LEGEND:

LAYOUT MAP

DESIGN SPEED:

MAINLINES - 70 MPH
RAMPS - 50 MPH
- 45 MPH

FUNCTIONAL CLASS: URBAN INTERSTATE

TERRAIN: ROLLING

PRELIMINARY ONLY

This document, and the associated engineering details and material quantities reflect Preliminary Schematic-level Design only. Use of this information for quantity verification, quantity take-offs and construction estimating is the responsibility of others, and is subject to the limitations and accuracy of Preliminary-level design. This document shall not be used for construction.

I-69 DEVELOPMENT PARTNERS

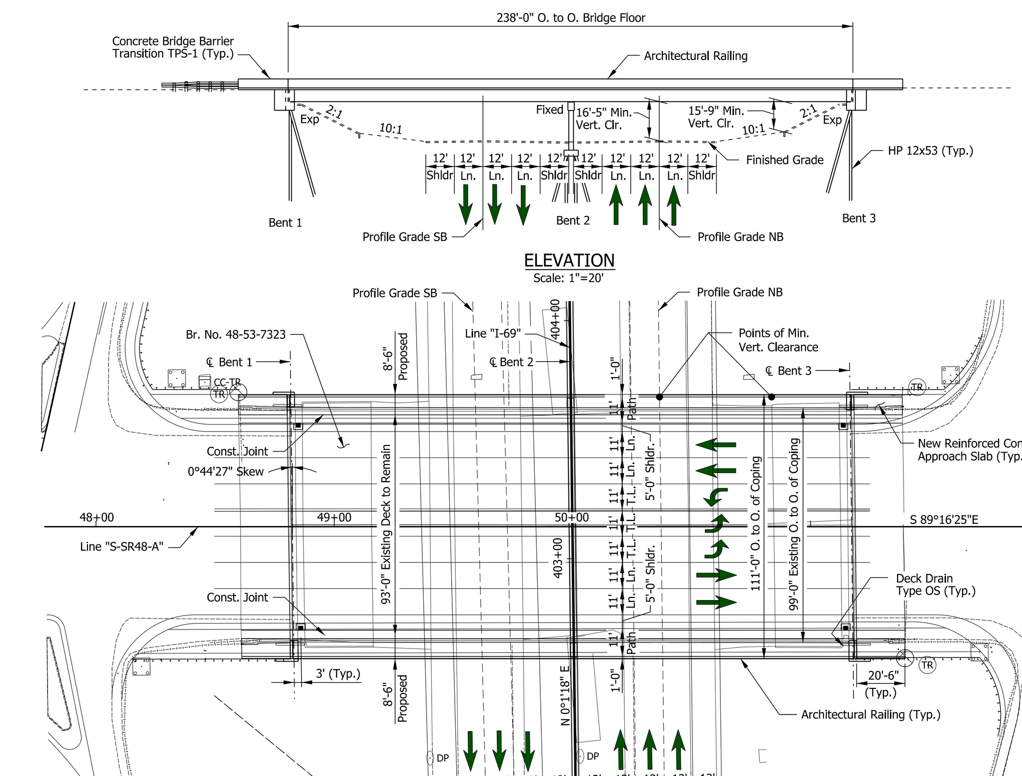
STRUCTURES
PRELIMINARY DESIGN

ROLL PLOT

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER	DATE
DESIGNED: MC	DRAWN: DES
APPROVED:	CHECKED: MC

DESIGNATION:	HORIZONTAL SCALE:	DWG NO.	SHT NO.
		ROLLPLOT02	2 OF 7
PROJECT:	VERTICAL SCALE:	REV. NO.	DWG DATE
			1-9-2014

ROLL PLOT NO.
21 OF 118



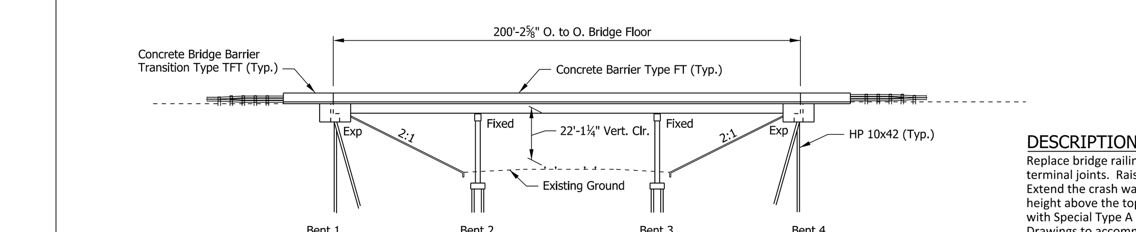
DESCRIPTION OF WORK:

Replace bridge railings, bridge railing transitions and deck joints. Widen the bents. Widen the approach slabs and superstructure, and construct sidewalks. Relocate deck drains. Replace bearings with elastomeric pads. Install surface seal and anti-graffiti coating.

NOTES:

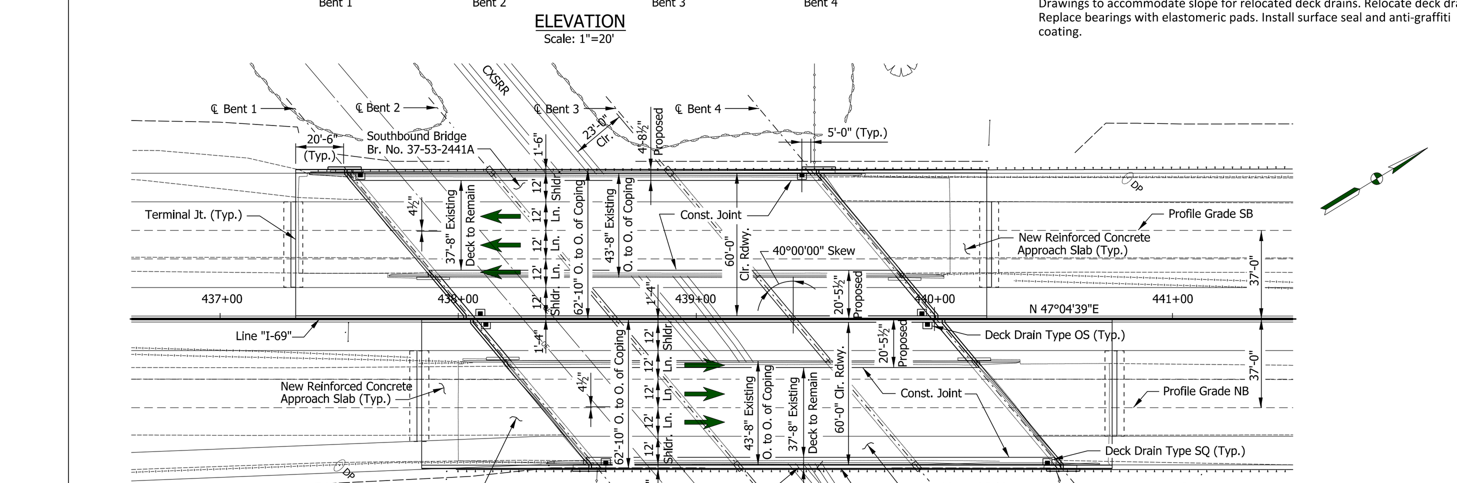
1. All stations, elevations and dimensions shown are based on "As-Built"plans and do not necessarily correspond to structure conditions now existing. Contractor shall verify all relevant dimensions in the field prior to fabrication of all materials.
2. The existing bridge was constructed in 1991 by the Indiana Department of Transportation under Project No. BN89-095-7(D).

RECOMMENDED FOR APPROVAL ___ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	SCALE: AS NOTED	BRIDGE FILE: 48-53-7323 DESIGNATION
DESIGNED: JMC DRAWN: DES CHECKED: CHECKED:	SR48/3rd STREET OVER I-69 GENERAL PLAN & ELEVATION	SURVEY BOOK / CONTRACT	SHEETS of / PROJECT



DESCRIPTION OF WORK:

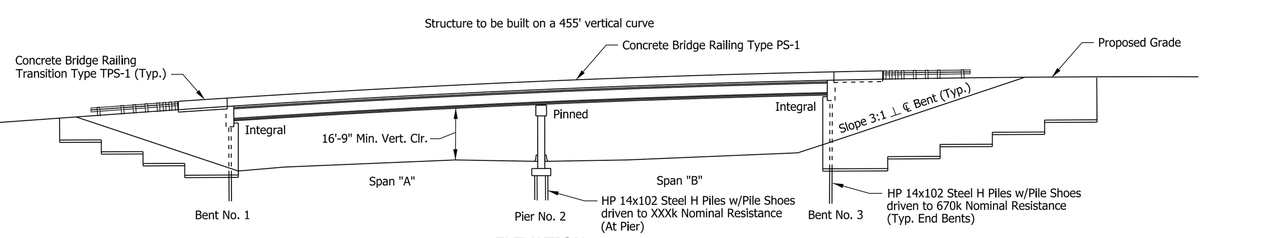
Replace bridge railings, approach slabs, bridge railing transitions, deck joints and terminal joints. Raise superstructure 4". Widen the bents and superstructure. Extend the crash walls at the interior bents to provide a 10-foot height above the top of high rail elevation. Replace the existing concrete berms with Special Type A paved side ditches in accordance with the INDOT Standard Drawings to accommodate slope for relocated deck drains. Relocate deck drains. Replace bearings with elastomeric pads. Install surface seal and anti-graffiti coating.

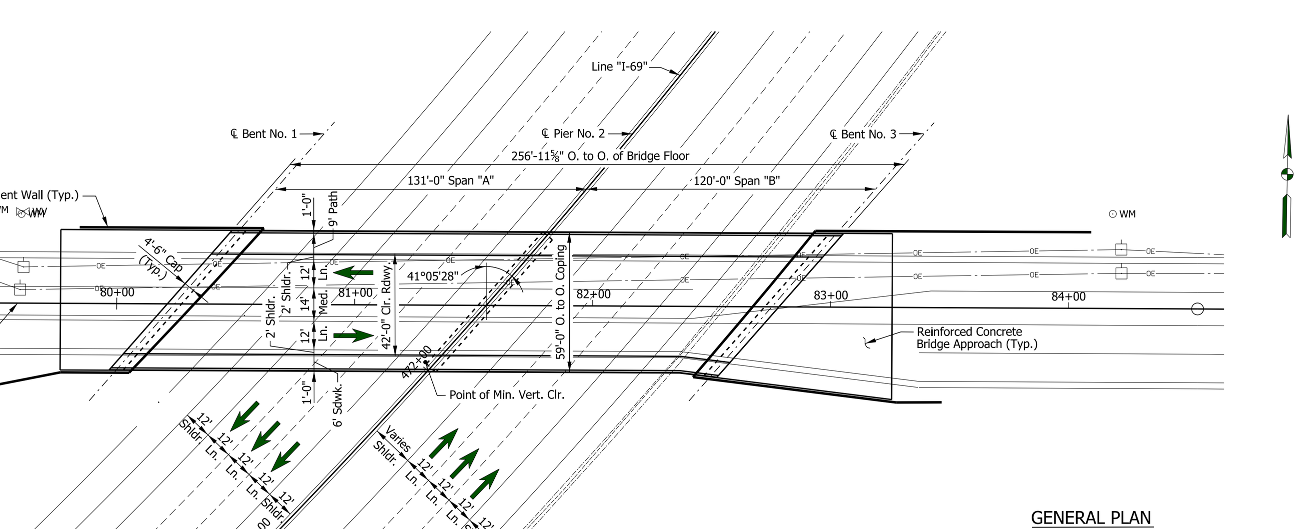


NOTES:

1. All stations, elevations and dimensions shown are based on "As-Built"plans and do not necessarily correspond to structure conditions now existing. Contractor shall verify all relevant dimensions in the field prior to fabrication of all materials.
2. The existing bridges were constructed in 1972 by the Indiana State Highway Commission under Project No. ST-F-893(9).
3. The existing bridges were widened and received new bridge decks, concrete barriers, deck drains and new approach slabs in 1993 by the Indiana Department of Transportation under Project No. NH/095-7(006).

RECOMMENDED FOR APPROVAL ___ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	SCALE: AS NOTED	BRIDGE FILE: 37-53-2441 DESIGNATION
DESIGNED: JMC DRAWN: DES CHECKED: CHECKED:	I-69 NB & SB OVER CSX RAILROAD GENERAL PLAN & ELEVATION	SURVEY BOOK / CONTRACT	SHEETS of / PROJECT

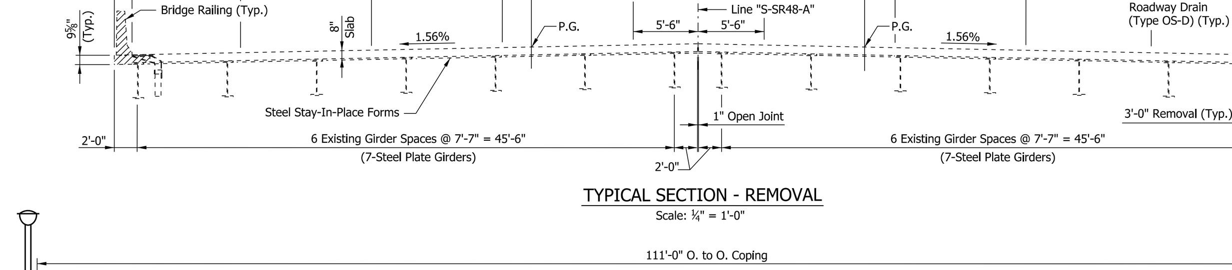




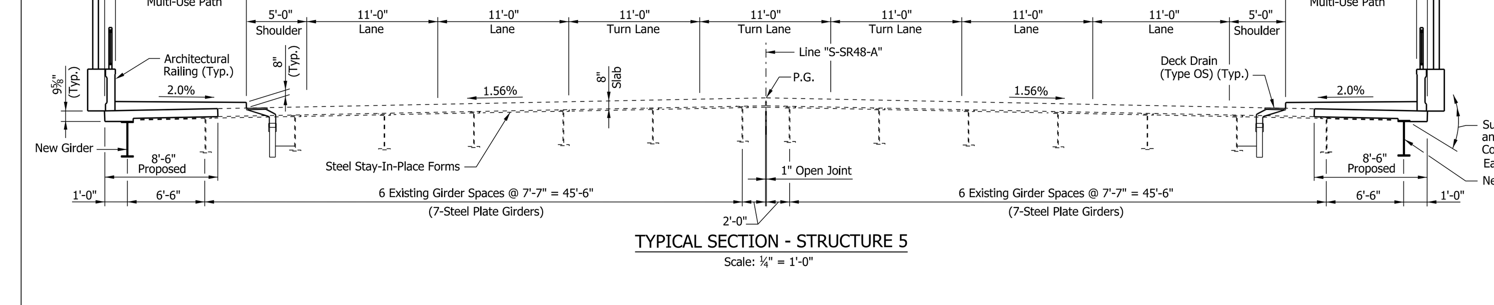
GENERAL PLAN

Continuous Prestressed Concrete Hybrid Bulb Tee Bridge
2 Spans: 131'-0", 120'-0"
Skew: 41°05'28" Right
42'-0" Clear Roadway
Vernal Pike over I-69
Monroe County

