

CHAPTER 01 Foundations

SECTION 01 General

SUB-SECTION

Detail Number	Version	Detail Description	Date Issued	Status
FND-GN-101	1	Skewed Abutment and Wing Wall Footing Intersection	11/17/1997	FOR OFFICE USE ONLY

SECTION 02 Pile Foundation

SUB-SECTION

Detail Number	Version	Detail Description	Date Issued	Status
FND-PF-101	1	Preliminary Embankment for Pedestal Type Bridge Abutments On Piles	07/24/2001	APPROVED
FND-PF-102	1	Preliminary Embankment for Semi-Cantilever Type Abutments on Piles with Stepped Wing Wall Footers	07/24/2001	APPROVED
FND-PF-201	1	Rebar Mat Pattern over Piling	01/22/2001	FOR OFFICE USE ONLY
FND-PF-202	1	Reinforcing Bar Standard Footing Support System	03/07/1991	APPROVED
FND-PF-301	1	Steel H Pile Splice Details	01/22/2001	APPROVED
FND-PF-302	1.01	Toothed Pile Point for 10" H Pile	04/03/2018	APPROVED
FND-PF-303	1.01	Toothed Pile Point for 12" H Pile	04/03/2018	APPROVED
FND-PF-304	1.01	Toothed Pile Point for 14" H Pile	04/03/2018	APPROVED



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Detail Number	Version	Detail Description	Date Issued	Status
FND-PF-401	1	Pile Point for Pipe Pile	04/03/2018	APPROVED
FND-PF-501	1	Details for Cast-In-Place Concrete Piles	10/09/2007	FOR OFFICE USE ONLY
FND-PF-502	1	Splice for Cast-In-Place Concrete Pile Shell	06/20/1975	APPROVED
FND-PF-503	1	Splice for Cast-In-Place Concrete Pipe Pile Shell	01/22/2001	APPROVED
FND-PF-504	1	Caisson/Pile Rebar Cage Clearance Spacing Devices	08/07/1998	APPROVED

SECTION 03 Slope Protection

SUB-SECTION

Detail Number	Version	Detail Description	Date Issued	Status
FND-SP-101	1	Slope Protection for Bridges Carrying Road Over Road or Railroad	09/16/2011	APPROVED
FND-SP-201	1	Typical Rip Rap Installations at Piers and Abutments		PRELIMINARY DRAFT(OFFICE USE ONLY)

CHAPTER 02 Substructure

SECTION 01 Drainage

SUB-SECTION

Detail Number	Version	Detail Description	Date Issued	Status
SUB-DR-101	1	Drainage Inlet At End of Bridge Structure (Open Approach Roadway)	01/30/2007	APPROVED
SUB-DR-201	1	Drainage System and Backfill for Abutments with Fixed Bearings or Expansion Bearings with Lengths Contributing to Expansion Less than or Equal to 70 Feet	10/02/2014	APPROVED
SUB-DR-202	1	Drainage System and Backfill for Abutments with Fixed Bearings or Expansion Bearings with Lengths Contributing to Expansion Greater than 70 Feet	10/02/2014	APPROVED
SUB-DR-203	1	Drainage System and Backfill for Wing Walls that are Parallel to the Highway	10/02/2014	APPROVED

SECTION 02 Abutment

SUB-SECTION

Detail Number	Version	Detail Description	Date Issued	Status
SUB-AB-101	1	Typical Section for Catilever Abutments on Piles Carrying Steel Girders with Steel Fixed Bearings or Steel Expansion Bearings with Length Contributing to Expansion <= 70 FT.	06/26/2013	FOR OFFICE USE ONLY
SUB-AB-102	1	Wing Wall/Abutment Connections for Fixed Bearings or Expansion Bearings with Length Contributing to Expansion <= 70 FT. - Reinforcing Details	12/20/2011	FOR OFFICE USE ONLY

Detail Number	Version	Detail Description	Date Issued	Status
SUB-AB-201	1	Typical Section for Catilever Abutments on Piles Carrying Steel Girders with Steel Expansion Bearings with Length Contributing to Exapnsion > 70 FT.	10/03/2013	FOR OFFICE USE ONLY
SUB-AB-202	1	Wing Wall/Abutment Connections for Fixed Bearings or Expansion Bearings with Length Contributing to Exapnsion > 70 FT. - Reinforcing Details	06/26/2013	FOR OFFICE USE ONLY
SUB-AB-301	1	Keyways at Construction Joints in Abutments	05/07/2018	FOR OFFICE USE ONLY

SECTION 03 WingWall

SUB-SECTION

Detail Number	Version	Detail Description	Date Issued	Status
SUB-WW-101	1	Stepped Expansion Joint for Wing Walls at Abutments	03/22/2006	APPROVED
SUB-WW-201	2	Typical Wing Wall Cantilever at End of End Post Reinforcement Details	08/11/2017	APPROVED
SUB-WW-301	1	Cheek Wall at Bridge Abutment with Fixed Bearings or Expansion Bearings with Length Contributing to Exapnsion <= 70 Ft.	03/29/2012	APPROVED
SUB-WW-401	1	Cheek Wall at Bridge Abutment with Expansion Bearings with Length Contributing to Exapnsion > 70 Ft.	11/15/2013	APPROVED
SUB-WW-402	1	Expansion Joint Cross Beam Connection at Wing Walls Parallel to the Center Line of Roadway	11/15/2013	APPROVED

SECTION 04

Pier

SUB-SECTION

Detail Number	Version	Detail Description	Date Issued	Status
SUB-PR-101	1	Design Criteria for Typical Reinforced Concrete Pier	07/26/2006	FOR OFFICE USE ONLY
SUB-PR-201	1	Nose Angle for Solid Shaft Water Pier	01/22/2001	APPROVED
SUB-PR-301	1	Fiberglass Jacket for Cast-In-Place Concrete Column	01/22/2001	APPROVED
SUB-PR-302	1	Fiberglass Jacket For New Cylinder Pile	01/22/2001	APPROVED
SUB-PR-303		Fiberglass Protective Jacket for H-Piles (New Construction)		PRELIMINARY DRAFT
SUB-PR-304	1	Fiberglass Jacket for Cast-In-Place Concrete Footing	01/22/2001	APPROVED

SECTION 05

Bearing Pad Details

SUB-SECTION

Detail Number	Version	Detail Description	Date Issued	Status
SUB-BP-101	1.01	Bearing Pad Where Only A Single Shoe Is Required On A Support	05/07/2018	APPROVED
SUB-BP-102	1.01	Bearing Pad (For Special Piers) Where Only a Single Shoe is Required on Support	05/07/2018	APPROVED

SECTION 06

Utility Details

SUB-SECTION

Detail Number	Version	Detail Description	Date Issued	Status
SUB-UTL-101	1	Sleeves for Future Utilities at Abutment Backwalls	12/04/2008	APPROVED

SECTION 07 Endpost Details

SUB-SECTION 01 42 F Shape

Detail Number	Version	Detail Description	Date Issued	Status
SUB-EP(42F)-101	1	42" F-Shape Parapet End Post with Fencing or Railing (Approach End, End Post Length > 11'-2")	06/01/2005	APPROVED
SUB-EP(42F)-102	1	42" F-Shape Parapet End Post without Fencing or Railing (Approach End, End Post Length > 11'-2")	06/01/2005	APPROVED
SUB-EP(42F)-103	1	42" F-Shape Parapet End Post with Fencing or Railing (Approach End, End Post Length < = 11'-2")	06/01/2005	APPROVED
SUB-EP(42F)-104	1	42" F-Shape Parapet End Post without Fencing or Railing (Approach End, End Post Length < = 11'-2")	06/01/2005	APPROVED
SUB-EP(42F)-105	1	42" F-Shape Parapet End Post with Fencing or Railing Trail End	06/01/2005	APPROVED
SUB-EP(42F)-106	1	42" F-Shape Parapet End Post without Fencing or Railing Trail End	06/01/2005	APPROVED

SUB-SECTION 02 Sidewalk

Detail Number	Version	Detail Description	Date Issued	Status
SUB-EP(SW)-101	1	Parapet End Post for Abutments with Expansion Joint Cross Beam and Sidewalk	09/01/2015	USEABLE DRAFT
SUB-EP(SW)-201	1	Parapet End Post for Abutments with Fixed Joint and Sidewalk	09/01/2015	USEABLE DRAFT

CHAPTER 03 Superstructure

SECTION 01 Bridge Deck

SUB-SECTION 01 Bridge Deck Details

Detail Number	Version	Detail Description	Date Issued	Status
SUP-BD(DT)-101	1	Layout of Transverse Joint for Skewed Bridge Deck	09/13/1994	APPROVED
SUP-BD(DT)-102	2	Bridge Deck Slab Detail at Transverse Construction Joint	04/30/2018	APPROVED
SUP-BD(DT)-201	2	Bridge Deck Slab Splice Locations	04/30/2018	APPROVED

SUB-SECTION 02 Bridge Deck Steel Girders

Detail Number	Version	Detail Description	Date Issued	Status
SUP-BD(SG)-101	1	Bridge Deck Slab - General Notes and Bar Spacing	04/12/2012	APPROVED
SUP-BD(SG)-102	2	Type XXXII Bridge Deck Slab for Steel Girders HL-93 Loading	07/03/2017	APPROVED
SUP-BD(SG)-103	2	Type XXXII Bridge Deck Slab for Steel Girders HL-93 Loading	07/03/2017	APPROVED
SUP-BD(SG)-104	2	Type XXXIII Bridge Deck Slab for Steel Girders HL-93 Loading	07/03/2017	APPROVED
SUP-BD(SG)-105	2	Type XXXIV Bridge Deck Slab for Steel Girders HL-93 Loading	07/03/2017	APPROVED
SUP-BD(SG)-106	2	Type XXXV Bridge Deck Slab for Steel Girders HL-93 Loading	07/03/2017	APPROVED
SUP-BD(SG)-107	2	Type XXXVI Bridge Deck Slab for Steel Girders HL-93 Loading	07/03/2017	APPROVED



