and Costs:	

c. - Cost Estimates	
Cost to Fully Meet Standards:	
Cost(s) For Incremental Improvements:	N/A

d. - Mitigation (e.g., increased superelevation and speed change lane length for a non-standard ramp radius):	
	Matches existing Stopping Sight Distance. Road to be rebuilt near to current location within the highway boundary, with minimal property impact.
e. - Compatibility with Adjacent Segments & Future Plans:	
f. - Other Factors (e.g., Social, Economic & Environmental):	
	2 additional properties would need to be displaced to meet full standards
g. - Proposed Treatment (i.e., Recommendation):	
	Additional signage to be provided on the approach to the curve

* Values were obtained from the 2010 NYSDOT Traffic Data Report and Traffic Data Viewer.
** The units are accidents per million of vehicles-miles.