RECOMMENDED FOR APPROVAL ___ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	SCALE: AS NOTED	BRIDGE FILE DESIGNATION
DESIGNED: MC DRAWN: DES CHECKED: CHECKED:	VERNAL PIKE/17th STREET OVER I-69 GENERAL PLAN & ELEVATION	SURVEY BOOK / CONTRACT	SHEETS of / PROJECT

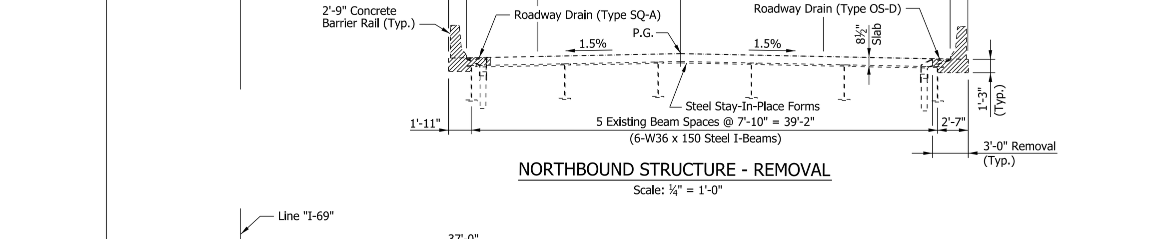


TYPICAL SECTION - REMOVAL
Scale: ¼" = 1'-0"

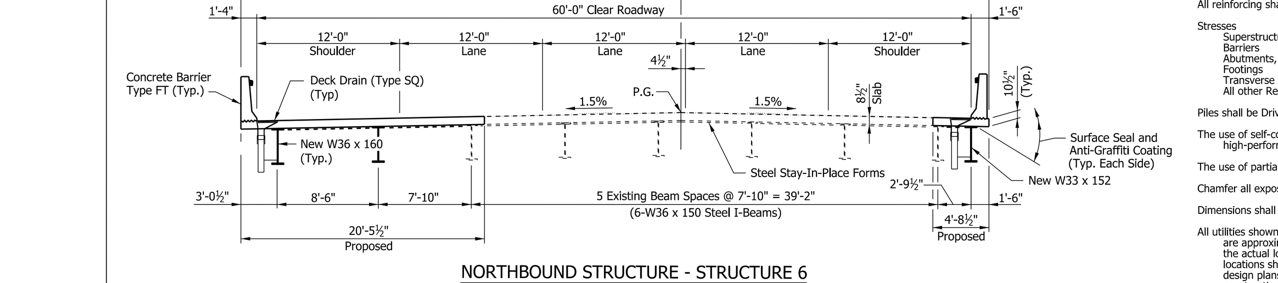


TYPICAL SECTION - STRUCTURE 5
Scale: ¼" = 1'-0"

RECOMMENDED FOR APPROVAL ___ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	SCALE: AS NOTED	BRIDGE FILE: 48-53-7323 DESIGNATION
DESIGNED: JMC DRAWN: DES CHECKED: CHECKED:	SR48/3RD STREET OVER I-69 TYPICAL SECTIONS	SURVEY BOOK / CONTRACT	SHEETS of / PROJECT



NORTHBOUND STRUCTURE - REMOVAL
Scale: ¼" = 1'-0"



NORTHBOUND STRUCTURE - STRUCTURE 6
Scale: ¼" = 1'-0"

GENERAL NOTES:

Construction Specifications:
Indiana Department of Transportation Standard Specifications, Edition of 2014.

Design Specifications:
AASHTO Standard Specifications for Highway Bridges, 17th Edition, 2002.

Dead Load:
Includes Allowance of 35 psf for Future Wearing Surface (FWS).
Includes Allowance of 15 psf for Stay-in-Place (SIP) Deck Forms.

Loading Class:
HS20-44 and/or Interstate Alternate Loading.

Composite Design:
Dead Load carried by girders only.

Importance Classification
Essential Bridge IC = I

Seismic Design:
Bridge Site is classified as Seismic Zone 1, with Peak Ground Acceleration (PGA) = 0.170g
Seismic Performance Category (SPC) = B
Seismic Design Category (SDC) = A (IDM Figure 403-3F)

Reinforcing steel shall conform to ASTM Specification A1035 or A615. All reinforcing steel shall be furnished as Grade 100 (ASTM A1035) or as 60 or 75 (ASTM A615). Reinforcing steel shall be epoxy coated, unless noted otherwise.

Stagger Splices unless noted otherwise.

All Bends and Hooks shall meet the requirements of AASHTO Article 8.23. All bend dimensions for reinforcing steel shall be out-to-out of bars. All placement dimensions for reinforcing shall be to center of bars, unless noted otherwise.

All reinforcing shall have 2 inch clear cover, unless noted otherwise.

Stresses
Superstructure	- Class 'C' Concrete ....f'c = 4500 psi
Barriers	- Class 'C' Concrete ....f'c = 4000 psi
Abutments, End Bents & Piers	- Class 'A' Concrete ....f'c = 3500 psi
Footings	- Class 'B' Concrete ....f'c = 3000 psi
Transverse Deck Reinforcing Steel	- Grade 60 ....fs = 20000 psi
All other Reinforcing Steel	- Grade 60 ....fs = 24000 psi

Piles shall be Driven to XX kip.

The use of self-consolidating, lightweight, semi-lightweight, high-strength, and high-performance concrete for permanent bridge structural components is prohibited.

The use of partial depth and full depth precast deck panels are prohibited.

Chamfer all exposed corners 1", unless noted otherwise.

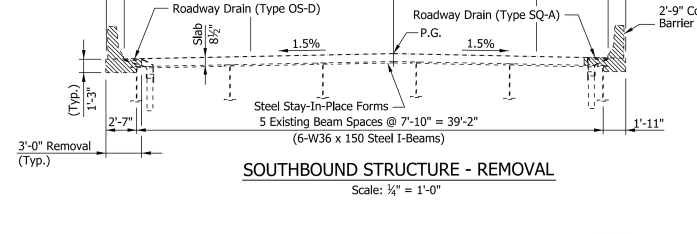
Dimensions shall not be scaled from drawings.

All utilities shown are provided for the contractor's general information only. The locations are approximate. It shall be the contractor's responsibility to determine and coordinate the actual location of utilities in the vicinity of the bridge construction. Existing utility locations shown reflect the findings of the latest available mapping. Refer to relevant design plans for status of existing utilities and new utility information. Bridge construction must be phased with utility construction in some locations. It shall be the contractor's responsibility to identify and coordinate construction in these locations.

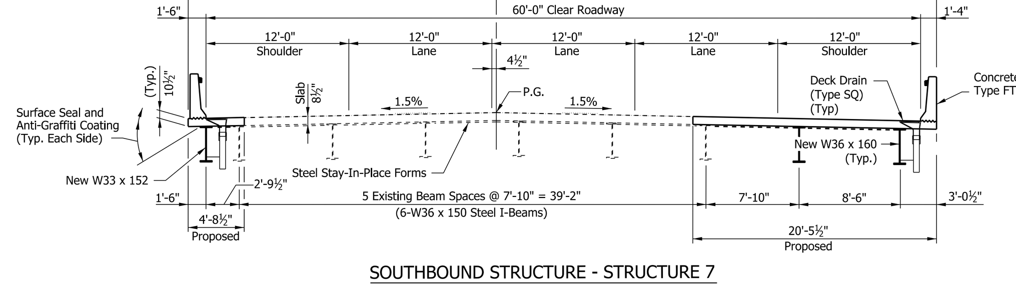
SURFACE SEAL NOTE:
Surface seal shall be applied to the top of decks and approach slabs, all exposed surfaces of concrete railings and railing transitions, and all exposed surfaces of the substructures. Surface seal shall be applied to deck copings in accordance with IDM Figure 17-5A(0). For concrete superstructure structural members, the tops and the outside faces of fascia members shall be surface sealed. The superstructure shall be sealed prior to opening the structure to traffic. Surface seal shall not be applied to an overlay or to the top of bridge deck prior to the placement of an overlay. Developer shall apply surface seal prior to applying the anti-graffiti coating.

ANTI-GRAFFITI COATING NOTE:
Anti-graffiti coating shall be placed on all exposed surfaces of walls and bridges. Anti-graffiti coating shall be placed from the finished ground surface at the base of the wall or substructures to a height of 10 feet above the finished ground surface. The anti-graffiti coating shall be a sacrificial, wax-based, emulsion-type coating.

RECOMMENDED FOR APPROVAL ___ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	SCALE: AS NOTED	BRIDGE FILE DESIGNATION
DESIGNED: JMC DRAWN: DES CHECKED: CHECKED:	CSX RAILROAD UNDERPASS NB TYPICAL SECTIONS	SURVEY BOOK / CONTRACT	SHEETS of / PROJECT



SOUTHBOUND STRUCTURE - REMOVAL
Scale: ¼" = 1'-0"



SOUTHBOUND STRUCTURE - STRUCTURE 7
Scale: ¼" = 1'-0"

GENERAL NOTES:

Construction Specifications:
Indiana Department of Transportation Standard Specifications, Edition of 2014.

Design Specifications:
AASHTO Standard Specifications for Highway Bridges, 17th Edition, 2002.

Dead Load:
Includes Allowance of 35 psf for Future Wearing Surface (FWS).
Includes Allowance of 15 psf for Stay-in-Place (SIP) Deck Forms.

Loading Class:
HS20-44 and/or Interstate Alternate Loading.

Composite Design:
Dead Load carried by girders only.

Importance Classification
Essential Bridge IC = I

Seismic Design:
Bridge Site is classified as Seismic Zone 1, with Peak Ground Acceleration (PGA) = 0.170g
Seismic Performance Category (SPC) = B
Seismic Design Category (SDC) = A (IDM Figure 403-3F)

Reinforcing steel shall conform to ASTM Specification A1035 or A615. All reinforcing steel shall be furnished as Grade 100 (ASTM A1035) or as 60 or 75 (ASTM A615). Reinforcing steel shall be epoxy coated, unless noted otherwise.

Stagger Splices unless noted otherwise.

All Bends and Hooks shall meet the requirements of AASHTO Article 8.23. All bend dimensions for reinforcing steel shall be out-to-out of bars. All placement dimensions for reinforcing shall be to center of bars, unless noted otherwise.

All reinforcing shall have 2 inch clear cover, unless noted otherwise.

Stresses
Superstructure - Class 'C' Concrete ....f'c = 4500 psi
Barriers - Class 'C' Concrete ....f'c = 4000 psi
Abutments, End Bents & Piers - Class 'A' Concrete ....f'c = 3500 psi
Footings - Class 'B' Concrete ....f'c = 3000 psi
Transverse Deck Reinforcing Steel - Grade 60 ....fs = 20000 psi
All other Reinforcing Steel - Grade 60 ....fs = 24000 psi

Piles shall be Driven to XX kip.

The use of self-consolidating, lightweight, semi-lightweight, high-strength, and high-performance concrete for permanent bridge structural components is prohibited.

The use of partial depth and full depth precast deck panels are prohibited.

Chamfer all exposed corners 1", unless noted otherwise.

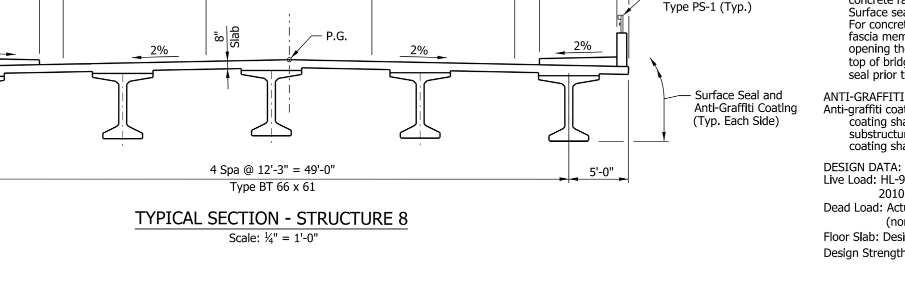
Dimensions shall not be scaled from drawings.

All utilities shown are provided for the contractor's general information only. The locations are approximate. It shall be the contractor's responsibility to determine and coordinate the actual location of utilities in the vicinity of the bridge construction. Existing utility locations shown reflect the findings of the latest available mapping. Refer to relevant design plans for status of existing utilities and new utility information. Bridge construction must be phased with utility construction in some locations. It shall be the contractor's responsibility to identify and coordinate construction in these locations.

SURFACE SEAL NOTE:
Surface seal shall be applied to the top of decks and approach slabs, all exposed surfaces of concrete railings and railing transitions, and all exposed surfaces of the substructures. Surface seal shall be applied to deck copings in accordance with IDM Figure 17-5A(0). For concrete superstructure structural members, the tops and the outside faces of fascia members shall be surface sealed. The superstructure shall be sealed prior to opening the structure to traffic. Surface seal shall not be applied to an overlay or to the top of bridge deck prior to the placement of an overlay. Developer shall apply surface seal prior to applying the anti-graffiti coating.

ANTI-GRAFFITI COATING NOTE:
Anti-graffiti coating shall be placed on all exposed surfaces of walls and bridges. Anti-graffiti coating shall be placed from the finished ground surface at the base of the wall or substructures to a height of 10 feet above the finished ground surface. The anti-graffiti coating shall be a sacrificial, wax-based, emulsion-type coating.

RECOMMENDED FOR APPROVAL ___ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	SCALE: AS NOTED	BRIDGE FILE: 37-53-2441 DESIGNATION
DESIGNED: JMC DRAWN: DES CHECKED: CHECKED:	CSX RAILROAD UNDERPASS SB TYPICAL SECTIONS	SURVEY BOOK / CONTRACT	SHEETS of / PROJECT



TYPICAL SECTION - STRUCTURE 8
Scale: ¼" = 1'-0"

GENERAL NOTES:

Reinforcing steel covering shall be 2½" in top and 1" minimum in the bottom of the floor slab and 2" in all other parts, unless noted.