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Detail Number	Version	Detail Description	Date Issued	Status
SUP-BD(SG)-108	2	Type XXXVII Bridge Deck Slab for Steel Girders HL-93 Loading	07/03/2017	APPROVED
SUP-BD(SG)-109	2	Type XXXVIII Bridge Deck Slab for Steel Girders HL-93 Loading	07/03/2017	APPROVED
SUP-BD(SG)-110	2	Type XXXIX Bridge Deck Slab for Steel Girders	07/03/2017	APPROVED
SUP-BD(SG)-201	1	Additional Longitudinal Reinforcing in Top of Continuous Deck Slabs over Piers	09/05/2012	APPROVED
SUP-BD(SG)-202		Additional Reinforcing for Concrete Bridge Deck Overhang for 42" F-Shape		DRAFT
SUP-BD(SG)-203		Additional Reinforcing for Concrete Bridge Deck Overhang for Three Strand Rail		DRAFT
SUP-BD(SG)-204		Additional Reinforcing for Concrete Bridge Deck Overhang for Parapet with Sidewalk		DRAFT
SUP-BD(SG)-301	1.01	Concrete Diaphragms at Abutments Carrying Steel Girders with Steel Fixed Bearings or Steel Expansion Bearings with Lengths Contributing to Expansion <= 70 Ft.	09/02/2018	APPROVED
SUP-BD(SG)-401	1.01	Concrete Diaphragms at Abutments Carrying Steel Girders with Steel Expansion Bearings with Lengths Contributing to Expansion > 70 Ft.	09/28/2018	APPROVED
SUP-BD(SG)-501	1	Steel Forms Which Remain in Place for Concrete Slabs on Steel Stringers	10/18/2011	APPROVED



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Detail Number	Version	Detail Description	Date Issued	Status
SUP-BD(SG)-502		Lightweight Steel Forms Which Remain in Place for Concrete Slabs on Steel Stringers		DRAFT
SUP-BD(SG)-601	1	Concrete Haunch Detail – Decks Formed with Timber	05/14/1976	FOR OFFICE USE ONLY

SUB-SECTION 03 Bridge Deck Conc Girders

Detail Number	Version	Detail Description	Date Issued	Status
SUP-BD(CG)-101	1	Bridge Deck Slab - General Notes and Bar Spacing	09/01/2015	USEABLE DRAFT
SUP-BD(CG)-102	1	Type XLI Bridge Deck Slabs for PCEF Bulb Tee Prestressed Girders HL-93 Loading (Greater than 7'-0" to 8'-0" Girder Spacing)	06/01/2018	APPROVED
SUP-BD(CG)-103	1	Type XLII Bridge Deck Slabs for PCEF Bulb Tee Prestressed Girders HL-93 Loading (Greater than 8'-0" to 8'-6" Girder Spacing)	06/01/2018	APPROVED
SUP-BD(CG)-104	1	Type XLIII Bridge Deck Slabs for PCEF Bulb Tee Prestressed Girders HL-93 Loading (Greater than 8'-6" to 9'-0" Girder Spacing)	06/01/2018	APPROVED
SUP-BD(CG)-105	1	Type XLIV Bridge Deck Slabs for PCEF Bulb Tee Prestressed Girders HL-93 Loading (Greater than 9'-0" to 9'-6" Girder Spacing)	06/01/2018	APPROVED
SUP-BD(CG)-106	1	Type XLV Bridge Deck Slabs for PCEF Bulb Tee Prestressed Girders HL-93 Loading (Greater than 9'-6" to 10'-0" Girder Spacing)	06/01/2018	APPROVED
SUP-BD(CG)-107	1	Type XLVI Bridge Deck Slabs for PCEF Bulb Tee Prestressed Girders HL-93 Loading (Greater than 10'-0" to 10'-6" Girder Spacing)	06/01/2018	APPROVED



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Detail Number	Version	Detail Description	Date Issued	Status
SUP-BD(CG)-108	1	Type XLVII Bridge Deck Slabs for PCEF Bulb Tee Prestressed Girders HL-93 Loading (Greater than 10'-6" to 11'-0" Girder Spacing)	06/01/2018	APPROVED
SUP-BD(CG)-109	1	Type XLVIII Bridge Deck Slabs for PCEF Bulb Tee Prestressed Girders HL-93 Loading (Greater than 11'-0" to 11'-6" Girder Spacing)	06/01/2018	APPROVED
SUP-BD(CG)-110	1	Type XLIX Bridge Deck Slabs for PCEF Bulb Tee Prestressed Girders HL-93 Loading (Greater than 11'-6" to 12'-0" Girder Spacing)	06/01/2018	APPROVED
SUP-BD(CG)-201	1	Additional Longitudinal Reinforcing in Continuous Deck Slabs over Piers for Concrete Girders	09/01/2015	USEABLE DRAFT
SUP-BD(CG)-301	1	Concrete Diaphragms at Abutments Carrying Prestressed Concrete Girders with Elastomeric Bearings with Lengths Contributing to Expansion > 70 Feet	07/27/2018	APPROVED
SUP-BD(CG)-401	1	Concrete Diaphragms at Abutments Carrying Prestressed Concrete Girders with Elastomeric Bearings with Lengths Contributing to Expansion <= 70 Feet	07/27/2018	APPROVED
SUP-BD(CG)-501	1	Steel Forms Which Remain in Place for Concrete Slabs on Concrete Girders	09/01/2015	USEABLE DRAFT

SUB-SECTION 04 Staged Construction

Detail Number	Version	Detail Description	Date Issued	Status
SUP-BD(SC)-101	2	Splicing of Bridge Deck Slab Truss Bars During Stage Construction Lap Splice Alternatives	04/30/2018	APPROVED

Detail Number	Version	Detail Description	Date Issued	Status
SUP-BD(SC)-102	2	Splicing of Bridge Deck Slab Reinforcing Steel/Truss Bars During Stage Construction	04/30/2018	APPROVED

Detail Number	Version	Detail Description	Date Issued	Status
SUP-BD(SC)-103	1	Split Pan Construction for Steel Forms Which Remain in Place	07/20/2006	APPROVED

SECTION 02 Traffic Barriers (parapets)

SUB-SECTION 01 42 Fshape Parapet

Detail Number	Version	Detail Description	Date Issued	Status
SUP-TB(42F)-101	1	Level/Low Side/High Side of Crown (or Superelevated) Section of 42" F-Shape Parapet with Straight Back	11/26/2007	APPROVED

Detail Number	Version	Detail Description	Date Issued	Status
SUP-TB(42F)-102	1	Level/Low Side/High Side of Crown (or Superelevated) Section of 42" F-Shape Parapet with Diamond Back	11/26/2007	APPROVED

Detail Number	Version	Detail Description	Date Issued	Status
SUP-TB(42F)-103	1	Level/Low Side/High Side of Crown (or Superelevated) Section of 42" F-Shape Parapet with Architectural Finish	11/26/2007	APPROVED

SUB-SECTION 02 Parapet with Sidewalk

Detail Number	Version	Detail Description	Date Issued	Status
SUP-TB(SW)-101	1	Level/Low Side/High Side of Crown (or Superelevated) Section of Sidewalk and Parapet with Straight Back	08/18/2014	APPROVED

Detail Number	Version	Detail Description	Date Issued	Status
SUP-TB(SW)-102	1	Level/Low Side/High Side of Crown (or Superelevated) Section of Sidewalk and Parapet with Diamond Back	08/18/2014	APPROVED

Detail Number	Version	Detail Description	Date Issued	Status
SUP-TB(SW)-103	1	Level/Low Side/High Side of Crown (or Superelevated) Section of Sidewalk and Parapet with Architectural Finish	08/18/2014	APPROVED

SUB-SECTION 03 Tube Rail

Detail Number	Version	Detail Description	Date Issued	Status
SUP-TB(TR)-101	1.01	Three Strand Structural Tube Rail Curb Mounted	04/03/2018	APPROVED
SUP-TB(TR)-102	1	Three Strand Structural Tube Rail Thrie Beam Connection Plate	02/13/2017	APPROVED
SUP-TB(TR)-201	1	Bridge Deck Curb Detail for Three Strand Structural Tube Rail	02/10/2017	APPROVED
SUP-TB(TR)-301	1.01	Precast Concrete Slab Panel Curb Detail for Three Strand Structural Tube Rail	04/30/2018	APPROVED

SUB-SECTION 04 Median Barrier

Detail Number	Version	Detail Description	Date Issued	Status
SUP-TB(MB)-101	1	42" F-Shape Median Barrier for Bridge Without Longitudinal Joint	11/26/2007	APPROVED
SUP-TB(MB)-102	1	42" F-Shape Median Barrier for Bridge Without Longitudinal Joint Where Traffic Will Use Area Prior to Placing Barrier	06/01/2005	APPROVED
SUP-TB(MB)-201	1	42" F-Shape Median Barrier For Bridge With Open Longitudinal Joint	11/26/2007	APPROVED
SUP-TB(MB)-202	1	42" F-Shape Median Barrier for Bridge with Longitudinal Joint Where Traffic Will Use Area Prior to Placing Barrier	11/22/2003	APPROVED

SUB-SECTION 05 Conduit Placement

Detail Number	Version	Detail Description	Date Issued	Status
SUP-TB(CP)-101	1	Expansion Joint For Conduit in Parapet	01/22/2001	APPROVED

Detail Number	Version	Detail Description	Date Issued	Status
SUP-TB(CP)-201	1	Parapet Control Joints and Single Conduit Placement with 42" F-Shape Parapet	03/05/2014	APPROVED
SUP-TB(CP)-202	1	Parapet Control Joints and Single Conduit Placement on Parapets with Sidewalk	01/06/2016	APPROVED
SUP-TB(CP)-301	1	Parapet Control Joints and Dual Conduit Placement with 42" F-Shape Parapet	03/05/2014	APPROVED
SUP-TB(CP)-302	1	Parapet Control Joints and Dual Conduit Placement on Parapets with Sidewalk	01/06/2016	APPROVED

SUB-SECTION 06 Miscellaneous Details

Detail Number	Version	Detail Description	Date Issued	Status
SUP-TB(MISC)-101	1	Additional Reinforcing for Slip Forming Parapets and Median Barriers	11/22/2003	APPROVED
SUP-TB(MISC)-201	1	Parapet Reinforcing Steel Placement at Expansion Joint	01/18/2005	APPROVED
SUP-TB(MISC)-301	1	Concrete Barrier Delineator	11/22/2003	APPROVED

SECTION 03 Support Brackets

SUB-SECTION 01 42 Fshape Parapet

Detail Number	Version	Detail Description	Date Issued	Status
SUP-SB(42F)-101	1	Support Bracket for Bridge Mounted Light Post with Single Conduit and 42" F-Shape Parapet with Straight Back	01/09/2008	APPROVED
SUP-SB(42F)-102	1	Support Bracket for Bridge Mounted Light Post with Single Conduit and 42" F-Shape Parapet with Diamond Back	01/09/2008	APPROVED