SURFACE SEAL NOTE:
Surface seal shall be applied to the top of decks and approach slabs, all exposed surfaces of concrete railings and railing transitions, and all exposed surfaces of the substructures. Surface seal shall be applied to deck copings in accordance with IDM Figure 17-5A(0). For concrete superstructure structural members, the tops and the outside faces of fascia members shall be surface sealed. The superstructure shall be sealed prior to opening the structure to traffic. Surface seal shall not be applied to an overlay or to the top of bridge deck prior to the placement of an overlay. Developer shall apply surface seal prior to applying the anti-graffiti coating.

ANTI-GRAFFITI COATING NOTE:
Anti-graffiti coating shall be placed on all exposed surfaces of walls and bridges. Anti-graffiti coating shall be placed from the finished ground surface at the base of the wall or substructures to a height of 10 feet above the finished ground surface. The anti-graffiti coating shall be a sacrificial, wax-based, emulsion-type coating.

DESIGN DATA:
Live Load: HL-93 loading with impact and distribution of loads in accordance with, Fifth Edition, 2010 A.A.S.H.T.O. LRFD Specifications with all subsequent Iterims through 2010.
Dead Load: Actual weight plus 35 psf (composite) for future wearing surface and 15 psf (non-composite) for permanent metal deck forms.
Floor Slab: Designed for HL-93 loading with a ½" sacrificial wearing surface.
Design Strengths: To be in accordance with, Fifth Edition, 2010 A.A.S.H.T.O. LRFD Specifications and all subsequent Interims through 2010:
Concrete: Class "C", f'c = 4000 psi
Class "B", f'c = 3000 psi
Class "A", f'c = 3500 psi
Reinforcing Steel: Grade 60, fy = 60,000 psi
Prestressed Concrete: f'c = 8000 psi @ 28 days
Initial f'c = 5500 psi @ Release of Strands
Prestressing Strands: 0.5 Dia., 7 Wire LoLax Strands (As = 0.153 in^2)
Minimum Tensile Strength = 270,000 psi
Initial Pull = 30,980 lbs. per strand

SEISMIC DATA:
A.A.S.H.T.O. LRFD Bridge Design Specifications with 2010 Interims.
Seismic Zone 1
S1 = XX
Site Class NN
Fv = XX

GENERAL PLAN

Continuous Prestressed Concrete Hybrid Bulb Tee Bridge
2 Spans: 131'-0", 120'-0"
Skew: 41°05'28" Right
42'-0" Clear Roadway
Vernal Pike over I-69
Monroe County

RECOMMENDED FOR APPROVAL ___ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	SCALE: AS NOTED	BRIDGE FILE DESIGNATION
DESIGNED: MC DRAWN: DES CHECKED: CHECKED:	VERNAL PIKE OVER I-69	SURVEY BOOK / CONTRACT	SHEETS of / PROJECT

TECHNICAL PROPOSAL - ROLL PLOT

ITP Exhibit B -
4.2.1.2.b Bridge Structures

LAYOUT MAP

DESIGN SPEED:

MAINLINES - 70 MPH
RAMPS - 50 MPH
- 45 MPH

FUNCTIONAL CLASS: URBAN INTERSTATE

TERRAIN: ROLLING

PRELIMINARY ONLY

This document, and the associated engineering details and material quantities reflect Preliminary Schematic-level Design only. Use of this information for quantity verification, quantity take-offs and construction estimating is the responsibility of others, and is subject to the limitations and accuracy of Preliminary-level design. This document shall not be used for construction.

I-69 DEVELOPMENT PARTNERS

STRUCTURES
PRELIMINARY DESIGN

ROLL PLOT

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER DATE
DESIGNED: MC DRAWN: DES
APPROVED: CHECKED: MC
DESIGNATION: HORIZONTAL SCALE: DWG NO. ROLLPLOT02 SHT NO. 2 OF 7
PROJECT: VERTICAL SCALE: REV. NO. DWG DATE 1-9-2014

ROLL PLOT NO.
21 OF 118

LEGEND:

LAYOUT MAP

DESIGN SPEED:

MAINLINES	-	70 MPH
RAMPS	-	50 MPH
	-	45 MPH

FUNCTIONAL CLASS: URBAN INTERSTATE

TERRAIN: ROLLING

PRELIMINARY ONLY

This document, and the associated engineering details and material quantities reflect Preliminary Schematic-level Design only. Use of this information for quantity verification, quantity take-offs and construction estimating is the responsibility of others, and is subject to the limitations and accuracy of Preliminary-level design. This document shall not be used for construction.

STRUCTURES
PRELIMINARY DESIGN

ROLL PLOT

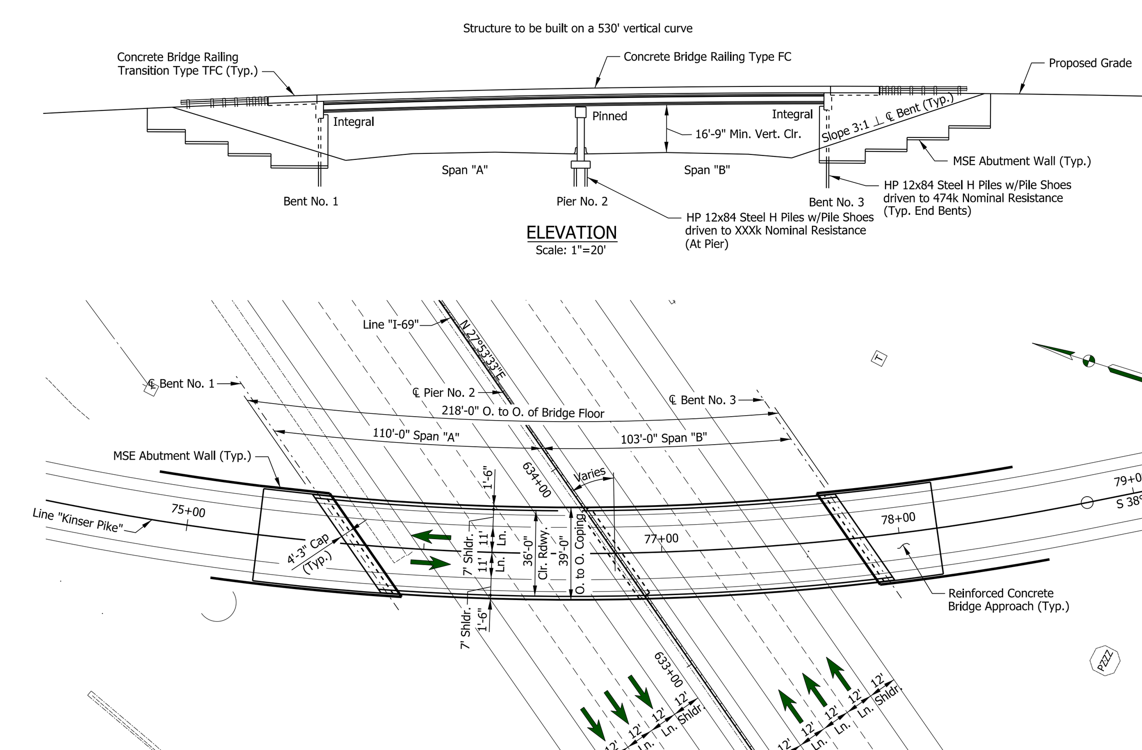
RECOMMENDED FOR APPROVAL: DESIGN ENGINEER DATE

DESIGNED: MC DRAWN: DES

APPROVED: CHECKED: MC

DESIGNATION:	HORIZONTAL SCALE:	DWG NO.	SHT NO.
		ROLLPLOT03	3 OF 7
PROJECT:	VERTICAL SCALE:	REV. NO.	DWG DATE
			1-9-2014

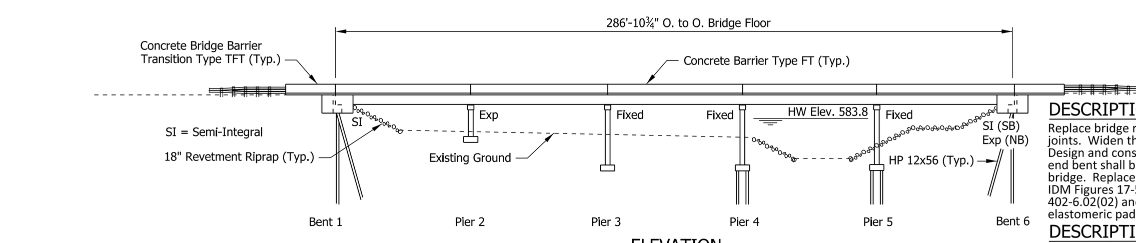
ROLL PLOT NO.
22 OF 118



NOTE:
Span lengths measured along Line "Kinser Pike". Skew measured between ℄ Pier and chord along Line "Kinser Pike".

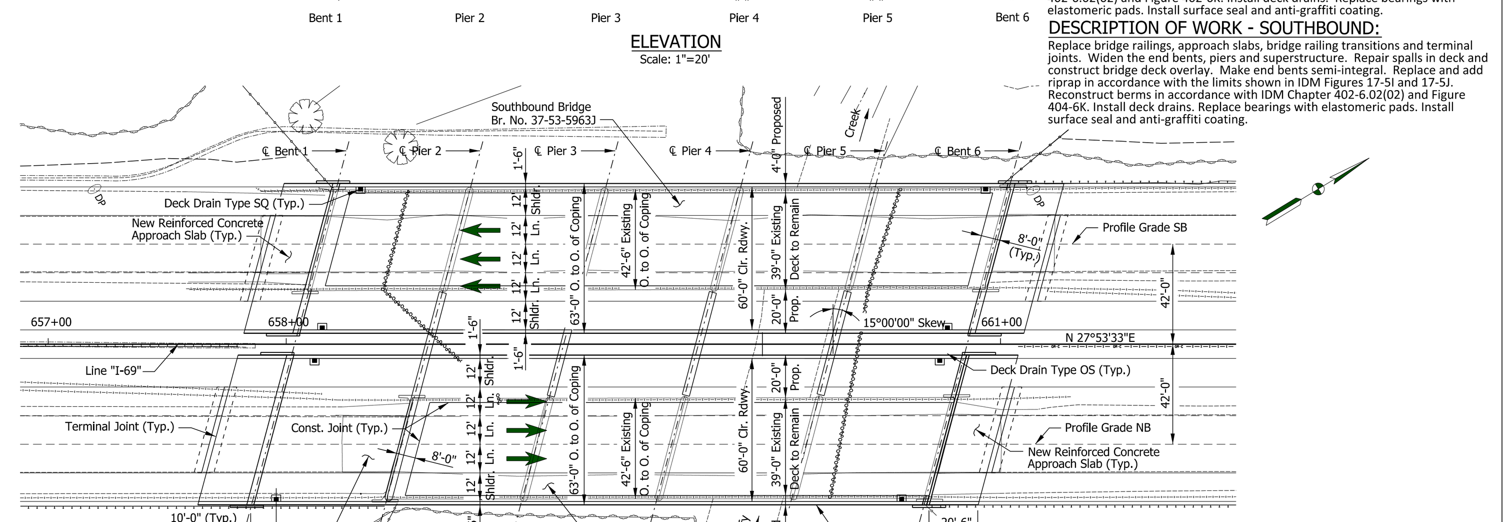
GENERAL PLAN
Continuous Prestressed Concrete Hybrid Bulb Tee Bridge
2 Spans: 110'-0", 103'-0"
Skew: Span 1 - 36°42'51" Left, Span 2 - 31°09'56" Left
36'-0" Clear Roadway
Kinser Pike over I-69
Monroe County

INDIANA DEPARTMENT OF TRANSPORTATION
KINSER PIKE OVER I-69
GENERAL PLAN & ELEVATION
DESIGNED: MC DRAWN: DES — SCALE: AS NOTED



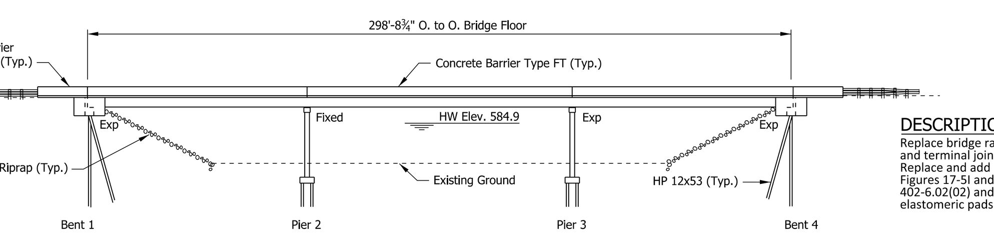
DESCRIPTION OF WORK - NORTHBOUND:
Replace bridge railings, approach slabs, bridge railing transitions and terminal joints. Widen the end bents, piers and superstructure.
Design and construct a new span on the south - the new interior pier and end bent shall be located to match the End Bent 1 alignment of southbound bridge. Replace and add riprap in accordance with the limits shown in IDM Figures 17-5I and 17-5J. Reconstruct berms in accordance with IDM Chapter 402-6.02(02) and Figure 402-6K. Install deck drains. Replace bearings with elastomeric pads. Install surface seal and anti-graffiti coating.

DESCRIPTION OF WORK - SOUTHBOUND:
Replace bridge railings, approach slabs, bridge railing transitions and terminal joints. Widen the end bents, piers and superstructure. Repair spalls in deck and construct bridge deck overlay. Make end bents semi-integral. Replace and add riprap in accordance with the limits shown in IDM Figures 17-5I and 17-5J. Reconstruct berms in accordance with IDM Chapter 402-6.02(02) and Figure 404-6K. Install deck drains. Replace bearings with elastomeric pads. Install surface seal and anti-graffiti coating.