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Detail Number	Version	Detail Description	Date Issued	Status
SUP-SB(42F)-103	1	Support Bracket for Bridge Mounted Light Post with Single Conduit and 42" F-Shape Parapet with Architectural Finish	01/09/2008	APPROVED
SUP-SB(42F)-201	1	Support Bracket for Bridge Mounted Light Post with Dual Conduits and 42" F-Shape Parapet with Straight Back	01/09/2008	APPROVED
SUP-SB(42F)-202	1	Support Bracket for Bridge Mounted Light Post with Dual Conduits and 42" F-Shape Parapet with Diamond Back	01/09/2008	APPROVED
SUP-SB(42F)-203	1	Support Bracket for Bridge Mounted Light Post with Dual Conduits and 42" F-Shape Parapet with Architectural Finish	01/09/2008	APPROVED

SUB-SECTION 02 Parapet with Sidewalk

Detail Number	Version	Detail Description	Date Issued	Status
SUP-SB(SW)-101	1	Support Bracket for Bridge Mounted Light Post with Single Conduit and Parapet with Straight Back and Sidewalk	06/01/2005	APPROVED
SUP-SB(SW)-102	1	Support Bracket for Bridge Mounted Light Post with Single Conduit and Parapet with Diamond Back and Sidewalk	06/01/2005	APPROVED
SUP-SB(SW)-103	1	Support Bracket for Bridge Mounted Light Post with Single Conduit and Parapet with Architectural Finish and Sidewalk	06/01/2005	APPROVED
SUP-SB(SW)-201	1	Support Bracket for Bridge Mounted Light Post with Dual Conduits and Parapet with Straight Back and Sidewalk	06/01/2005	APPROVED
SUP-SB(SW)-202	1	Support Bracket for Bridge Mounted Light Post with Dual Conduits and Parapet with Diamond Back and Sidewalk	06/01/2005	APPROVED

Detail Number	Version	Detail Description	Date Issued	Status
SUP-SB(SW)-203	1	Support Bracket for Bridge Mounted Light Post with Dual Conduits and Parapet with Architectural Finish and Sidewalk	06/01/2005	APPROVED

SECTION 04 Fence and Railing

SUB-SECTION 01 Fencing

Detail Number	Version	Detail Description	Date Issued	Status
SUP-FR(FN)-101	2	Layout of Fencing on Bridges	07/27/2018	FOR OFFICE USE ONLY
SUP-FR(FN)-201	1	Chain Link Safety Fence - New Structures General Notes	10/09/2007	APPROVED
SUP-FR(FN)-202	1	Type I Chain Link Safety Fence - New Structures	09/24/2013	APPROVED
SUP-FR(FN)-203	1	Type II Chain Link Safety Fence for New Structures with 34" or 42" F-Shape Parapet	09/24/2013	APPROVED
SUP-FR(FN)-204	1	Chain Link Safety Fence - New Structures Miscellaneous Details	01/22/2001	APPROVED
SUP-FR(FN)-205	1	Anti-Climb Shield for Chain Link Safety Fences - Types I and II	09/24/2013	APPROVED
SUP-FR(FN)-301	1	Chain Link Safety Fence Retaining Walls and Box Culverts General Notes	07/24/2001	APPROVED
SUP-FR(FN)-302	1	Type III Chain Link Safety Fence Retaining Walls and Box Culverts	01/14/2014	APPROVED
SUP-FR(FN)-401	1	Ornamental Fence General Notes	02/10/2017	APPROVED
SUP-FR(FN)-402	1	3 Foot Ornamental Fence Details	02/10/2017	APPROVED



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Detail Number	Version	Detail Description	Date Issued	Status
SUP-FR(FN)-403	1	5 Foot Ornamental Fence Details	02/10/2017	APPROVED

SUB-SECTION 02 Railing

Detail Number	Version	Detail Description	Date Issued	Status
SUP-FR(RL)-101	1	Layout of Railing on Bridges	06/01/2005	FOR OFFICE USE ONLY
SUP-FR(RL)-201	1	One Strand Bridge Railing	08/01/2018	APPROVED

SUB-SECTION 03 Railroad Barrier

Detail Number	Version	Detail Description	Date Issued	Status
SUP-FR(RR)-101	1	Protective Barrier For Portion of Bridge Over Electrified Railroad	05/13/2013	APPROVED
SUP-FR(RR)-102	1	Protective Barrier for Portion of Bridge over Electrified Railroad with Sidewalk	04/15/2011	APPROVED
SUP-FR(RR)-201	1	Electrified Territory Danger Sign	01/22/2001	APPROVED

SECTION 05 Structural Steel

SUB-SECTION 01 General

Detail Number	Version	Detail Description	Date Issued	Status
SUP-SS(GEN)-101	1	Steel Stud Shear Developer Embedment Detail	09/08/1976	APPROVED
SUP-SS(GEN)-201	1	Stiffener Attachment Details for Steel Girders	10/09/2007	FOR OFFICE USE ONLY
SUP-SS(GEN)-202	1.01	Bearing Stiffeners for Rolled Steel Beams	04/03/2018	APPROVED
SUP-SS(GEN)-203	1	Stiffener and Stringer Connection Plate Weld Termination Detail	10/01/2003	APPROVED



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Detail Number	Version	Detail Description	Date Issued	Status
SUP-SS(GEN)-204	1	Steel Seat Plates/Angles for Skewed Concrete Diaphragms	03/07/2013	APPROVED
SUP-SS(GEN)-301	1	Typical Steel Stringer Splice Detail	10/09/2007	FOR OFFICE USE ONLY
SUP-SS(GEN)-401	1	Shop Splice Details for Plate Girder Stringers	08/16/1992	APPROVED

SUB-SECTION 02 Cross Frames

Detail Number	Version	Detail Description	Date Issued	Status
SUP-SS(CF)-101	1	Rolled Steel Beams Intermediate Diaphragm Details Welded and Bolted Connections	01/22/2003	APPROVED
SUP-SS(CF)-201		Cross Frame Layout Skew Angle is Less Than 70 Degrees		DRAFT
SUP-SS(CF)-202		Cross Frame Layout Skew Angle is Greater Than or Equal to 70 Degrees or Radial Supports		DRAFT
SUP-SS(CF)-301		Intermediate Cross Frames for Fabricated Steel Girders (K Frame)		DRAFT
SUP-SS(CF)-302		Intermediate Cross Frames for Fabricated Steel Girders (X Frame)		DRAFT
SUP-SS(CF)-401		Cross Frames at Piers where Fabricated Structural Steel Girders are Continuous (K Frame)		DRAFT
SUP-SS(CF)-402		Cross Frames at Piers where Fabricated Structural Steel Girders are Continuous (X Frame)		DRAFT
SUP-SS(CF)-501		Cross Frame Connections		DRAFT



Detail Number	Version	Detail Description	Date Issued	Status
SUP-SS(CF)-502		Weld Termination Details for Cross Frames		DRAFT

SUB-SECTION 03 Deck Replacements

Detail Number	Version	Detail Description	Date Issued	Status
SUP-SS(DR)-101	1	Roadway Joint - Clip Angle Detail - Deck Replacement - Existing Stringer	07/24/2001	APPROVED
SUP-SS(DR)-201	1	Fascia Stringer Closure Plate Detail	06/03/1976	APPROVED
SUP-SS(DR)-301	1	Detail of Existing Spiral Removal	05/19/2011	APPROVED
SUP-SS(DR)-302	1	Detail of Additional Reinforcement at Existing Shear Stud Developers or Addition of Stud Extensions	05/19/2011	APPROVED

SECTION 06 Concrete Girder

SUB-SECTION 01 General

Detail Number	Version	Detail Description	Date Issued	Status
SUP-CG(GEN)-101	1	Typical Non-Prestressing Reinforcing Detail for PCEF Bulb Tee Prestressed Concrete Girders	05/04/2017	FOR OFFICE USE ONLY
SUP-CG(GEN)-201	1	Section Properties for PCEF Bulb Tee Prestressed Concrete Girders with 7" Thick Bottom Flanges	05/04/2017	FOR OFFICE USE ONLY
SUP-CG(GEN)-202	1	Section Properties for PCEF Bulb Tee Prestressed Concrete Girders with 9" Thick Bottom Flanges	05/04/2017	FOR OFFICE USE ONLY
SUP-CG(GEN)-301	1	Typical Spacing of Prestressing Strands for PCEF Bulb Tee Prestressed Concrete Girders with 7" Thick Bottom Flanges	05/04/2017	FOR OFFICE USE ONLY



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Detail Number	Version	Detail Description	Date Issued	Status
SUP-CG(GEN)-302	1	Typical Spacing of Prestressing Strands for PCEF Bulb Tee Prestressed Concrete Girders with 9" Thick Bottom Flanges	05/04/2017	FOR OFFICE USE ONLY
SUP-CG(GEN)-401	1	Prestressed Concrete Girder Top Finish and Stirrup Embedment Detail	05/04/2017	APPROVED
SUP-CG(GEN)-501	1	Lifting Device Details for Prestressed Concrete Girders	05/04/2017	APPROVED
SUP-CG(GEN)-601	1	Pier Connection Details for PCEF Bulb Tee Prestressed Concrete Girders with 7" Thick Bottom Flanges	05/04/2017	APPROVED
SUP-CG(GEN)-602	1	Pier Connection Details for PCEF Bulb Tee Prestressed Concrete Girders with 9" Thick Bottom Flanges	05/04/2017	APPROVED

SUB-SECTION 02 Intermediate Diaphragms

Detail Number	Version	Detail Description	Date Issued	Status
SUP-CG(DIA)-101	1	Intermediate Diaphragm for 29" and 31" PCEF Bulb Tee Girder	12/13/2017	APPROVED
SUP-CG(DIA)-102	1	Intermediate Diaphragm for 37" and 39" PCEF Bulb Tee Girder	12/13/2017	APPROVED
SUP-CG(DIA)-103	1	Intermediate Diaphragm for 45" and 47" PCEF Bulb Tee Girder	12/13/2017	APPROVED
SUP-CG(DIA)-104	1	Intermediate Diaphragm for 53" through 63" PCEF Bulb Tee Girder	12/13/2017	APPROVED
SUP-CG(DIA)-105	1	Intermediate Diaphragm for 69" and 71" PCEF Bulb Tee Girder	12/13/2017	APPROVED
SUP-CG(DIA)-106	1	Intermediate Diaphragm for 77" through 87" PCEF Bulb Tee Girder	12/13/2017	APPROVED