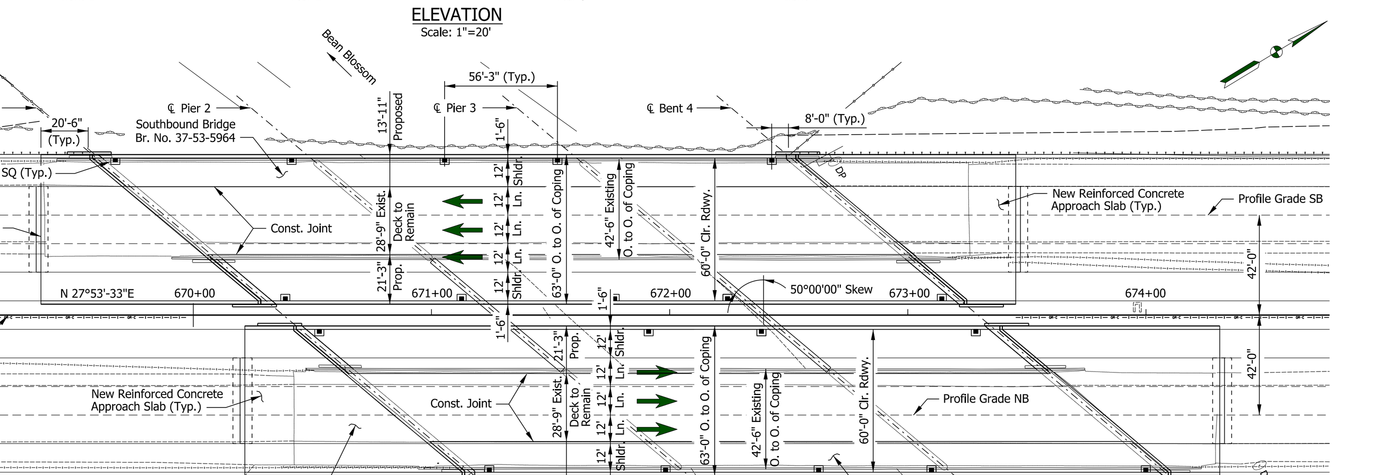


NOTES:
1. All stations, elevations and dimensions shown are based on "As-Built"plans and do not necessarily correspond to structure conditions now existing. Contractor shall verify all relevant dimensions in the field prior to fabrication of all materials.
2. The existing bridges were constructed in 1972 by the Indiana State Highway Commission under Project No. ST-F-428(19).

INDIANA DEPARTMENT OF TRANSPORTATION
I-69 NB & SB OVER GRIFFY CREEK
GENERAL PLAN & ELEVATION
DESIGNED: JMC DRAWN: DES — SCALE: AS NOTED — BRIDGE FILE 37-53-5963



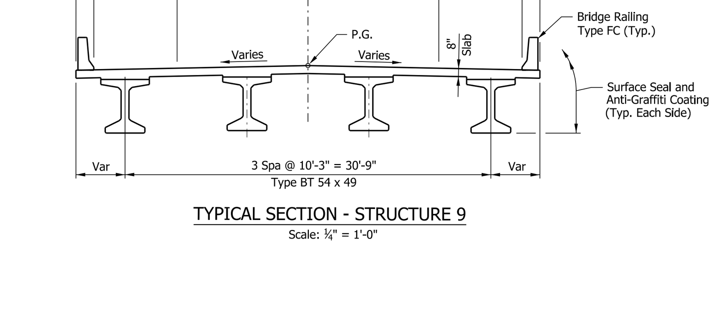
DESCRIPTION OF WORK:
Replace bridge railings, approach slabs, bridge railing transitions, deck joints and terminal joints. Widen the end bents, piers and superstructure.
Replace and add riprap in accordance with the limits shown in IDM Figures 17-5I and 17-5J. Reconstruct berms in accordance with IDM Chapter 402-6.02(02) and Figure 402-6K. Relocate deck drains. Replace bearings with elastomeric pads. Install surface seal and anti-graffiti coating.



PLAN
Scale: 1"=20'

NOTES:
1. All stations, elevations and dimensions shown are based on "As-Built"plans and do not necessarily correspond to structure conditions now existing. Contractor shall verify all relevant dimensions in the field prior to fabrication of all materials.
2. The existing bridges were constructed in 1972 by the Indiana State Highway Commission under Project No. ST-F-428(19).
3. The existing bridges received new concrete barriers, deck drains, a bridge deck overlay and new approach slabs in 1999 by the Indiana Department of Transportation under Project No. NH-097-0(004).

INDIANA DEPARTMENT OF TRANSPORTATION
I-69 NB & SB OVER BEAN BLOSSOM CREEK
GENERAL PLAN & ELEVATION
DESIGNED: JMC DRAWN: DES — SCALE: AS NOTED — BRIDGE FILE 37-53-5964 — DESIGNATION 9611560



GENERAL NOTES:
Reinforcing steel covering shall be 2½" in top and 1" minimum in the bottom of the floor slab and 2" in all other parts, unless noted.

SURFACE SEAL NOTE:
Surface seal shall be applied to the top of decks and approach slabs, all exposed surfaces of concrete railings and railing transitions, and all exposed surfaces of the substructures. Surface seal shall be applied to deck copings in accordance with IDM Figure 17-5A(0). For concrete superstructure structural members, the tops and the outside faces of fascia members shall be surface sealed. The superstructure shall be sealed prior to opening the structure to traffic. Surface seal shall not be applied to an overlay or to the top of bridge deck prior to the placement of an overlay. Developer shall apply surface seal prior to applying the anti-graffiti coating.

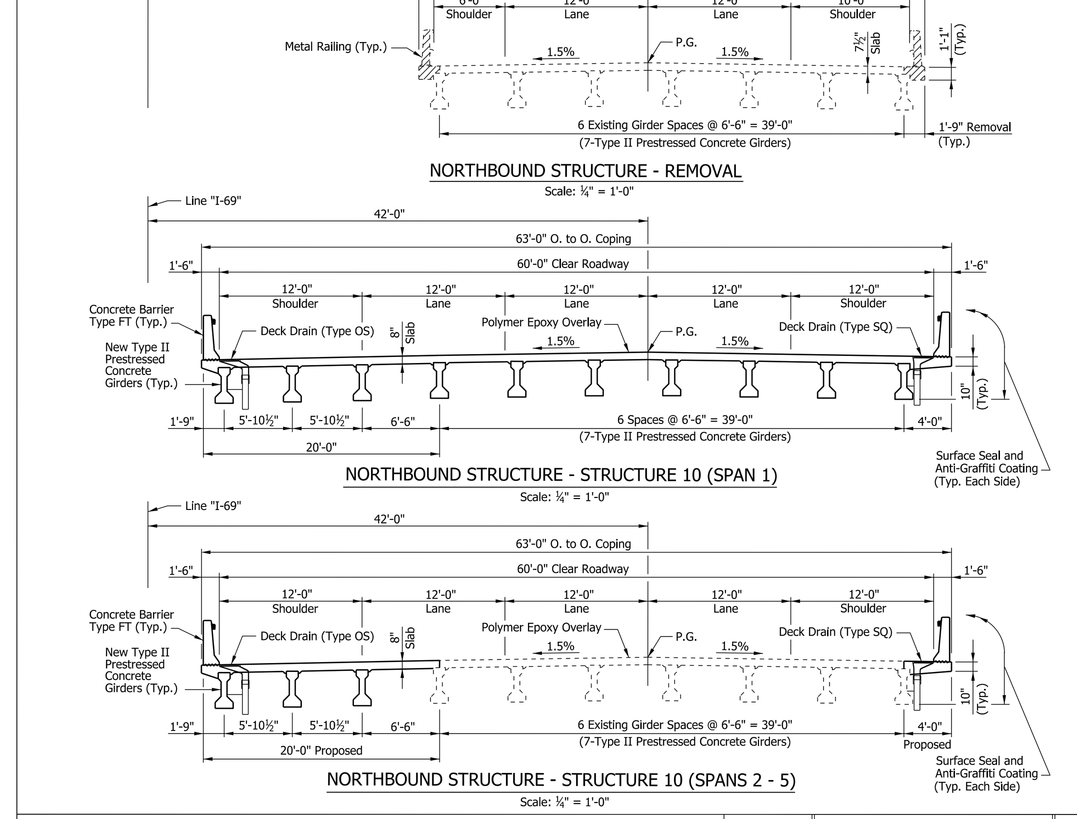
ANTI-GRAFFITI COATING NOTE:
Anti-graffiti coating shall be placed on all exposed surfaces of walls and bridges. Anti-graffiti coating shall be placed from the finished ground surface at the base of the wall or substructures to a height of 10 feet above the finished ground surface. The anti-graffiti coating shall be a sacrificial, wax-based, emulsion-type coating.

DESIGN DATA:
Live Load: HL-93 loading with impact and distribution of loads in accordance with, Fifth Edition, 2010 A.A.S.H.T.O. LRFD Specifications with all subsequent Iterims through 2010.
Dead Load: Actual weight plus 35 psf (composite) for future wearing surface and 15 psf (non-composite) for permanent metal deck forms.
Floor Slab: Designed for HL-93 loading with a ½" sacrificial wearing surface.
Design Strengths: To be in accordance with, Fifth Edition, 2010 A.A.S.H.T.O. LRFD Specifications and all subsequent Interims through 2010:
Concrete: Class "C", f'c = 4000 psi
Class "B", f'c = 3000 psi
Class "A", f'c = 3500 psi
Reinforcing Steel: Grade 60, fy = 60,000 psi
Prestressed Concrete: f'c = 8000 psi @ 28 days
Initial f'c = 5500 psi @ Release of Strands
Prestressing Strands: 0.5 Dia., 7 Wire LoLax Strands (As = 0.153 in 2)
Minimum Tensile Strength = 270,000 psi
Initial Pull = 30,980 lbs. per strand

SEISMIC DATA:
A.A.S.H.T.O. LRFD Bridge Design Specifications with 2010 Interims.
Seismic Zone 1
S1 = XX
Site Class NN
Fv = XX

GENERAL PLAN
Continuous Prestressed Concrete Hybrid Bulb Tee Bridge
2 Spans: 110'-0", 103'-0"
Skew: Span 1 - 36°42'51" Left, Span 2 31°09'56" Left
36'-0" Clear Roadway
Kinser Pike over I-69
Monroe County

INDIANA DEPARTMENT OF TRANSPORTATION
KINSER PIKE OVER I-69
DESIGNED: MC DRAWN: DES — SCALE: AS NOTED



GENERAL NOTES:
Construction Specifications:
Indiana Department of Transportation Standard Specifications, Edition of 2014.

Design Specifications:
AASHTO Standard Specifications for Highway Bridges, 17th Edition, 2002.

Dead Load:
Includes Allowance of 35 psf for Future Wearing Surface (FWS).
Includes Allowance of 15 psf for Stay-in-Place (SIP) Deck Forms.

Loading Class:
HS20-44 and/or Interstate Alternate Loading.

Composite Design:
Dead Load carried by girders only.

Importance Classification
Essential Bridge IC = I

Seismic Design:
Bridge Site is classified as Seismic Zone 1, with Peak Ground Acceleration (PGA) = 0.170g
Seismic Performance Category (SPC) = B
Seismic Design Category (SDC) = A (IDM Figure 403-3F)

Reinforcing steel shall conform to ASTM Specification A1035 or A615. All reinforcing steel shall be furnished as Grade 100 (ASTM A1035) or as 60 or 75 (ASTM A615). Reinforcing steel shall be epoxy coated, unless noted otherwise.

Stagger Splices unless noted otherwise.

All Bends and Hooks shall meet the requirements of AASHTO Article 8.23. All bend dimensions for reinforcing steel shall be out-to-out of bars. All placement dimensions for reinforcing shall be to center of bars, unless noted otherwise.

All reinforcing shall have 2 inch clear cover, unless noted otherwise.

Stresses
Superstructure	- Class 'C' Concrete ....f'c = 4500 psi
Barriers	- Class 'C' Concrete ....f'c = 4000 psi
Abutments, End Bents & Piers	- Class 'A' Concrete ....f'c = 3500 psi
Footings	- Class 'B' Concrete ....f'c = 3000 psi
Transverse Deck Reinforcing Steel	- Grade 60 ....fs = 20000 psi
All other Reinforcing Steel	- Grade 60 ....fs = 24000 psi

Piles shall be Driven to XX kip.

The use of self-consolidating, lightweight, semi-lightweight, high-strength, and high-performance concrete for permanent bridge structural components is prohibited.

The use of partial depth and full depth precast deck panels are prohibited.

Chamfer all exposed corners 1", unless noted otherwise.

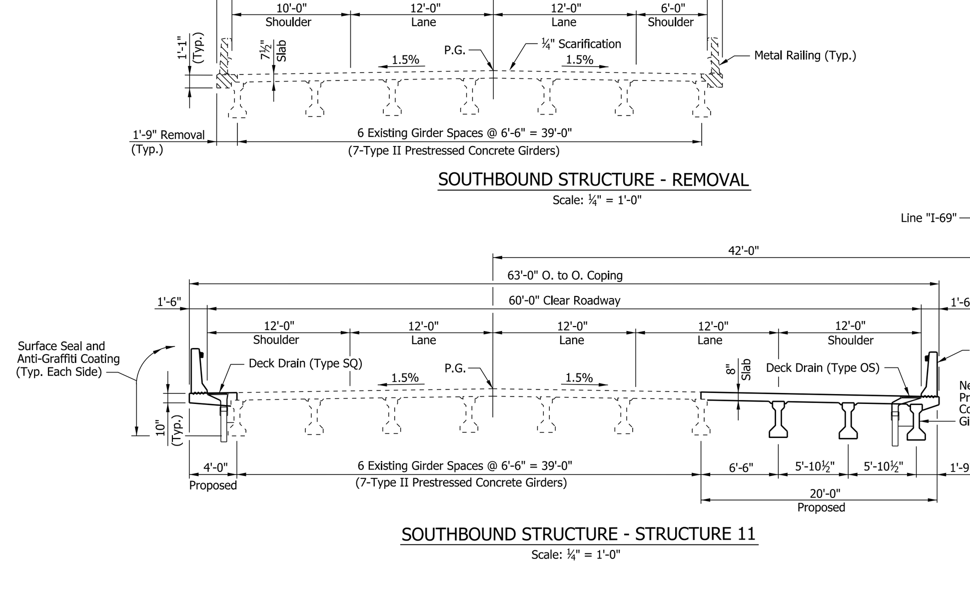
Dimensions shall not be scaled from drawings.

All utilities shown are provided for the contractor's general information only. The locations are approximate. It shall be the contractor's responsibility to determine and coordinate the actual location of utilities in the vicinity of the bridge construction. Existing utility locations shown reflect the findings of the latest available mapping. Refer to relevant design plans for status of existing utilities and new utility information. Bridge construction must be phased with utility construction in some locations. It shall be the contractor's responsibility to identify and coordinate construction in these locations.

SURFACE SEAL NOTE:
Surface seal shall be applied to the top of decks and approach slabs, all exposed surfaces of concrete railings and railing transitions, and all exposed surfaces of the substructures. Surface seal shall be applied to deck copings in accordance with IDM Figure 17-5A(0). For concrete superstructure structural members, the tops and the outside faces of fascia members shall be surface sealed. The superstructure shall be sealed prior to opening the structure to traffic. Surface seal shall not be applied to an overlay or to the top of bridge deck prior to the placement of an overlay. Developer shall apply surface seal prior to applying the anti-graffiti coating.

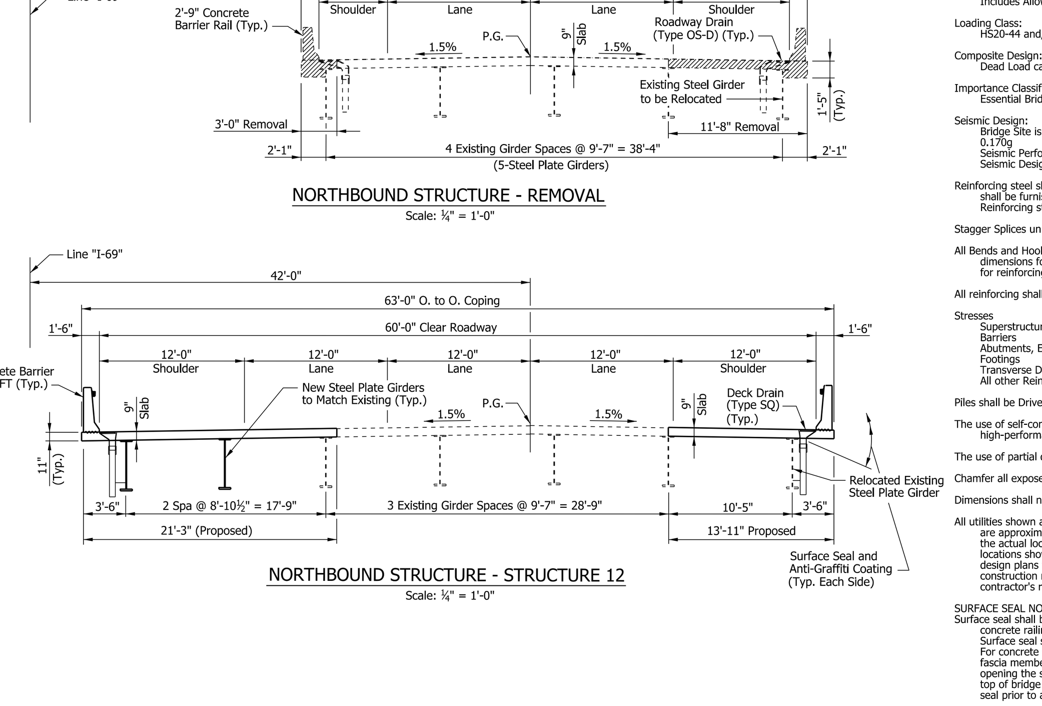
ANTI-GRAFFITI COATING NOTE:
Anti-graffiti coating shall be placed on all exposed surfaces of walls and bridges. Anti-graffiti coating shall be placed from the finished ground surface at the base of the wall or substructures to a height of 10 feet above the finished ground surface. The anti-graffiti coating shall be a sacrificial, wax-based, emulsion-type coating.

INDIANA DEPARTMENT OF TRANSPORTATION
GRIFFY CREEK NB
TYPICAL SECTIONS
DESIGNED: JMC DRAWN: DES — SCALE: AS NOTED — BRIDGE FILE 37-53-5963



GENERAL NOTES:
Construction Specifications:
Indiana Department of Transportation Standard Specifications, Edition of 2014.
Design Specifications:
AASHTO Standard Specifications for Highway Bridges, 17th Edition, 2002.
Dead Load:
Includes Allowance of 35 psf for Future Wearing Surface (FWS).
Includes Allowance of 15 psf for Stay-in-Place (SIP) Deck Forms.
Loading Class:
HS20-44 and/or Interstate Alternate Loading.
Composite Design:
Dead Load carried by girders only.
Importance Classification
Essential Bridge IC = I
Seismic Design:
Bridge Site is classified as Seismic Zone 1, with Peak Ground Acceleration (PGA) = 0.170g
Seismic Performance Category (SPC) = B
Seismic Design Category (SDC) = A (IDM Figure 403-3F)
Reinforcing steel shall conform to ASTM Specification A1035 or A615. All reinforcing steel shall be furnished as Grade 100 (ASTM A1035) or as 60 or 75 (ASTM A615). Reinforcing steel shall be epoxy coated, unless noted otherwise.
Stagger Splices unless noted otherwise.
All Bends and Hooks shall meet the requirements of AASHTO Article 8.23. All bend dimensions for reinforcing steel shall be out-to-out of bars. All placement dimensions for reinforcing shall be to center of bars, unless noted otherwise.
All reinforcing shall have 2 inch clear cover, unless noted otherwise.
Stresses
Superstructure - Class 'C' Concrete ....f'c = 4500 psi
Barriers - Class 'C' Concrete ....f'c = 4000 psi
Abutments, End Bents & Piers - Class 'A' Concrete ....f'c = 3500 psi
Footings - Class 'B' Concrete ....f'c = 3000 psi
Transverse Deck Reinforcing Steel - Grade 60 ....fs = 20000 psi
All other Reinforcing Steel - Grade 60 ....fs = 24000 psi
Piles shall be Driven to XX kip.
The use of self-consolidating, lightweight, semi-lightweight, high-strength, and high-performance concrete for permanent bridge structural components is prohibited.
The use of partial depth and full depth precast deck panels are prohibited.
Chamfer all exposed corners 1", unless noted otherwise.
Dimensions shall not be scaled from drawings.
All utilities shown are provided for the contractor's general information only. The locations are approximate. It shall be the contractor's responsibility to determine and coordinate the actual location of utilities in the vicinity of the bridge construction. Existing utility locations shown reflect the findings of the latest available mapping. Refer to relevant design plans for status of existing utilities and new utility information. Bridge construction must be phased with utility construction in some locations. It shall be the contractor's responsibility to identify and coordinate construction in these locations.
SURFACE SEAL NOTE:
Surface seal shall be applied to the top of decks and approach slabs, all exposed surfaces of concrete railings and railing transitions, and all exposed surfaces of the substructures. Surface seal shall be applied to deck copings in accordance with IDM Figure 17-5A(0). For concrete superstructure structural members, the tops and the outside faces of fascia members shall be surface sealed. The superstructure shall be sealed prior to opening the structure to traffic. Surface seal shall not be applied to an overlay or to the top of bridge deck prior to the placement of an overlay. Developer shall apply surface seal prior to applying the anti-graffiti coating.
ANTI-GRAFFITI COATING NOTE:
Anti-graffiti coating shall be placed on all exposed surfaces of walls and bridges. Anti-graffiti coating shall be placed from the finished ground surface at the base of the wall or substructures to a height of 10 feet above the finished ground surface. The anti-graffiti coating shall be a sacrificial, wax-based, emulsion-type coating.

INDIANA DEPARTMENT OF TRANSPORTATION
GRIFFY CREEK SB
TYPICAL SECTIONS
DESIGNED: JMC DRAWN: DES — SCALE: AS NOTED — BRIDGE FILE 37-53-5963



GENERAL NOTES:
Construction Specifications:
Indiana Department of Transportation Standard Specifications, Edition of 2014.
Design Specifications:
AASHTO Standard Specifications for Highway Bridges, 17th Edition, 2002.
Dead Load:
Includes Allowance of 35 psf for Future Wearing Surface (FWS).
Includes Allowance of 15 psf for Stay-in-Place (SIP) Deck Forms.
Loading Class:
HS20-44 and/or Interstate Alternate Loading.
Composite Design:
Dead Load carried by girders only.
Importance Classification
Essential Bridge IC = I
Seismic Design:
Bridge Site is classified as Seismic Zone 1, with Peak Ground Acceleration (PGA) = 0.170g
Seismic Performance Category (SPC) = B
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Reinforcing steel shall conform to ASTM Specification A1035 or A615. All reinforcing steel shall be furnished as Grade 100 (ASTM A1035) or as 60 or 75 (ASTM A615). Reinforcing steel shall be epoxy coated, unless noted otherwise.
Stagger Splices unless noted otherwise.
All Bends and Hooks shall meet the requirements of AASHTO Article 8.23. All bend dimensions for reinforcing steel shall be out-to-out of bars. All placement dimensions for reinforcing shall be to center of bars, unless noted otherwise.
All reinforcing shall have 2 inch clear cover, unless noted otherwise.
Stresses
Superstructure - Class 'C' Concrete ....f'c = 4500 psi
Barriers - Class 'C' Concrete ....f'c = 4000 psi
Abutments, End Bents & Piers - Class 'A' Concrete ....f'c = 3500 psi
Footings - Class 'B' Concrete ....f'c = 3000 psi
Transverse Deck Reinforcing Steel - Grade 60 ....fs = 20000 psi
All other Reinforcing Steel - Grade 60 ....fs = 24000 psi
Piles shall be Driven to XX kip.
The use of self-consolidating, lightweight, semi-lightweight, high-strength, and high-performance concrete for permanent bridge structural components is prohibited.
The use of partial depth and full depth precast deck panels are prohibited.
Chamfer all exposed corners 1", unless noted otherwise.
Dimensions shall not be scaled from drawings.
All utilities shown are provided for the contractor's general information only. The locations are approximate. It shall be the contractor's responsibility to determine and coordinate the actual location of utilities in the vicinity of the bridge construction. Existing utility locations shown reflect the findings of the latest available mapping. Refer to relevant design plans for status of existing utilities and new utility information. Bridge construction must be phased with utility construction in some locations. It shall be the contractor's responsibility to identify and coordinate construction in these locations.
SURFACE SEAL NOTE:
Surface seal shall be applied to the top of decks and approach slabs, all exposed surfaces of concrete railings and railing transitions, and all exposed surfaces of the substructures. Surface seal shall be applied to deck copings in accordance with IDM Figure 17-5A(0). For concrete superstructure structural members, the tops and the outside faces of fascia members shall be surface sealed. The superstructure shall be sealed prior to opening the structure to traffic. Surface seal shall not be applied to an overlay or to the top of bridge deck prior to the placement of an overlay. Developer shall apply surface seal prior to applying the anti-graffiti coating.
ANTI-GRAFFITI COATING NOTE:
Anti-graffiti coating shall be placed on all exposed surfaces of walls and bridges. Anti-graffiti coating shall be placed from the finished ground surface at the base of the wall or substructures to a height of 10 feet above the finished ground surface. The anti-graffiti coating shall be a sacrificial, wax-based, emulsion-type coating.

INDIANA DEPARTMENT OF TRANSPORTATION
BEAN BLOSSOM NB
TYPICAL SECTIONS
DESIGNED: JMC DRAWN: DES — SCALE: AS NOTED — BRIDGE FILE 37-53-5964 — DESIGNATION 9611560

TECHNICAL PROPOSAL - ROLL PLOT

ITP Exhibit B -
4.2.1.2.b Bridge Structures

LAYOUT MAP
DESIGN SPEED:
MAINLINES - 70 MPH
RAMPS - 50 MPH
- 45 MPH
FUNCTIONAL CLASS: URBAN INTERSTATE
TERRAIN: ROLLING
PRELIMINARY ONLY
This document, and the associated engineering details and material quantities reflect Preliminary Schematic-level Design only. Use of this information for quantity verification, quantity take-offs and construction estimating is the responsibility of others, and is subject to the limitations and accuracy of Preliminary-level design. This document shall not be used for construction.
STRUCTURES PRELIMINARY DESIGN
ROLL PLOT
RECOMMENDED FOR APPROVAL: DESIGN ENGINEER DATE
DESIGNED: MC DRAWN: DES
APPROVED: CHECKED: MC
DESIGNATION: HORIZONTAL SCALE: DWG NO. ROLLPLOT03 SHT NO. 3 OF 7
PROJECT: VERTICAL SCALE: REV. NO. DWG DATE 1-9-2014
ROLL PLOT NO.
22 OF 118

LEGEND:

LAYOUT MAP

DESIGN SPEED:

MAINLINES	- 70 MPH
RAMPS	- 50 MPH
	- 45 MPH

FUNCTIONAL CLASS: URBAN INTERSTATE

TERRAIN: ROLLING

PRELIMINARY ONLY

This document, and the associated engineering details and material quantities reflect Preliminary Schematic-level Design only. Use of this information for quantity verification, quantity take-offs and construction estimating is the responsibility of others, and is subject to the limitations and accuracy of Preliminary-level design. This document shall not be used for construction.

I-69 DEVELOPMENT PARTNERS

STRUCTURES
PRELIMINARY DESIGN

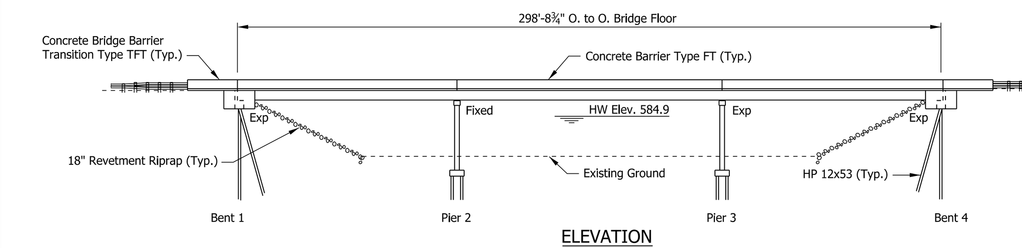
ROLL PLOT

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER DATE

DESIGNED: MC DRAWN: DES

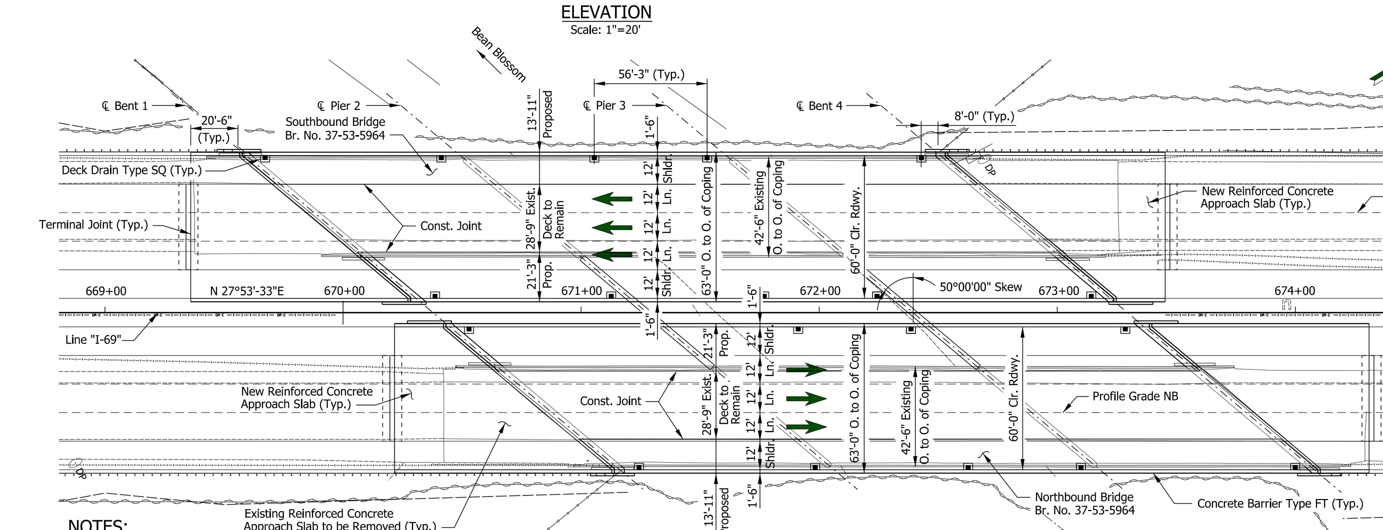
APPROVED: CHECKED: MC

DESIGNATION:	HORIZONTAL SCALE:	DWG NO.	SHT NO.
		ROLLPLOT04	4 OF 7
PROJECT:	VERTICAL SCALE:	REV. NO.	DWG DATE
			1-9-2014



ELEVATION
Scale: 1"=20'

DESCRIPTION OF WORK:
Replace bridge railings, approach slabs, bridge railing transitions, deck joints and terminal joints. Widen the end bents, piers and superstructure. Replace and add riprap in accordance with the limits shown in IDM Figures 17-5I and 17-5J. Reconstruct berms in accordance with IDM Chapter 402-6.02(02) and Figure 402-6K. Relocate deck drains. Replace bearings with elastomeric pads. Install surface seal and anti-graffiti coating.