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Detail Number	Version	Detail Description	Date Issued	Status
SUP-CG(DIA)-107	1	Intermediate Diaphragm for 93" and 95" PCEF Bulb Tee Girder	12/13/2017	APPROVED

SECTION 07 Concrete Slabs

SUB-SECTION 01 General

Detail Number	Version	Detail Description	Date Issued	Status
SUP-SLAB-101	1	Precast Concrete Slab Panel General Notes	02/15/2017	APPROVED
SUP-SLAB-102	1	Precast Concrete Slab Panel Slab Erection Sequence of Operations	02/15/2017	APPROVED
SUP-SLAB-103	1.01	Precast Concrete Slab Panel Concrete Overlay Squence of Operations	04/25/2017	APPROVED
SUP-SLAB-201	1	Precast Slab Unit and Tie Rod Layout Slabs 30' and Less	02/15/2017	FOR OFFICE USE ONLY
SUP-SLAB-202	1	Precast Slab Unit and Tie Rod Layout Slabs Greater Than 30' up to 50'	02/15/2017	FOR OFFICE USE ONLY
SUP-SLAB-203	1	Precast Slab Unit and Tie Rod Layout Slabs Greater Than 50'	02/15/2017	FOR OFFICE USE ONLY
SUP-SLAB-301	1	Precast Slab Unit and Tie Rod Layout Slabs 30' and Less with Staged Construction	02/15/2017	FOR OFFICE USE ONLY
SUP-SLAB-302	1	Precast Slab Unit and Tie Rod Layout Slabs Greater Than 30' up to 50' with Staged Construction	02/15/2017	FOR OFFICE USE ONLY
SUP-SLAB-303	1	Precast Slab Unit and Tie Rod Layout Slabs Greater Than 50' with Staged Construction	02/15/2017	FOR OFFICE USE ONLY



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Detail Number	Version	Detail Description	Date Issued	Status
SUP-SLAB-401	1.01	Precast Concrete Slab Units Tie-Rod Details	08/11/2017	APPROVED
SUP-SLAB-501	1	Precast Concrete Slab Panel Shear Key Details	02/15/2017	APPROVED
SUP-SLAB-601	1.02	Precast Concrete Slab Unit Detail at Abutment	05/12/2017	APPROVED
SUP-SLAB-602	1	Precast Concrete Slab Curb Joint Details	02/15/2017	APPROVED
SUP-SLAB-701	1.01	Precast Concrete Slab Panel Bridge Overlay Reinforcement Details	04/30/2018	APPROVED
SUP-SLAB-801	1	Precast Concrete Slab Panel Lifting Devices Location and Working Load	02/15/2017	APPROVED

SUB-SECTION 02 3ft slabs

Detail Number	Version	Detail Description	Date Issued	Status
SUP-SLAB(3FT)-050	1	Simple Span Interior/Exterior 3'-0" Precast Concrete Slab Panel Diagram and Notes for Camber	05/04/2017	FOR OFFICE USE ONLY
SUP-SLAB(3FT)-101	1	Simple Span 20'-0" or Less Interior 3'-0" Precast Concrete Slab Panel	05/04/2017	FOR OFFICE USE ONLY
SUP-SLAB(3FT)-102	1	Simple Span 20'-0" or Less Exterior 3'-0" Precast Concrete Slab Panel	05/04/2017	FOR OFFICE USE ONLY
SUP-SLAB(3FT)-103	1	Simple Span 20'-0" or Less 3'-0" Precast Concrete Slab Panel Skewed End Detail	05/04/2017	FOR OFFICE USE ONLY



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Detail Number	Version	Detail Description	Date Issued	Status
SUP-SLAB(3FT)-201	1	Simple Span Greater than 20'-0" to 25'-0" Interior 3'-0" Precast Concrete Slab Panel	05/04/2017	FOR OFFICE USE ONLY
SUP-SLAB(3FT)-202	1	Simple Span Greater than 20'-0" to 25'-0" Exterior 3'-0" Precast Concrete Slab Panel	05/04/2017	FOR OFFICE USE ONLY
SUP-SLAB(3FT)-203	1	Simple Span Greater than 20'-0" to 25'-0" - 3'-0" Precast Concrete Slab Panel Skewed End Detail	05/04/2017	FOR OFFICE USE ONLY
SUP-SLAB(3FT)-301	1	Simple Span Greater than 25'-0" to 30'-0" Interior 3'-0" Precast Concrete Slab Panel	05/04/2017	FOR OFFICE USE ONLY
SUP-SLAB(3FT)-302	1	Simple Span Greater than 25'-0" to 30'-0" Exterior 3'-0" Precast Concrete Slab Panel	05/04/2017	FOR OFFICE USE ONLY
SUP-SLAB(3FT)-303	1	Simple Span Greater than 25'-0" to 30'-0" - 3'-0" Precast Concrete Slab Panel Skewed End Detail	05/04/2017	FOR OFFICE USE ONLY
SUP-SLAB(3FT)-401	1	Simple Span Greater than 30'-0" to 35'-0" Interior 3'-0" Precast Concrete Slab Panel	05/04/2017	FOR OFFICE USE ONLY
SUP-SLAB(3FT)-402	1	Simple Span Greater than 30'-0" to 35'-0" Exterior 3'-0" Precast Concrete Slab Panel	05/04/2017	FOR OFFICE USE ONLY
SUP-SLAB(3FT)-403	1	Simple Span Greater than 30'-0" to 35'-0" - 3'-0" Precast Concrete Slab Panel Skewed End Detail	05/04/2017	FOR OFFICE USE ONLY



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Detail Number	Version	Detail Description	Date Issued	Status
SUP-SLAB(3FT)-501	1	Simple Span Greater than 35'-0" to 40'-0" Interior 3'-0" Precast Concrete Slab Panel	05/04/2017	FOR OFFICE USE ONLY
SUP-SLAB(3FT)-502	1	Simple Span Greater than 35'-0" to 40'-0" Exterior 3'-0" Precast Concrete Slab Panel	05/04/2017	FOR OFFICE USE ONLY
SUP-SLAB(3FT)-503	1	Simple Span Greater than 35'-0" to 40'-0" - 3'-0" Precast Concrete Slab Panel Skewed End Detail	05/04/2017	FOR OFFICE USE ONLY
SUP-SLAB(3FT)-601	1	Simple Span Greater than 40'-0" to 45'-0" Interior 3'-0" Precast Concrete Slab Panel	05/04/2017	FOR OFFICE USE ONLY
SUP-SLAB(3FT)-602	1	Simple Span Greater than 40'-0" to 45'-0" Exterior 3'-0" Precast Concrete Slab Panel	05/04/2017	FOR OFFICE USE ONLY
SUP-SLAB(3FT)-603	1	Simple Span Greater than 40'-0" to 45'-0" - 3'-0" Precast Concrete Slab Panel Skewed End Detail	05/04/2017	FOR OFFICE USE ONLY
SUP-SLAB(3FT)-701	1	Simple Span Greater than 45'-0" to 50'-0" Interior 3'-0" Precast Concrete Slab Panel	05/04/2017	FOR OFFICE USE ONLY
SUP-SLAB(3FT)-702	1	Simple Span Greater than 45'-0" to 50'-0" Exterior 3'-0" Precast Concrete Slab Panel	05/04/2017	FOR OFFICE USE ONLY
SUP-SLAB(3FT)-703	1	Simple Span Greater than 45'-0" to 50'-0" - 3'-0" Precast Concrete Slab Panel Skewed End Detail	05/04/2017	FOR OFFICE USE ONLY



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Detail Number	Version	Detail Description	Date Issued	Status
SUP-SLAB(3FT)-801	1	Simple Span Greater than 50'-0" to 55'-0" Interior 3'-0" Precast Concrete Slab Panel	05/04/2017	FOR OFFICE USE ONLY
SUP-SLAB(3FT)-802	1.01	Simple Span Greater than 50'-0" to 55'-0" Exterior 3'-0" Precast Concrete Slab Panel	08/11/2017	FOR OFFICE USE ONLY
SUP-SLAB(3FT)-803	1	Simple Span Greater than 50'-0" to 55'-0" - 3'-0" Precast Concrete Slab Panel Skewed End Detail	05/04/2017	FOR OFFICE USE ONLY

SUB-SECTION 03 4ft slabs

Detail Number	Version	Detail Description	Date Issued	Status
SUP-SLAB(4FT)-050	1	Simple Span Interior/Exterior 4'-0" Precast Concrete Slab Panel Diagram and Notes for Camber	05/12/2017	FOR OFFICE USE ONLY
SUP-SLAB(4FT)-101	1	Simple Span 20'-0" or Less Interior 4'-0" Precast Concrete Slab Panel	05/12/2017	FOR OFFICE USE ONLY
SUP-SLAB(4FT)-102	1	Simple Span 20'-0" or Less Exterior 4'-0" Precast Concrete Slab Panel	05/12/2017	FOR OFFICE USE ONLY
SUP-SLAB(4FT)-103	1	Simple Span 20'-0" or Less 4'-0" Precast Concrete Slab Panel Skewed End Detail	05/12/2017	FOR OFFICE USE ONLY
SUP-SLAB(4FT)-201	1	Simple Span Greater than 20'-0" to 25'-0" Interior 4'-0" Precast Concrete Slab Panel	05/12/2017	FOR OFFICE USE ONLY
SUP-SLAB(4FT)-202	1	Simple Span Greater than 20'-0" to 25'-0" Exterior 4'-0" Precast Concrete Slab Panel	05/12/2017	FOR OFFICE USE ONLY



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Detail Number	Version	Detail Description	Date Issued	Status
SUP-SLAB(4FT)-203	1	Simple Span Greater than 20'-0" to 25'-0" - 4'-0" Precast Concrete Slab Panel Skewed End Detail	05/12/2017	FOR OFFICE USE ONLY
SUP-SLAB(4FT)-301	1	Simple Span Greater than 25'-0" to 30'-0" Interior 4'-0" Precast Concrete Slab Panel	05/12/2017	FOR OFFICE USE ONLY
SUP-SLAB(4FT)-302	1	Simple Span Greater than 25'-0" to 30'-0" Exterior 4'-0" Precast Concrete Slab Panel	05/12/2017	FOR OFFICE USE ONLY
SUP-SLAB(4FT)-303	1	Simple Span Greater than 25'-0" to 30'-0" - 4'-0" Precast Concrete Slab Panel Skewed End Detail	05/12/2017	FOR OFFICE USE ONLY
SUP-SLAB(4FT)-401	1	Simple Span Greater than 30'-0" to 35'-0" Interior 4'-0" Precast Concrete Slab Panel	05/12/2017	FOR OFFICE USE ONLY
SUP-SLAB(4FT)-402	1	Simple Span Greater than 30'-0" to 35'-0" Exterior 4'-0" Precast Concrete Slab Panel	05/12/2017	FOR OFFICE USE ONLY
SUP-SLAB(4FT)-403	1	Simple Span Greater than 30'-0" to 35'-0" - 4'-0" Precast Concrete Slab Panel Skewed End Detail	05/12/2017	FOR OFFICE USE ONLY
SUP-SLAB(4FT)-501	1	Simple Span Greater than 35'-0" to 40'-0" Interior 3'-0" Precast Concrete Slab Panel	05/12/2017	FOR OFFICE USE ONLY
SUP-SLAB(4FT)-502	1	Simple Span Greater than 35'-0" to 40'-0" Exterior 3'-0" Precast Concrete Slab Panel	05/12/2017	FOR OFFICE USE ONLY



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Detail Number	Version	Detail Description	Date Issued	Status
SUP-SLAB(4FT)-503	1	Simple Span Greater than 35'-0" to 40'-0" - 3'-0" Precast Concrete Slab Panel Skewed End Detail	05/12/2017	FOR OFFICE USE ONLY
SUP-SLAB(4FT)-601	1	Simple Span Greater than 40'-0" to 45'-0" Interior 4'-0" Precast Concrete Slab Panel	05/12/2017	FOR OFFICE USE ONLY
SUP-SLAB(4FT)-602	1	Simple Span Greater than 40'-0" to 45'-0" Exterior 4'-0" Precast Concrete Slab Panel	05/12/2017	FOR OFFICE USE ONLY
SUP-SLAB(4FT)-603	1	Simple Span Greater than 40'-0" to 45'-0" - 4'-0" Precast Concrete Slab Panel Skewed End Detail	05/12/2017	FOR OFFICE USE ONLY
SUP-SLAB(4FT)-701	1	Simple Span Greater than 45'-0" to 50'-0" Interior 4'-0" Precast Concrete Slab Panel	05/12/2017	FOR OFFICE USE ONLY
SUP-SLAB(4FT)-702	1	Simple Span Greater than 45'-0" to 50'-0" Exterior 4'-0" Precast Concrete Slab Panel	05/12/2017	FOR OFFICE USE ONLY
SUP-SLAB(4FT)-703	1	Simple Span Greater than 45'-0" to 50'-0" - 4'-0" Precast Concrete Slab Panel Skewed End Detail	05/12/2017	FOR OFFICE USE ONLY
SUP-SLAB(4FT)-801	1	Simple Span Greater than 50'-0" to 55'-0" Interior 4'-0" Precast Concrete Slab Panel	05/12/2017	FOR OFFICE USE ONLY
SUP-SLAB(4FT)-802	1	Simple Span Greater than 50'-0" to 55'-0" Exterior 4'-0" Precast Concrete Slab Panel	05/12/2017	FOR OFFICE USE ONLY

Detail Number	Version	Detail Description	Date Issued	Status
SUP-SLAB(4FT)-803	1	Simple Span Greater than 50'-0" to 55'-0" - 4'-0" Precast Concrete Slab Panel Skewed End Detail	05/12/2017	FOR OFFICE USE ONLY

Detail Number	Version	Detail Description	Date Issued	Status
SUP-SLAB(4FT)-901	1	4'-0" Precast Concrete Slab Panel Alternate Reinforcing Details	05/12/2017	FOR OFFICE USE ONLY

SECTION 08 Bridge Deck Joints

SUB-SECTION 01 Joint Construction Details

Detail Number	Version	Detail Description	Date Issued	Status
SUP-JT(JC)-101	1	Roadway Joint Splices for Sequential Construction	01/09/2011	APPROVED

Detail Number	Version	Detail Description	Date Issued	Status
SUP-JT(JC)-102	1	Roadway Joint Angle Shop Splices for Non-Sequential Construction	09/16/2011	APPROVED

SUB-SECTION 02 Joint Seal Details

Detail Number	Version	Detail Description	Date Issued	Status
SUP-JT(JS)-101	1	Compression Seal Joint and Retainer Angle Detail	09/24/2015	APPROVED

Detail Number	Version	Detail Description	Date Issued	Status
SUP-JT(JS)-102	1	Preformed Compression Seal Selection Chart	10/01/1982	FOR OFFICE USE ONLY

Detail Number	Version	Detail Description	Date Issued	Status
SUP-JT(JS)-201	1	Silicone Seal Joint and Retainer Angle Detail	03/07/2013	APPROVED

SUB-SECTION 03 Fixed Joints

Detail Number	Version	Detail Description	Date Issued	Status
SUP-JT(FIX)-101	1	Roadway Joint at Abutments Carrying Steel Griders with Steel Fixed Bearing or Steel Expansion Bearings with Length Contributing to Exansion <= 70 Feet	03/18/2014	APPROVED

Detail Number	Version	Detail Description	Date Issued	Status
SUP-JT(FIX)-201	1	Roadway Joint at Abutments Carrying Prestessed Griders with Elastomeric Fixed Bearing or Expansion Bearings with Length Contributing to Exansion <= 70 Feet	02/24/2017	APPROVED



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Detail Number	Version	Detail Description	Date Issued	Status
SUP-JT(FIX)-301	1.01	Full Height Roadway Joint For 42" F-Shape Parapet for Bridge with Fixed Bearings or Expansion Bearings with Length Contributing to Expansion <= 70 Ft.	05/07/2018	APPROVED

Detail Number	Version	Detail Description	Date Issued	Status
SUP-JT(FIX)-401	1	Full Height Roadway Joint for Sidewalks for Bridge with Fixed Bearings or Expansion Bearings with Length Contributing to Expansion <= 70 Ft.	02/24/2017	APPROVED

SUB-SECTION 04 Expansion Joints

Detail Number	Version	Detail Description	Date Issued	Status
SUP-JT(EXP)-101	1.01	Roadway Joint at Abutments Carrying Steel Griders with Steel Expansion Bearings with Length Contributing to Expansion > 70 Feet	04/03/2018	APPROVED

Detail Number	Version	Detail Description	Date Issued	Status
SUP-JT(EXP)-201	1.01	Roadway Joint at Abutments Carrying Prestressed Concrete Griders with Elastomeric Expansion Bearings with Length Contributing to Expansion > 70 Feet	04/03/2018	APPROVED

Detail Number	Version	Detail Description	Date Issued	Status
SUP-JT(EXP)-301	1	Full Height Roadway Joint For 42" F-Shape Parapet for Bridge with Expansion Bearings with Length Contributing to Expansion > 70 Ft.	03/29/2012	APPROVED

Detail Number	Version	Detail Description	Date Issued	Status
SUP-JT(EXP)-401	1	Full Height Roadway Joint For Sidewalks for Bridge with Expansion Bearings with Length Contributing to Expansion > 70 Ft.	11/15/2013	APPROVED

SUB-SECTION 05 Finger Joint Details

Detail Number	Version	Detail Description	Date Issued	Status
SUP-JT(FJ)-101	1	Finger Joint Details (42" F-Shape Parapet) for Bridges with Steel Stringers with Skew Angles Between 50° and 90°	07/19/2006	APPROVED

SUB-SECTION 06 Modified Joint Details

Detail Number	Version	Detail Description	Date Issued	Status
SUP-JT(MJ)-101	1	Modified Existing Bridge Deck Expansion Joint At Abutments	01/07/2002	APPROVED
SUP-JT(MJ)-102	1	Modified Existing Bridge Deck Expansion Joint At Piers	01/07/2002	APPROVED
SUP-JT(MJ)-201	1	Modified Existing Bridge Deck Non-Armored Expansion Joint at Abutments	01/22/2001	APPROVED
SUP-JT(MJ)-202	1	Modified Existing Bridge Deck Non-Armored Expansion Joint At Piers	01/17/1997	APPROVED
SUP-JT(MJ)-301	1	Modified Existing Bridge Armored Joint At Walkway	11/17/1997	APPROVED
SUP-JT(MJ)-302	1	Modified Existing Bridge Non-Armored Joint At Walkway	09/09/1982	APPROVED
SUP-JT(MJ)-303	1	Modified Existing Bridge Non-Armored Joint at Parapet (No Walkway)	06/21/1994	APPROVED
SUP-JT(MJ)-401	1	Compression Seal Roadway Joints At Piers	07/19/2006	APPROVED

SUB-SECTION 07 Drainage Trough Details

Detail Number	Version	Detail Description	Date Issued	Status
SUP-JT(DT)-101	1	Drainage Trough Catch Basin	02/26/2015	APPROVED

SECTION 09 Bearings

SUB-SECTION 01 Bearing Steel

Detail Number	Version	Detail Description	Date Issued	Status
SUP-BR(SB)-101	2	Fixed Bearing Short Length Spans (Grade 50 Steel)	04/03/2018	APPROVED
SUP-BR(SB)-102	2	Expansion Bearing Short Length Spans (Grade 50 Steel)	04/03/2018	APPROVED
SUP-BR(SB)-103	2	Fixed Bearing Medium Length Spans (Grade 50 Steel)	04/03/2018	APPROVED
SUP-BR(SB)-104	2	Bronze Expansion Bearing Medium Length Spans (Grade 50 Steel)	04/03/2018	APPROVED

SUB-SECTION 02 Elastomeric Bearings

Detail Number	Version	Detail Description	Date Issued	Status
SUP-BR(EB)-101	1	Bearings for Prestressed Concrete Girders General Notes	02/23/2017	APPROVED
SUP-BR(EB)-102	1	Expansion Bearings for PCEF Bulb Tee Prestressed Concrete Girders	02/23/2017	APPROVED
SUP-BR(EB)-103	1	Fixed Bearings for PCEF Bulb Tee Prestressed Concrete Girders	02/23/2017	APPROVED

SECTION 10 Scuppers

SUB-SECTION

Detail Number	Version	Detail Description	Date Issued	Status
SUP-SC-101	1	Type I Bridge Scupper	04/17/2018	RESCINDED
SUP-SC-102	1	Type IA Bridge Scupper	01/22/2001	APPROVED
SUP-SC-103	1	Type II Bridge Scupper	01/22/2001	APPROVED