PLAN
Scale: 1"=20'

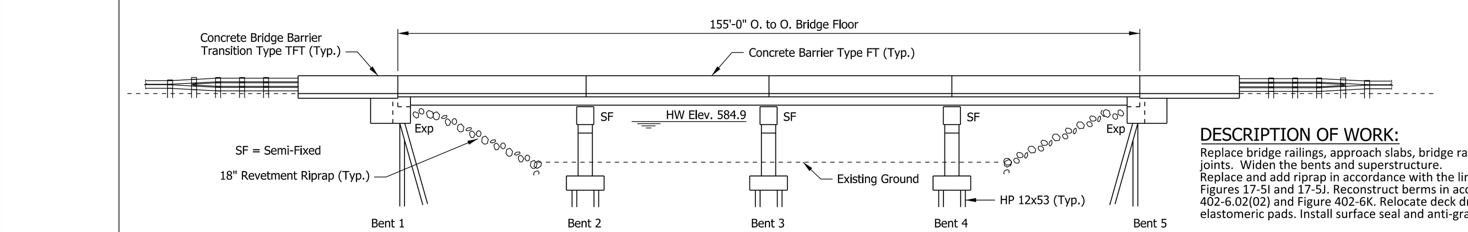
NOTES:
1. All stations, elevations and dimensions shown are based on "As-Built"plans and do not necessarily correspond to structure conditions now existing. Contractor shall verify all relevant dimensions in the field prior to fabrication of all materials.
2. The existing bridges were constructed in 1972 by the Indiana State Highway Commission under Project No. ST-F-428(19).
3. The existing bridges received new concrete barriers, deck drains, a bridge deck overlay and new approach slabs in 1999 by the Indiana Department of Transportation under Project No. NH-097-0(004).

RECOMMENDED FOR APPROVAL DESIGN ENGINEER DATE | DESIGNED: JMC DRAWN: DES | CHECKED: CHECKED:

INDIANA
DEPARTMENT OF TRANSPORTATION

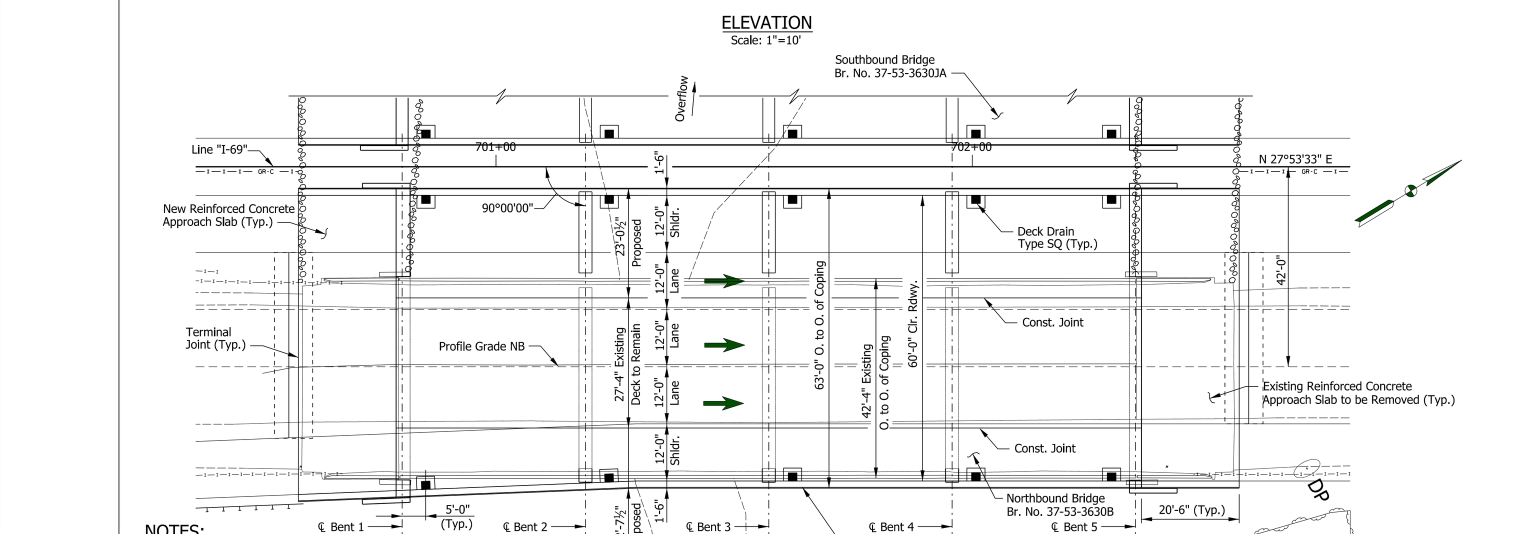
I-69 NB & SB OVER BEAN BLOSSOM CREEK
GENERAL PLAN & ELEVATION

SCALE: AS NOTED | BRIDGE FILE: 37-53-5964 | DESIGNATION: 9611560 | SURVEY BOOK | SHEETS of | CONTRACT | PROJECT



ELEVATION
Scale: 1"=10'

DESCRIPTION OF WORK:
Replace bridge railings, approach slabs, bridge railing transitions and terminal joints. Widen the bents and superstructure.
Replace and add riprap in accordance with the limits shown in IDM Figures 17-5I and 17-5J. Reconstruct berms in accordance with IDM Chapter 402-6.02(02) and Figure 402-6K. Relocate deck drains. Replace bearings with elastomeric pads. Install surface seal and anti-graffiti coating.



PLAN
Scale: 1"=10'

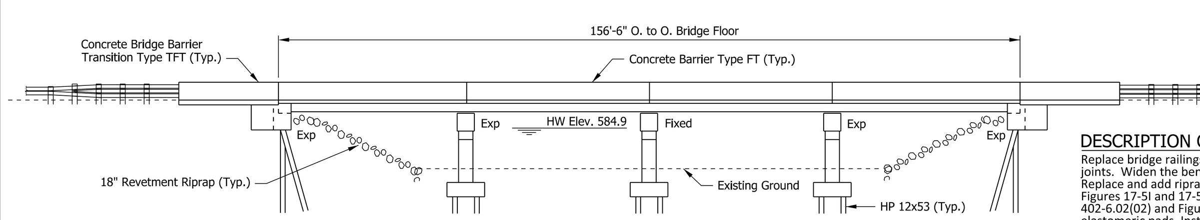
NOTES:
1. All stations, elevations and dimensions shown are based on "As-Built"plans and do not necessarily correspond to structure conditions now existing. Contractor shall verify all relevant dimensions in the field prior to fabrication of all materials.
2. The existing bridge was constructed in 1946 by the Indiana State Highway Commission under Project No. F-428(5).
3. The existing bridge was widened in 1968 by the Indiana State Highway Commission under Project No. ST-F-428(18).
4. The existing bridge was reconstructed in 1995 by the Indiana Department of Transportation under Project No. BRF-097-0(003).

RECOMMENDED FOR APPROVAL DESIGN ENGINEER DATE | DESIGNED: JMC DRAWN: DES | CHECKED: CHECKED:

INDIANA
DEPARTMENT OF TRANSPORTATION

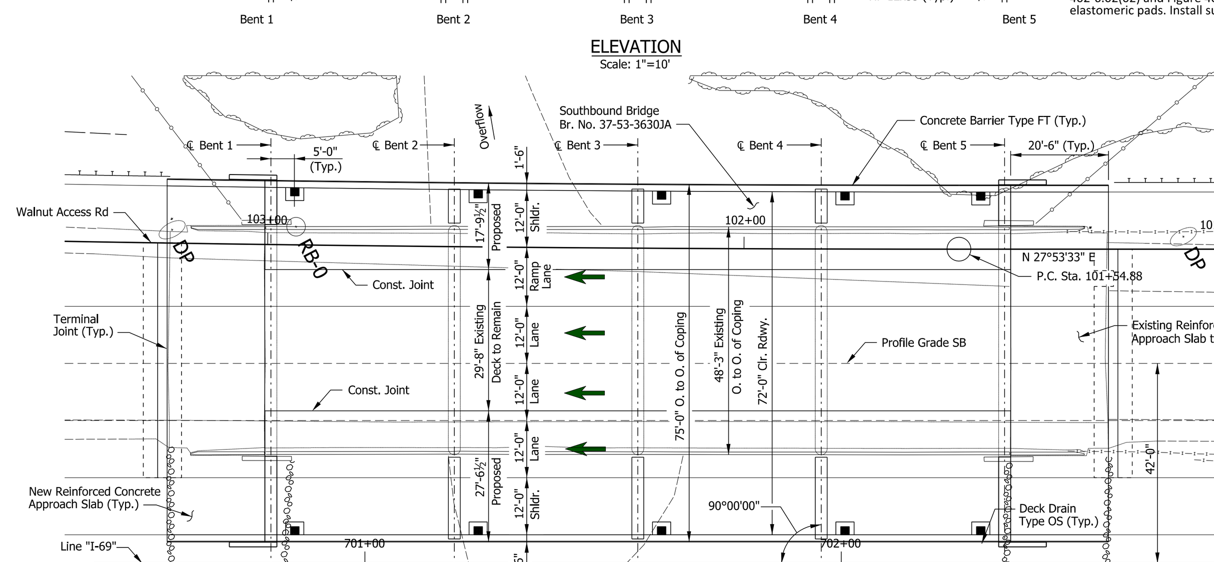
I-69 NB OVER BEAN BLOSSOM OVERFLOW
GENERAL PLAN & ELEVATION

SCALE: AS NOTED | BRIDGE FILE: 37-53-3630 | DESIGNATION | SURVEY BOOK | SHEETS of | CONTRACT | PROJECT



ELEVATION
Scale: 1"=10'

DESCRIPTION OF WORK:
Replace bridge railings, approach slabs, bridge railing transitions and terminal joints. Widen the bents and superstructure.
Replace and add riprap in accordance with the limits shown in IDM Figures 17-5I and 17-5J. Reconstruct berms in accordance with IDM Chapter 402-6.02(02) and Figure 402-6K. Relocate deck drains. Replace bearings with elastomeric pads. Install surface seal and anti-graffiti coating.



PLAN
Scale: 1"=10'

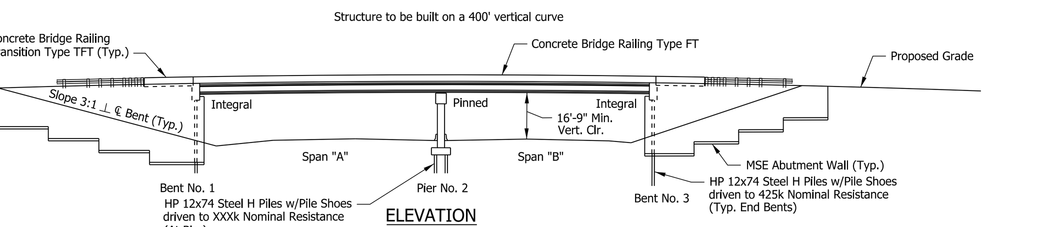
NOTES:
1. All stations, elevations and dimensions shown are based on "As-Built"plans and do not necessarily correspond to structure conditions now existing. Contractor shall verify all relevant dimensions in the field prior to fabrication of all materials.
2. The existing bridge was constructed in 1972 by the Indiana State Highway Commission under Project No. STF-428(18).
3. The existing bridge received new concrete barriers, deck drains, a bridge deck overlay, new approach slabs and end bent diaphragm modifications in 1995 by the Indiana Department of Transportation under Project No. BRF-097-0(003).