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Detail Number	Version	Detail Description	Date Issued	Status
SUP-SC-104	1	Type III Bridge Scupper	06/13/2001	APPROVED
SUP-SC-105	1	Type IV Bridge Scupper	07/14/2008	APPROVED
SUP-SC-106	1	Type V Bridge Scupper	07/14/2008	APPROVED
SUP-SC-201	1	Scupper Downspout Support Bracket for Short Cast Iron Scupper Downspout	07/14/2008	APPROVED
SUP-SC-202	1	Scupper Downspout Support Bracket for Long Cast Iron Scupper Downspout	07/14/2008	APPROVED
SUP-SC-301	1	Bridge Deck Reinforcement Pattern in Scupper Area for Scupper Types I and IA at F-Shape Parapet with Straight Back	10/22/2003	APPROVED
SUP-SC-302	1	Bridge Deck Reinforcement Pattern in Scupper Area for Scupper Types I and IA at F-Shape Parapet with Diamond Back	10/22/2003	APPROVED
SUP-SC-303	1	Bridge Deck Reinforcement Pattern in Scupper Area for Scupper Types I and IA at F-Shape Parapet with Architectural Finish	10/22/2003	APPROVED
SUP-SC-304	1	Bridge Deck Reinforcement Pattern in Scupper Area for Scupper Types I, IA, IV and V at Sidewalk	08/07/1998	APPROVED
SUP-SC-401	1	Splash Blocks for Scupper Outlets	01/22/2001	APPROVED

CHAPTER 04 Maintenance of Traffic

SECTION

SUB-SECTION

Detail Number	Version	Detail Description	Date Issued	Status
MOT-101	1	Temporary Precast Single Face F-Type Concrete Barrier	01/21/2013	APPROVED
MOT-102	1	Temporary Precast Double Face F- Type Concrete Barrier	10/21/2013	APPROVED
MOT-201	1	Detail of Temporary Slab Underpinning During Stage Construction	10/09/2007	APPROVED
MOT-301	1	Temporary Movable Barricade	07/24/2007	APPROVED

CHAPTER 05 Retaining Walls

SECTION

SUB-SECTION

Detail Number	Version	Detail Description	Date Issued	Status
RW-101	1	Standard Retaining Wall - General Notes	03/21/2014	APPROVED
RW-102	1	Type A Retaining Wall Section (for Excellent Soil Condition and Two Foot Surcharge)	12/04/2013	APPROVED
RW-103	1	Type B Retaining Wall Section (for Good Soil Condition and Two Foot Surcharge)	12/04/2013	APPROVED
RW-104	1	Type C Retaining Wall Section (for Poor Soil Condition and Two Foot Surcharge)	12/04/2013	APPROVED
RW-105	1	Type D Retaining Wall Section (for Excellent Soil Condition and Sloping Groundline)	12/04/2013	APPROVED
RW-106	1	Type E Retaining Wall Section (for Good Soil Condition and Sloping Groundline)	12/04/2013	APPROVED
RW-107	1	Type F Retaining Wall Section (for Poor Soil Condition and Sloping Groundline)	12/04/2013	APPROVED
RW-108	1	Type G Retaining Wall Section (for Pile Footing and Two Foot Surcharge)	12/04/2013	APPROVED



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Detail Number	Version	Detail Description	Date Issued	Status
RW-109	1	Type H Retaining Wall Section (for Pile Footing and Sloping Groundline)	11/13/2007	APPROVED
RW-201	1	Standard Retaining Wall Standard Details	07/16/2002	FOR OFFICE USE ONLY
RW-301	1	Retaining Wall and Wing Wall Drainage Systems	01/22/2001	APPROVED
RW-401	1	Concrete Retaining Wall Contraction and Expansion Joints	05/04/2006	APPROVED
RW-402	1	Stepped Footing Detail	08/28/2002	APPROVED
RW-403	1	Stepped Footing Detail with Piles	07/16/2002	APPROVED
RW-501	1	Reinforcement Adjustment At Utility And/Or Pipe Opening In Wall	07/02/1993	FOR OFFICE USE ONLY

CHAPTER 06 Box Culverts

SECTION

SUB-SECTION

Detail Number	Version	Detail Description	Date Issued	Status
BC-101	1	Box Culvert Headwall and Toewall Details	10/09/2007	APPROVED
BC-102	1	Headwall For Multi-Celled Box Culvert Groove Details	06/20/1975	APPROVED
BC-201	1	Contraction Joint For Box Culvert Barrel	01/17/1997	APPROVED
BC-202	1	Box Culvert Wing Wall Construction Joint	10/09/2007	APPROVED
BC-301	1	Expansion Joint For Box Culvert Barrel	03/22/2006	APPROVED
BC-302	1	Box Culvert Wing Wall Expansion Joint	10/09/2007	APPROVED
BC-401	1	Typical Section For Single Box Culvert	10/09/2007	APPROVED
BC-402	1	Typical Section Multi-Celled Box Culvert	10/09/2007	APPROVED
BC-501	1	Tie-In Detail for Box Culvert Bottom Slab and Wing Wall Footing	10/09/2007	APPROVED

CHAPTER 07 Reinforcing Details

SECTION 01 Bar Laps

SUB-SECTION

Detail Number	Version	Detail Description	Date Issued	Status
REBAR-BL-101	1	Bar Lap Dimensions for Grade 60 Reinforcing Steel in Mix No. 3 (3500 P.S.I.) Concrete	03/21/2017	APPROVED
REBAR-BL-102	1	Bar Lap Dimensions for Grade 60 Reinforcing Steel in Lightweight (4500 P.S.I.) Concrete	03/21/2017	APPROVED
REBAR-BL-103	1	Bar Lap Dimensions for Grade 60 Reinforcing Steel In Mix No. 6 (4500 P.S.I.) Concrete	03/21/2017	APPROVED

SECTION 02 Development Length

SUB-SECTION

Detail Number	Version	Detail Description	Date Issued	Status
REBAR-DL-101	1	Development Length Dimensions for Grade 60 Reinforcing Steel in Mix No. 3 (3500 P.S.I.) Concrete	03/21/2017	APPROVED
REBAR-DL-102	1	Development Length Dimensions for Grade 60 Reinforcing Steel in Lightweight (4500 P.S.I.) Concrete	03/21/2017	APPROVED
REBAR-DL-103	1	Development Length Dimensions for Grade 60 Reinforcing Steel in Mix No. 6 (4500 P.S.I.) Concrete	03/21/2017	APPROVED
REBAR-DL-201	1	Development Length Dimensions of Hooked Bars for Grade 60 Reinforcing Steel in Mix No. 3 (3500 P.S.I.) Concrete	05/10/2011	APPROVED



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Detail Number	Version	Detail Description	Date Issued	Status
REBAR-DL-202	1	Development Length Dimensions of Hooked Bars for Grade 60 Reinforcing Steel in Lightweight (4500 P.S.I.) Concrete	05/10/2011	APPROVED

Detail Number	Version	Detail Description	Date Issued	Status
REBAR-DL-203	1	Development Length Dimensions of Hooked Bars for Grade 60 Reinforcing Steel in Mix No. 6 (4500 P.S.I.) Concrete	05/10/2011	APPROVED

SECTION 03 Bar Bends

SUB-SECTION

Detail Number	Version	Detail Description	Date Issued	Status
REBAR-BB-101	1	Bar Bend Types	02/10/1994	APPROVED

Detail Number	Version	Detail Description	Date Issued	Status
REBAR-BB-102	1	Reinforcing Steel Hook Tables and Diagrams	11/17/1997	APPROVED

SECTION 04 Existing Reinforcing

SUB-SECTION

Detail Number	Version	Detail Description	Date Issued	Status
REBAR-ER-101	1	Splicing to Existing Reinforcing Steel	11/26/2007	APPROVED

CHAPTER 08 Aesthetics

SECTION

SUB-SECTION

Detail Number	Version	Detail Description	Date Issued	Status
AES-101	1	Groove Detail for Substructure Elements	03/14/1994	APPROVED
AES-201	1	Trapezoidal Striation Details for Bridge Substructure Units and Retaining Walls	10/22/2003	APPROVED
AES-202	1	Trapezoidal Striation Layout for Bridge Substructure Units and Retaining Walls	10/22/2003	FOR OFFICE USE ONLY
AES-203	1	Trapezoidal Striation Corner Details	01/22/2001	APPROVED

CHAPTER 09 Structure Inventory

SECTION

SUB-SECTION

Detail Number	Version	Detail Description	Date Issued	Status
SI-101	1	Location of Year Built Marking and Structure Inventory Number on Bridges	10/17/2013	APPROVED
SI-102	1.01	Small Structure Sign and Placement Details	07/27/2018	APPROVED
SI-103	1	Location of Year Built Marking and Structure Inventory Number on Headwalls for Pipes and Box Culverts	10/17/2013	APPROVED
SI-104	1	Location of Year Built Marking and Structure Inventory Number on Retaining Walls	10/17/2013	APPROVED
SI-201	1	Numerals for Year Built Marking on Structures	09/14/1999	APPROVED

CHAPTER 11 Structure Repairs

SECTION 01 Steel Repairs

SUB-SECTION 01 Fatigue Repairs

Detail Number	Version	Detail Description	Date Issued	Status
SR-ST(FR)-101	1.01	Fatigue Crack Repairs for Structural Steel	08/11/2017	APPROVED

SUB-SECTION 02 Gouge Repairs

Detail Number	Version	Detail Description	Date Issued	Status
SR-ST(GR)-101	1	Gouge Repair Details	06/28/2017	APPROVED

SUB-SECTION 03 Bearing Stiffener Retrofits

Detail Number	Version	Detail Description	Date Issued	Status
SR-ST(BSR)-101	1	Bearing Stiffener Plating - General Notes	06/28/2017	APPROVED

Detail Number	Version	Detail Description	Date Issued	Status
SR-ST(BSR)-102	1	Exterior/Interior Girder/Beam End Bearing Stiffener Plating Details - Concrete Diaphragm	06/28/2017	APPROVED

SUB-SECTION 04 Structural Retrofits

Detail Number	Version	Detail Description	Date Issued	Status
SR-ST(SR)-101	1	Girder/Beam End Plating - General Notes	06/28/2017	APPROVED

Detail Number	Version	Detail Description	Date Issued	Status
SR-ST(SR)-102	1	Interior Girder/Beam End Plating Details - Concrete Diaphragm	06/28/2017	APPROVED

Detail Number	Version	Detail Description	Date Issued	Status
SR-ST(SR)-103	1	Interior Girder/Beam End Plating Details - Steel Diaphragm with Deterioration below Diaphragm	06/28/2017	APPROVED

Detail Number	Version	Detail Description	Date Issued	Status
SR-ST(SR)-104	1	Exterior Girder/Beam End Plating Outside Face without Stiffener Details - Concrete Diaphragm	06/28/2017	APPROVED



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Detail Number	Version	Detail Description	Date Issued	Status
SR-ST(SR)-105	1	Exterior Girder/Beam Beam End Plating Outside Face with Stiffener Details - Concrete Diaphragm	06/28/2017	APPROVED

SUB-SECTION 05 Non-Structural Retrofits

Detail Number	Version	Detail Description	Date Issued	Status
SR-ST(NSR)-101	1	Non-Structural Girder/Beam End Plating General Notes	06/28/2017	APPROVED

Detail Number	Version	Detail Description	Date Issued	Status
SR-ST(NSR)-102	1	Non-Structural Interior Girder/Beam End Plating Details - Concrete Diaphragm	06/28/2017	APPROVED

Detail Number	Version	Detail Description	Date Issued	Status
SR-ST(NSR)-103	1	Non-Structural Interior Girder/Beam End Plating Details - Steel Diaphragm with Deterioration Below Diaphragm	06/28/2017	APPROVED

Detail Number	Version	Detail Description	Date Issued	Status
SR-ST(NSR)-104	1	Non-Structural Exterior Girder Beam End Plating Outside Face without Stiffener Details - Concrete Diaphragm	06/28/2017	APPROVED

Detail Number	Version	Detail Description	Date Issued	Status
SR-ST(NSR)-105	1	Non-Structural Exterior Girder/Beam End Plating Outside Face with Stiffener Details - Concrete Diaphragm	06/28/2017	APPROVED

SUB-SECTION 06 Heat Straightening

Detail Number	Version	Detail Description	Date Issued	Status
SR-ST(HS)-101	1	Heat Straightening - General Heating Procedures - Design Guide	06/28/2017	FOR OFFICE USE ONLY

Detail Number	Version	Detail Description	Date Issued	Status
SR-ST(HS)-102	1	Heat Straightening - Web Straightening Details - Design Field Measurements	06/28/2017	FOR OFFICE USE ONLY

Detail Number	Version	Detail Description	Date Issued	Status
SR-ST(HS)-103	1	Heat Straightening - General Heating Procedures - Construction Guide	06/28/2017	FOR OFFICE USE ONLY



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Detail Number	Version	Detail Description	Date Issued	Status
SR-ST(HS)-104	1	Heat Straightening - Defect Notes	06/28/2017	FOR OFFICE USE ONLY
SR-ST(HS)-105	1	Heat Straightening - Heating Pattern & Torch Tip Recommendations	06/28/2017	FOR OFFICE USE ONLY
SR-ST(HS)-106	1	Heat Straightening - Straightening Details - Typical Framing Plan	06/28/2017	FOR OFFICE USE ONLY
SR-ST(HS)-107	1	Heat Straightening - Flange Straightening Details	06/28/2017	FOR OFFICE USE ONLY
SR-ST(HS)-108	1	Heat Straightening - Web Straightening Details	06/28/2017	FOR OFFICE USE ONLY
SR-ST(HS)-109	1	Heat Straightening - Temporary Diaphragm Details	06/28/2017	FOR OFFICE USE ONLY

SECTION 02 Concrete Repairs

SUB-SECTION

Detail Number	Version	Detail Description	Date Issued	Status
SR-CR-101	1	Cast-In-Place Concrete Sequence and Repair Details (Pier Cap and Pier Column)	06/28/2017	APPROVED
SR-CR-102	1	Cast-In-Place Concrete Repair to Concrete Diaphragm at Pier	06/28/2017	APPROVED
SR-CR-103	1	Cast-In-Place Concrete Sequence and Repair Details for Concrete Pier Wall	06/28/2017	APPROVED
SR-CR-201	1	Pneumatically Applied Mortar Sequence and Repair Details (Pier Cap and Pier Column)	06/28/2017	APPROVED



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Detail Number	Version	Detail Description	Date Issued	Status
SR-CR-202	1	Pneumatically Applied Mortar Repair to Concrete Diaphragm at Pier	06/28/2017	APPROVED

Detail Number	Version	Detail Description	Date Issued	Status
SR-CR-203	1	Pneumatically Applied Mortar Sequence and Repair Details for Concrete Pier Walls	06/28/2017	APPROVED

SECTION 03 Jacking Systems

SUB-SECTION 01 Jacking Beam

Detail Number	Version	Detail Description	Date Issued	Status
SR-JS(JB)-101	1	Jacking Beam Design Guidelines	06/28/2017	APPROVED

Detail Number	Version	Detail Description	Date Issued	Status
SR-JS(JB)-102	1	Jacking Details	06/28/2017	APPROVED

Detail Number	Version	Detail Description	Date Issued	Status
SR-JS(JB)-103	1	Jacking Beam Jacking Chart	06/28/2017	APPROVED

SUB-SECTION 02 Prestressing Bar

Detail Number	Version	Detail Description	Date Issued	Status
SR-JS(PSB)-101	1	Prestressing Bar Design Guidelines	06/28/2017	APPROVED

Detail Number	Version	Detail Description	Date Issued	Status
SR-JS(PSB)-102	1	Jack Support Assembly for Prestressing Bar Brackets	06/28/2017	APPROVED

Detail Number	Version	Detail Description	Date Issued	Status
SR-JS(PSB)-103	1	Single Prestressing Bar Bracket Details (90 degree alignments)	06/28/2017	APPROVED

Detail Number	Version	Detail Description	Date Issued	Status
SR-JS(PSB)-104	1	Double Prestressing Bar Bracket Details (90 degree alignments)	06/28/2017	APPROVED

Detail Number	Version	Detail Description	Date Issued	Status
SR-JS(PSB)-105	1	Cap Plate for Single Prestressing Bar Brackets (skewed alignment)	06/28/2017	APPROVED



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Detail Number	Version	Detail Description	Date Issued	Status
SR-JS(PSB)-106	1	Cap Plate for Double Prestressing Bar Brackets (skewed alignment)	06/28/2017	APPROVED

Detail Number	Version	Detail Description	Date Issued	Status
SR-JS(PSB)-107	1	Prestressing Bar Tensioning and Jacking Chart	06/28/2017	APPROVED

SUB-SECTION 03 Channel Bracket

Detail Number	Version	Detail Description	Date Issued	Status
SR-JS(CB)-101	1	Double Channel Bracket Design Guidelines	06/28/2017	APPROVED

Detail Number	Version	Detail Description	Date Issued	Status
SR-JS(CB)-102	1	Channel Bracket Jacking Details	06/28/2017	APPROVED

Detail Number	Version	Detail Description	Date Issued	Status
SR-JS(CB)-103	1	Double Channel Bracket Jacking Chart	06/28/2017	APPROVED

SECTION 04 Substructure Repairs

SUB-SECTION

Detail Number	Version	Detail Description	Date Issued	Status
SR-SUB-101	1	Fiberglass Protective Pile Jacket for Existing Piles	06/28/2017	APPROVED

Detail Number	Version	Detail Description	Date Issued	Status
SR-SUB-102	1	Nylon Form Protective Pile Jacket for Existing Piles	06/28/2017	APPROVED

Detail Number	Version	Detail Description	Date Issued	Status
SR-SUB-201	1	Splice for Connecting Existing Timber Piling to New Timber Piling	06/28/2017	APPROVED

Detail Number	Version	Detail Description	Date Issued	Status
SR-SUB-301	1	Steel Replacement/Temporary Bent for Timber/Concrete Composite or Concrete Slab Bridges	06/28/2017	APPROVED

Detail Number	Version	Detail Description	Date Issued	Status
SR-SUB-401	1	Steel Replacement/Temporary Bent for Steel Stringer Bridges	06/28/2017	APPROVED

Detail Number	Version	Detail Description	Date Issued	Status
SR-SUB-501	1	Steel Replacement/Temporary Bent Material List	06/28/2017	APPROVED

SECTION 05 Bearing Repairs

SUB-SECTION

Detail Number	Version	Detail Description	Date Issued	Status
SR-BR-101	1	Bearing Shim Details - General Notes	06/28/2017	APPROVED
SR-BR-102	1	Bearing Shim - Shim Plate Details - Rotation Installation	06/28/2017	APPROVED
SR-BR-103	1	Bearing Shim - Shim Plate Details - Direct Installation	06/28/2017	APPROVED
SR-BR-201	1	Sliding Plate Bearing - Supplementary Anchorage System	06/28/2017	APPROVED
SR-BR-202	1	Rocker Bearing - Supplementary Anchorage System	06/28/2017	APPROVED
SR-BR-301	1	Elastomeric Restraint System - Steel Beam	06/28/2017	APPROVED
SR-BR-302	1	Elastomeric Restraint System - Concrete Girder	06/28/2017	APPROVED

SECTION 06 Scour Erosion Repairs

SUB-SECTION

Detail Number	Version	Detail Description	Date Issued	Status
SR-SCOUR-101	1	Grout Bag Installation General Notes	06/28/2017	APPROVED
SR-SCOUR-102	1	Grout Bag Installation for Undermined Areas at Piers and Abutments General Notes	06/28/2017	APPROVED
SR-SCOUR-103	1	Grout Bag Section (various cases)	06/28/2017	APPROVED

Detail Number	Version	Detail Description	Date Issued	Status
SR-SCOUR-201	1	Grout Bag Section - Case where Scour and Underpinning has Occurred at Headwall (without Apron)	06/28/2017	APPROVED

Detail Number	Version	Detail Description	Date Issued	Status
SR-SCOUR-202	1	Grout Bag Section - Case where Scour and Underpinning has Occurred at Headwall (with Apron)	06/28/2017	APPROVED

Detail Number	Version	Detail Description	Date Issued	Status
SR-SCOUR-301	1	Riprap Underpinning and Armoring Section	06/28/2017	APPROVED

SECTION 07 Roadway Joint Repairs

SUB-SECTION 01 Retainer Bar

Detail Number	Version	Detail Description	Date Issued	Status
SR-JT(RB)-101	1.01	Compression Seal Gland Replacement - Armored Joint	04/30/2018	APPROVED