RECOMMENDED FOR APPROVAL DESIGN ENGINEER DATE | DESIGNED: JMC DRAWN: DES | CHECKED: CHECKED:

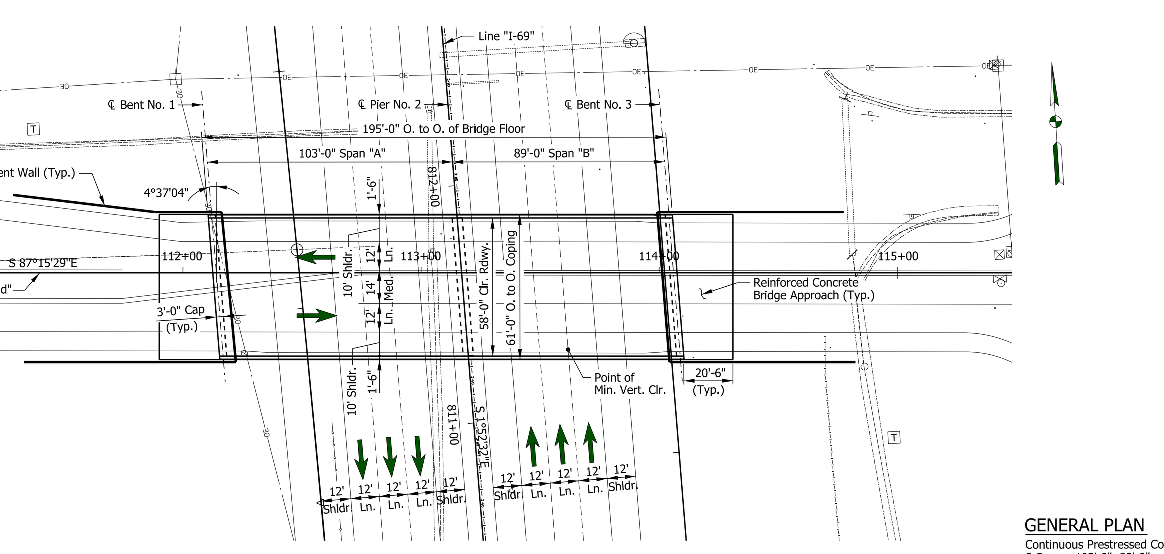
INDIANA
DEPARTMENT OF TRANSPORTATION

I-69 SB OVER BEAN BLOSSOM OVERFLOW
GENERAL PLAN & ELEVATION

SCALE: AS NOTED | BRIDGE FILE: 37-53-3630 | DESIGNATION | SURVEY BOOK | SHEETS of | CONTRACT | PROJECT



ELEVATION
Scale: 1"=20'



PLAN
Scale: 1"=20'

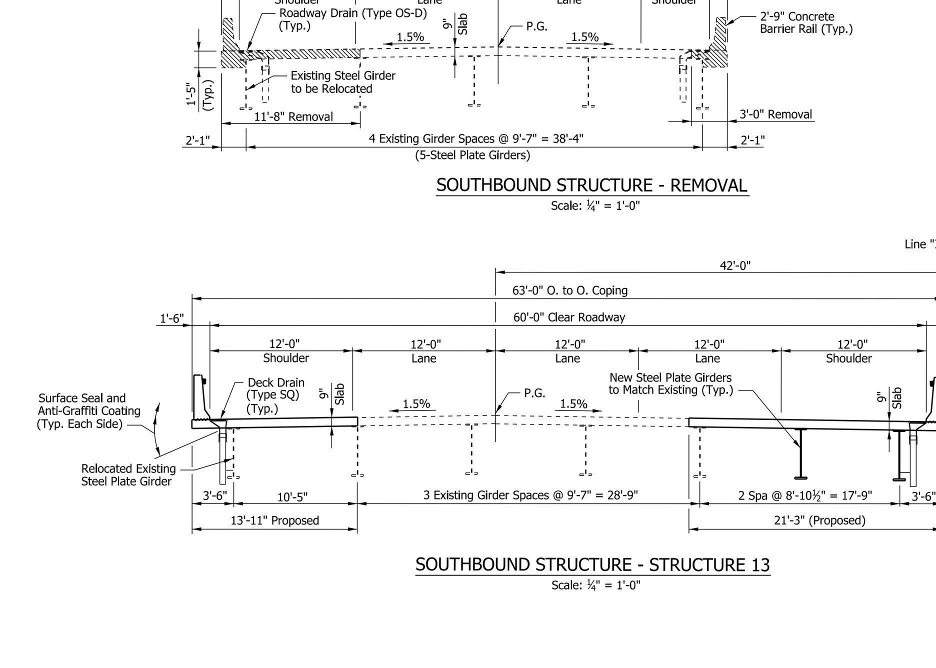
GENERAL PLAN
Continuous Prestressed Concrete Hybrid Bulb Tee Bridge
2 Spans: 103'-0", 89'-0"
Skew: 4°37'04" Left
58'-0" Clear Roadway
Sample Road over I-69
Monroe County

RECOMMENDED FOR APPROVAL DESIGN ENGINEER DATE | DESIGNED: MC DRAWN: DES | CHECKED: CHECKED:

INDIANA
DEPARTMENT OF TRANSPORTATION

SAMPLE ROAD OVER I-69
GENERAL PLAN & ELEVATION

SCALE: AS NOTED | BRIDGE FILE | DESIGNATION | SURVEY BOOK | SHEETS of | CONTRACT | PROJECT



GENERAL NOTES:
Construction Specifications:
Indiana Department of Transportation Standard Specifications, Edition of 2014.

Design Specifications:
AASHTO Standard Specifications for Highway Bridges, 17th Edition, 2002.

Dead Load:
Includes Allowance of 35 psf for Future Wearing Surface (FWS).
Includes Allowance of 15 psf for Stay-in-Place (SIP) Deck Forms.

Loading Class:
HS20-44 and/or Interstate Alternate Loading.

Composite Design:
Dead Load carried by girders only.

Importance Classification
Essential Bridge IC = I

Seismic Design:
Bridge Site is classified as Seismic Zone 1, with Peak Ground Acceleration (PGA) = 0.170g
Seismic Performance Category (SPC) = B
Seismic Design Category (SDC) = A (IDM Figure 403-3F)

Reinforcing steel shall conform to ASTM Specification A1035 or A615. All reinforcing steel shall be furnished as Grade 100 (ASTM A1035) or as 60 or 75 (ASTM A615). Reinforcing steel shall be epoxy coated, unless noted otherwise.

Stagger Splices unless noted otherwise.

All Bends and Hooks shall meet the requirements of AASHTO Article 8.23. All bend dimensions for reinforcing steel shall be out-to-out of bars. All placement dimensions for reinforcing shall be to center of bars, unless noted otherwise.

All reinforcing shall have 2 inch clear cover, unless noted otherwise.

Stresses

Superstructure	- Class 'C' Concrete ....f'c = 4500 psi
Barriers	- Class 'C' Concrete ....f'c = 4000 psi
Abutments, End Bents & Piers	- Class 'A' Concrete ....f'c = 3500 psi
Footings	- Class 'B' Concrete ....f'c = 3000 psi
Transverse Deck Reinforcing Steel	- Grade 60 ....fs = 20000 psi
All other Reinforcing Steel	- Grade 60 ....fs = 24000 psi

Piles shall be Driven to XX kip.

The use of self-consolidating, lightweight, semi-lightweight, high-strength, and high-performance concrete for permanent bridge structural components is prohibited.

The use of partial depth and full depth precast deck panels are prohibited.

Chamfer all exposed corners 1", unless noted otherwise.

Dimensions shall not be scaled from drawings.

All utilities shown are provided for the contractor's general information only. The locations are approximate. It shall be the contractor's responsibility to determine and coordinate the actual location of utilities in the vicinity of the bridge construction. Existing utility locations shown reflect the findings of the latest available mapping. Refer to relevant design plans for status of existing utilities and new utility information. Bridge construction must be phased with utility construction in some locations. It shall be the contractor's responsibility to identify and coordinate construction in these locations.

SURFACE SEAL NOTE:
Surface seal shall be applied to the top of decks and approach slabs, all exposed surfaces of concrete railings and railing transitions, and all exposed surfaces of the substructures. Surface seal shall be applied to deck copings in accordance with IDM Figure 17-5A(0). For concrete superstructure structural members, the tops and the outside faces of fascia members shall be surface sealed. The superstructure shall be sealed prior to opening the structure to traffic. Surface seal shall not be applied to an overlay or to the top of bridge deck prior to the placement of an overlay. Developer shall apply surface seal prior to applying the anti-graffiti coating.

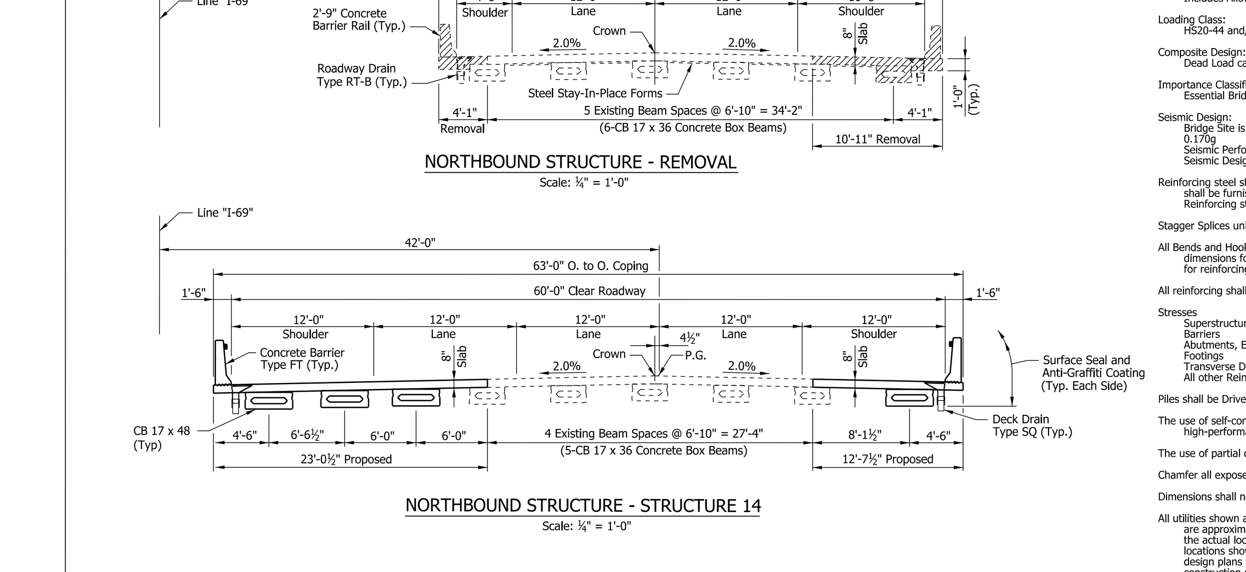
ANTI-GRAFFITI COATING NOTE:
Anti-graffiti coating shall be placed on all exposed surfaces of walls and bridges. Anti-graffiti coating shall be placed from the finished ground surface at the base of the wall or substructures to a height of 10 feet above the finished ground surface. The anti-graffiti coating shall be a sacrificial, wax-based, emulsion-type coating.

RECOMMENDED FOR APPROVAL DESIGN ENGINEER DATE | DESIGNED: JMC DRAWN: DES | CHECKED: CHECKED:

INDIANA
DEPARTMENT OF TRANSPORTATION

BEAN BLOSSOM SB
TYPICAL SECTIONS

SCALE: AS NOTED | BRIDGE FILE: 37-53-5964 | DESIGNATION: 9611560 | SURVEY BOOK | SHEETS of | CONTRACT | PROJECT



GENERAL NOTES:
Construction Specifications:
Indiana Department of Transportation Standard Specifications, Edition of 2014.

Design Specifications:
AASHTO Standard Specifications for Highway Bridges, 17th Edition, 2002.

Dead Load:
Includes Allowance of 35 psf for Future Wearing Surface (FWS).
Includes Allowance of 15 psf for Stay-in-Place (SIP) Deck Forms.

Loading Class:
HS20-44 and/or Interstate Alternate Loading.

Composite Design:
Dead Load carried by girders only.

Importance Classification
Essential Bridge IC = I

Seismic Design:
Bridge Site is classified as Seismic Zone 1, with Peak Ground Acceleration (PGA) = 0.170g
Seismic Performance Category (SPC) = B
Seismic Design Category (SDC) = A (IDM Figure 403-3F)

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Superstructure - Class 'C' Concrete ....f'c = 4500 psi
Barriers - Class 'C' Concrete ....f'c = 4000 psi
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Transverse Deck Reinforcing Steel - Grade 60 ....fs = 20000 psi
All other Reinforcing Steel - Grade 60 ....fs = 24000 psi

Piles shall be Driven to XX kip.

The use of self-consolidating, lightweight, semi-lightweight, high-strength, and high-performance concrete for permanent bridge structural components is prohibited.

The use of partial depth and full depth precast deck panels are prohibited.

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All utilities shown are provided for the contractor's general information only. The locations are approximate. It shall be the contractor's responsibility to determine and coordinate the actual location of utilities in the vicinity of the bridge construction. Existing utility locations shown reflect the findings of the latest available mapping. Refer to relevant design plans for status of existing utilities and new utility information. Bridge construction must be phased with utility construction in some locations. It shall be the contractor's responsibility to identify and coordinate construction in these locations.

SURFACE SEAL NOTE:
Surface seal shall be applied to the top of decks and approach slabs, all exposed surfaces of concrete railings and railing transitions, and all exposed surfaces of the substructures. Surface seal shall be applied to deck copings in accordance with IDM Figure 17-5A(0). For concrete superstructure structural members, the tops and the outside faces of fascia members shall be surface sealed. The superstructure shall be sealed prior to opening the structure to traffic. Surface seal shall not be applied to an overlay or to the top of bridge deck prior to the placement of an overlay. Developer shall apply surface seal prior to applying the anti-graffiti coating.

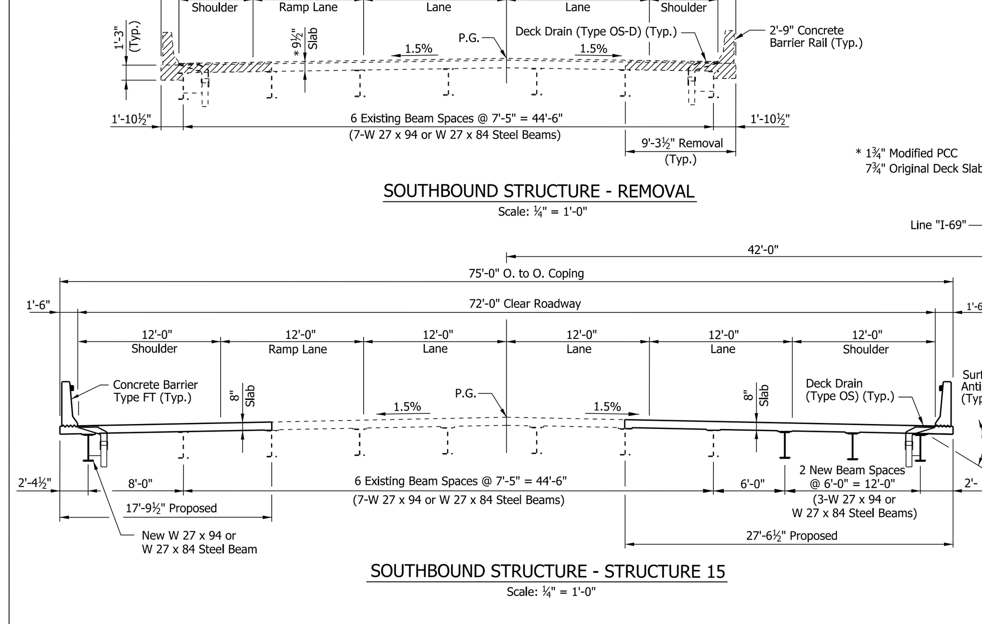
ANTI-GRAFFITI COATING NOTE:
Anti-graffiti coating shall be placed on all exposed surfaces of walls and bridges. Anti-graffiti coating shall be placed from the finished ground surface at the base of the wall or substructures to a height of 10 feet above the finished ground surface. The anti-graffiti coating shall be a sacrificial, wax-based, emulsion-type coating.