SUB-SECTION 02 Pourable Seals

Detail Number	Version	Detail Description	Date Issued	Status
SR-JT(PS)-101	1	Installing Pourable Joint Seals for Existing Bridge Decks with Armored Joints	06/28/2017	APPROVED

Detail Number	Version	Detail Description	Date Issued	Status
SR-JT(PS)-102	1	Installing Pourable Joint Seals for Existing Bridge Decks with Non-Armored Joints	06/28/2017	APPROVED

SUB-SECTION 03 Silicone Joint Seals

Detail Number	Version	Detail Description	Date Issued	Status
SR-JT(SJ)-101	1	Preformed Silicone Joint Seals with Primer for Existing Bridge Decks with Armored Joints (Joint Opening < 4")	06/28/2017	APPROVED

Detail Number	Version	Detail Description	Date Issued	Status
SR-JT(SJ)-102	1	Preformed Silicone Joint Seals with Primer for Existing Bridge Decks with NonArmored Joints (Joint Opening < 4")	06/28/2017	APPROVED



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Detail Number	Version	Detail Description	Date Issued	Status
SR-JT(SJ)-103	1	Preformed Silicone Joint Seal Installation (Joint Opening >4")	06/28/2017	APPROVED

SUB-SECTION 04 Parapet Curb Seals

Detail Number	Version	Detail Description	Date Issued	Status
SR-JT(PCS)-101	1	Installing Parapet/Curb Joint Seals for Existing Bridge Decks with Non-Armored Joints	06/28/2017	APPROVED

SUB-SECTION 05 Roadway Angle

Detail Number	Version	Detail Description	Date Issued	Status
SR-JT(RA)-101	1	Roadway Angle Repair Details (Deck - Armored Joint)	06/28/2017	APPROVED

Detail Number	Version	Detail Description	Date Issued	Status
SR-JT(RA)-102	1	Roadway Angle Repair Details (Backwall - Non-Armored Joint)	06/28/2017	APPROVED

Detail Number	Version	Detail Description	Date Issued	Status
SR-JT(RA)-103	1	Roadway Angle Repair Details (Backwall - Armored Joint)	06/28/2017	APPROVED

Detail Number	Version	Detail Description	Date Issued	Status
SR-JT(RA)-104	1	Roadway Angle Repair Details (Backwall - Angle Joint - Seal Side)	06/28/2017	APPROVED

Detail Number	Version	Detail Description	Date Issued	Status
SR-JT(RA)-105	1	Roadway Angle Repair Details (Backwall - Armored Joint - Approach Side)	06/28/2017	APPROVED

SUB-SECTION 06 Finger Joint Repairs

Detail Number	Version	Detail Description	Date Issued	Status
SR-JT(FJ)-101	1	Finger Joint Details - Bolt Repair for Bridge with Skew Angles between 50 and 90 degrees	06/28/2017	APPROVED

SUB-SECTION 07 Drainage Trough

Detail Number	Version	Detail Description	Date Issued	Status
SR-JT(DT)-101	1	Drainage Trough Detail at Pier For Existing Structure	06/28/2017	APPROVED



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Detail Number	Version	Detail Description	Date Issued	Status
SR-JT(DT)-201	1.01	Drainage Trough Detail at Abutment For Existing Structure	08/11/2017	APPROVED
Detail Number	Version	Detail Description	Date Issued	Status
SR-JT(DT)-301	1	Details for Replacing Sections of Existing Neoprene Drainage Troughs	06/28/2017	APPROVED

SECTION 08 Paved Inverts

SUB-SECTION

Detail Number	Version	Detail Description	Date Issued	Status
SR-PI-101	1	Design Guidelines for Invert Paving	06/28/2017	FOR OFFICE USE ONLY
Detail Number	Version	Detail Description	Date Issued	Status
SR-PI-102	1.01	Invert Paving of Existing Pipe - General Notes	08/11/2017	APPROVED
Detail Number	Version	Detail Description	Date Issued	Status
SR-PI-103	1.01	Invert Paving of Existing Pipe - General Notes (Project with E&S Permit)	08/11/2017	APPROVED
Detail Number	Version	Detail Description	Date Issued	Status
SR-PI-104	1	Invert Paving of Existing Pipe - Construction Notes	06/28/2017	APPROVED
Detail Number	Version	Detail Description	Date Issued	Status
SR-PI-105	1	Invert paving of Existing Pipe - Notice to Contractor	06/28/2017	APPROVED
Detail Number	Version	Detail Description	Date Issued	Status
SR-PI-106	1	Invert paving of Existing Pipe - Notice to Contractor (Project with E&S Permit)	06/28/2017	APPROVED
Detail Number	Version	Detail Description	Date Issued	Status
SR-PI-107	1	Invert paving of Existing Pipe - Sequence of Construction	06/28/2017	APPROVED
Detail Number	Version	Detail Description	Date Issued	Status
SR-PI-108	1	Invert paving of Existing Pipe - Sequence of Construction (Project with E&S Permit)	06/28/2017	APPROVED



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Detail Number	Version	Detail Description	Date Issued	Status
SR-PI-201	1	Invert Paving of Existing Circular Metal Pipe	06/28/2017	APPROVED
SR-PI-202	1	Invert Paving of Existing Metal Pipe Arch	06/28/2017	APPROVED
SR-PI-203	1	Invert Paving of Existing Circular Concrete Pipe	06/28/2017	APPROVED
SR-PI-204	1	Invert Paving of Existing Concrete Pipe Arch	06/28/2017	APPROVED
SR-PI-205	1	Invert Paving of Existing Box Culvert	06/28/2017	APPROVED
SR-PI-206	1	Invert Paving of Existing Box Culvert with Curtain Wall	06/28/2017	APPROVED
SR-PI-207	1	Invert Paving of Existing Rigid Frame Culvert	06/28/2017	APPROVED
SR-PI-301	1	Invert Paving of Existing Circular Metal Pipe with Drop Inlet Pipe	06/28/2017	APPROVED
SR-PI-302	1	Invert Paving of Existing Metal Arch Pipe with Drop Inlet Pipe	06/28/2017	APPROVED
SR-PI-303	1	Invert Paving of Existing Box Culvert with Drop Inlet Pipe	06/28/2017	APPROVED
SR-PI-401	1	Invert Paving Extensions of Existing Circular Metal Pipe with Previous Invert Paving	06/28/2017	APPROVED
SR-PI-402	1	Invert Paving Extensions of Existing Metal Pipe Arch with Previous Invert Paving	06/28/2017	APPROVED

Detail Number	Version	Detail Description	Date Issued	Status
SR-PI-501	1	Pipe Plating of Existing Circular Metal Pipe around Defective Joints and Circumferential Deterioration	06/28/2017	APPROVED
SR-PI-502	1	Pipe Plating of Existing Metal Pipe Arch around Defective Joints and Circumferential Deterioration	06/28/2017	APPROVED
SR-PI-503	1	Pipe Plating of Existing Circular Metal Pipe for Isolated Defects	06/28/2017	APPROVED
SR-PI-504	1	Pipe Plating of Existing Metal Pipe Arch for Isolated Defects	06/28/2017	APPROVED

SECTION 09 Pipe and Culvert Lining

SUB-SECTION

Detail Number	Version	Detail Description	Date Issued	Status
SR-PCL-101	1.01	Lining of Existing Culvert - General Notes	08/11/2017	APPROVED
SR-PCL-102	1	Lining of Existing Culvert - Construction Notes	06/28/2017	APPROVED
SR-PCL-103	1	Lining of Existing Culvert - Notice to Contractors	06/28/2017	APPROVED
SR-PCL-201	1	Lining of Existing Culvert - Sequence of Construction - Using Existing Pipes for Stream Diversion	06/28/2017	APPROVED
SR-PCL-202	1	Lining of Existing Culvert - Sequence of Construction - Using Trench in Pavement for Stream Diversion	06/28/2017	APPROVED
SR-PCL-203	1	Lining of Existing Culvert - Sequence of Construction - Using Hose in Pipe Liner for Stream Diversion	06/28/2017	APPROVED



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SR-PCL-204	1	Lining of Existing Culvert - Sequence of Construction - Using Adjacent Stream for Stream Diversion	06/28/2017	APPROVED

Detail Number	Version	Detail Description	Date Issued	Status
SR-PCL-301	1	Pipe Lining of Existing Culvert - Circular Metal Pipe	06/28/2017	APPROVED

Detail Number	Version	Detail Description	Date Issued	Status
SR-PCL-302	1	Pipe Lining of Existing Culvert - Metal Pipe Arch	06/28/2017	APPROVED

SECTION 10 Retaining Wall Repairs

SUB-SECTION

Detail Number	Version	Detail Description	Date Issued	Status
SR-RW-101	1	MSE Panel Joint Repairs	06/28/2017	APPROVED

SECTION 11 Noise Wall Repairs

SUB-SECTION

Detail Number	Version	Detail Description	Date Issued	Status
SR-NW-101	1	Noise Wall Panel Restraint Detail - General Notes	06/28/2017	APPROVED

Detail Number	Version	Detail Description	Date Issued	Status
SR-NW-102	1	Noise Wall Panel Restraint Detail - Wedge	06/28/2017	APPROVED

Detail Number	Version	Detail Description	Date Issued	Status
SR-NW-103	1	Noise Wall Panel Restraint Detail - Stand Alone Concrete Posts	06/28/2017	APPROVED

Detail Number	Version	Detail Description	Date Issued	Status
SR-NW-104	1	Noise Wall Panel Restraint Detail - Concrete Noise Wall with Integral Posts	06/28/2017	APPROVED

Detail Number	Version	Detail Description	Date Issued	Status
SR-NW-105	1	Noise Wall Panel Restraint Detail - Steel Posts	06/28/2017	APPROVED



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Detail Number	Version	Detail Description	Date Issued	Status
SR-NW-106	1	Noise Wall Panel Restraint Detail - Skewed Panel Connection - Special Steel Posts	06/28/2017	APPROVED

SECTION 12 Miscellaneous Repairs

SUB-SECTION 01 Traffic Plating

Detail Number	Version	Detail Description	Date Issued	Status
SR-MISC(TP)-101		Traffic Plating Details		DRAFT

SUB-SECTION 05 Safety Fence Handrail

Detail Number	Version	Detail Description	Date Issued	Status
SR-MISC(SFH)-101		Safety Fence Handrail		DRAFT

CHAPTER 12 **Miscellaneous**

SECTION

SUB-SECTION

Detail Number	Version	Detail Description	Date Issued	Status
MISC-101		Diversion Detail using Precast Concrete Blocks		DRAFT