RECOMMENDED FOR APPROVAL DESIGN ENGINEER DATE | DESIGNED: JMC DRAWN: DES | CHECKED: CHECKED:

INDIANA
DEPARTMENT OF TRANSPORTATION

BEAN BLOSSOM OVERFLOW NB
TYPICAL SECTIONS

SCALE: AS NOTED | BRIDGE FILE: 37-53-3630 | DESIGNATION | SURVEY BOOK | SHEETS of | CONTRACT | PROJECT



GENERAL NOTES:
Construction Specifications:
Indiana Department of Transportation Standard Specifications, Edition of 2014.

Design Specifications:
AASHTO Standard Specifications for Highway Bridges, 17th Edition, 2002.

Dead Load:
Includes Allowance of 35 psf for Future Wearing Surface (FWS).
Includes Allowance of 15 psf for Stay-in-Place (SIP) Deck Forms.

Loading Class:
HS20-44 and/or Interstate Alternate Loading.

Composite Design:
Dead Load carried by girders only.

Importance Classification
Essential Bridge IC = I

Seismic Design:
Bridge Site is classified as Seismic Zone 1, with Peak Ground Acceleration (PGA) = 0.170g
Seismic Performance Category (SPC) = B
Seismic Design Category (SDC) = A (IDM Figure 403-3F)

Reinforcing steel shall conform to ASTM Specification A1035 or A615. All reinforcing steel shall be furnished as Grade 100 (ASTM A1035) or as 60 or 75 (ASTM A615). Reinforcing steel shall be epoxy coated, unless noted otherwise.

Stagger Splices unless noted otherwise.

All Bends and Hooks shall meet the requirements of AASHTO Article 8.23. All bend dimensions for reinforcing steel shall be out-to-out of bars. All placement dimensions for reinforcing shall be to center of bars, unless noted otherwise.

All reinforcing shall have 2 inch clear cover, unless noted otherwise.

Stresses
Superstructure - Class 'C' Concrete ....f'c = 4500 psi
Barriers - Class 'C' Concrete ....f'c = 4000 psi
Abutments, End Bents & Piers - Class 'A' Concrete ....f'c = 3500 psi
Footings - Class 'B' Concrete ....f'c = 3000 psi
Transverse Deck Reinforcing Steel - Grade 60 ....fs = 20000 psi
All other Reinforcing Steel - Grade 60 ....fs = 24000 psi

Piles shall be Driven to XX kip.

The use of self-consolidating, lightweight, semi-lightweight, high-strength, and high-performance concrete for permanent bridge structural components is prohibited.

The use of partial depth and full depth precast deck panels are prohibited.

Chamfer all exposed corners 1", unless noted otherwise.

Dimensions shall not be scaled from drawings.

All utilities shown are provided for the contractor's general information only. The locations are approximate. It shall be the contractor's responsibility to determine and coordinate the actual location of utilities in the vicinity of the bridge construction. Existing utility locations shown reflect the findings of the latest available mapping. Refer to relevant design plans for status of existing utilities and new utility information. Bridge construction must be phased with utility construction in some locations. It shall be the contractor's responsibility to identify and coordinate construction in these locations.

SURFACE SEAL NOTE:
Surface seal shall be applied to the top of decks and approach slabs, all exposed surfaces of concrete railings and railing transitions, and all exposed surfaces of the substructures. Surface seal shall be applied to deck copings in accordance with IDM Figure 17-5A(0). For concrete superstructure structural members, the tops and the outside faces of fascia members shall be surface sealed. The superstructure shall be sealed prior to opening the structure to traffic. Surface seal shall not be applied to an overlay or to the top of bridge deck prior to the placement of an overlay. Developer shall apply surface seal prior to applying the anti-graffiti coating.

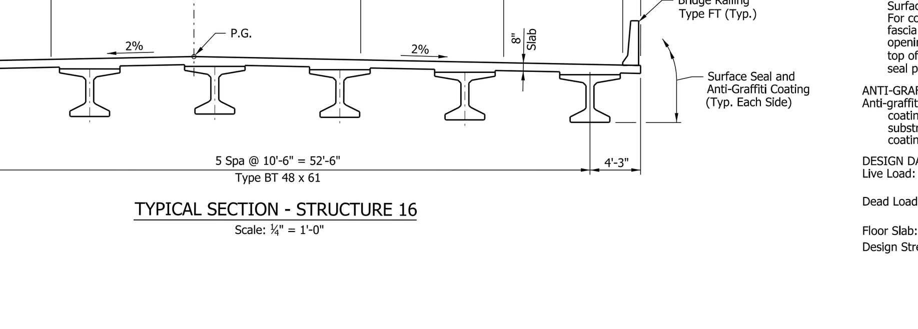
ANTI-GRAFFITI COATING NOTE:
Anti-graffiti coating shall be placed on all exposed surfaces of walls and bridges. Anti-graffiti coating shall be placed from the finished ground surface at the base of the wall or substructures to a height of 10 feet above the finished ground surface. The anti-graffiti coating shall be a sacrificial, wax-based, emulsion-type coating.

RECOMMENDED FOR APPROVAL DESIGN ENGINEER DATE | DESIGNED: JMC DRAWN: DES | CHECKED: CHECKED:

INDIANA
DEPARTMENT OF TRANSPORTATION

BEAN BLOSSOM OVERFLOW SB
TYPICAL SECTIONS

SCALE: AS NOTED | BRIDGE FILE: 37-53-3630 | DESIGNATION | SURVEY BOOK | SHEETS of | CONTRACT | PROJECT



TYPICAL SECTION - STRUCTURE 16
Scale: ¼" = 1'-0"

GENERAL NOTES:
Reinforcing steel covering shall be 2½" in top and 1" minimum in the bottom of the floor slab and 2" in all other parts, unless noted.

SURFACE SEAL NOTE:
Surface seal shall be applied to the top of decks and approach slabs, all exposed surfaces of concrete railings and railing transitions, and all exposed surfaces of the substructures. Surface seal shall be applied to deck copings in accordance with IDM Figure 17-5A(0). For concrete superstructure structural members, the tops and the outside faces of fascia members shall be surface sealed. The superstructure shall be sealed prior to opening the structure to traffic. Surface seal shall not be applied to an overlay or to the top of bridge deck prior to the placement of an overlay. Developer shall apply surface seal prior to applying the anti-graffiti coating.

ANTI-GRAFFITI COATING NOTE:
Anti-graffiti coating shall be placed on all exposed surfaces of walls and bridges. Anti-graffiti coating shall be placed from the finished ground surface at the base of the wall or substructures to a height of 10 feet above the finished ground surface. The anti-graffiti coating shall be a sacrificial, wax-based, emulsion-type coating.

DESIGN DATA:
Live Load: HL-93 loading with impact and distribution of loads in accordance with, Fifth Edition, 2010 A.A.S.H.T.O. LRFD Specifications with all subsequent Iterims through 2010.
Dead Load: Actual weight plus 35 psf (composite) for future wearing surface and 15 psf (non-composite) for permanent metal deck forms.
Floor Slab: Designed for HL-93 loading with a ½" sacrificial wearing surface.
Design Strengths: To be in accordance with, Fifth Edition, 2010 A.A.S.H.T.O. LRFD Specifications and all subsequent Interims through 2010:
Concrete: Class "C", f'c = 4000 psi
Class "B", f'c = 3000 psi
Class "A", f'c = 3500 psi
Reinforcing Steel: Grade 60, fy = 60,000 psi
Prestressed Concrete: f'c = 8000 psi @ 28 days
Initial f'c = 5500 psi @ Release of Strands
Prestressing Strands: 0.5 Dia., 7 Wire LoLax Strands (As = 0.153 in 2)
Minimum Tensile Strength = 270,000 psi
Initial Pull = 30,980 lbs. per strand

SEISMIC DATA:
A.A.S.H.T.O. LRFD Bridge Design Specifications with 2010 Interims.
Seismic Zone 1
S1 = XX
Site Class NN
Fv = XX

GENERAL PLAN
Continuous Prestressed Concrete Hybrid Bulb Tee Bridge
2 Spans: 103'-0", 89'-0"
Skew: 4°37'04" Left
58'-0" Clear Roadway
Sample Road over I-69
Monroe County

RECOMMENDED FOR APPROVAL DESIGN ENGINEER DATE | DESIGNED: MC DRAWN: DES | CHECKED: CHECKED:

INDIANA
DEPARTMENT OF TRANSPORTATION

SAMPLE ROAD OVER I-69

SCALE: AS NOTED | BRIDGE FILE | DESIGNATION | SURVEY BOOK | SHEETS of | CONTRACT | PROJECT

ROLL PLOT NO.
23 OF 118

TECHNICAL PROPOSAL - ROLL PLOT

ITP Exhibit B -
4.2.1.2.b Bridge Structures

LAYOUT MAP

DESIGN SPEED:
MAINLINES - 70 MPH
RAMPS - 50 MPH
- 45 MPH

FUNCTIONAL CLASS: URBAN INTERSTATE

TERRAIN: ROLLING

PRELIMINARY ONLY

This document, and the associated engineering details and material quantities reflect Preliminary Schematic-level Design only. Use of this information for quantity verification, quantity take-offs and construction estimating is the responsibility of others, and is subject to the limitations and accuracy of Preliminary-level design. This document shall not be used for construction.

I-69 DEVELOPMENT PARTNERS

STRUCTURES
PRELIMINARY DESIGN

ROLL PLOT

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER DATE
DESIGNED: MC DRAWN: DES
APPROVED: CHECKED: MC
DESIGNATION: HORIZONTAL SCALE: DWG NO. ROLLPLOT04 SHT NO. 4 OF 7
PROJECT: VERTICAL SCALE: REV. NO. DWG DATE 1-9-2014

ROLL PLOT NO.
23 OF 118

LEGEND:

LAYOUT MAP

DESIGN SPEED:

MAINLINES	- 70 MPH
RAMPS	- 50 MPH
	- 45 MPH

FUNCTIONAL CLASS: URBAN INTERSTATE

TERRAIN: ROLLING

PRELIMINARY ONLY

This document, and the associated engineering details and material quantities reflect Preliminary Schematic-level Design only. Use of this information for quantity verification, quantity take-offs and construction estimating is the responsibility of others, and is subject to the limitations and accuracy of Preliminary-level design. This document shall not be used for construction.

I-69 DEVELOPMENT PARTNERS

STRUCTURES PRELIMINARY DESIGN

ROLL PLOT

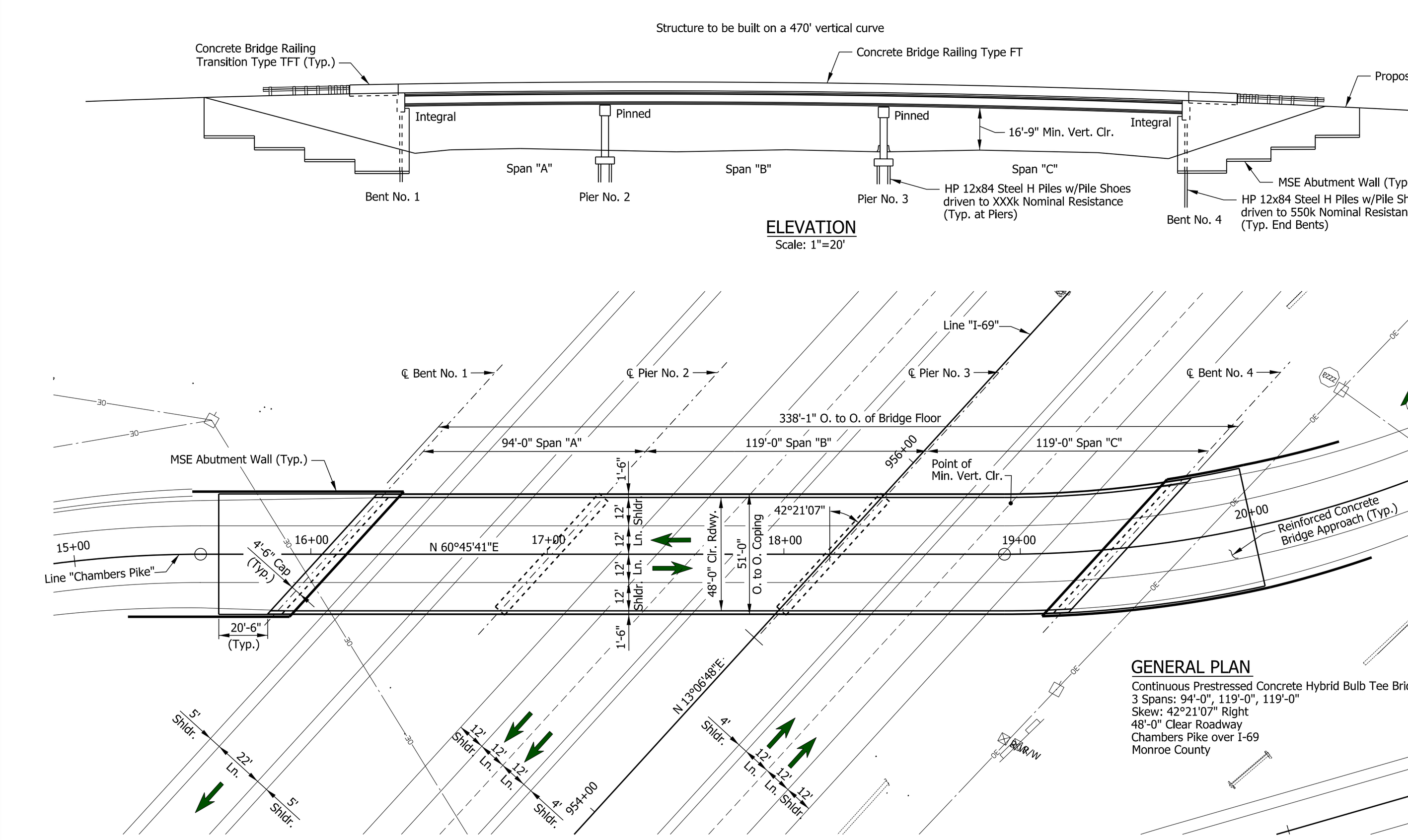
RECOMMENDED FOR APPROVAL: DESIGN ENGINEER DATE

DESIGNED: MC DRAWN: DES

APPROVED: CHECKED: MC

DESIGNATION:	HORIZONTAL SCALE:	DWG NO.	SHT NO.
		ROLLPLOT05	5 OF 7
PROJECT:	VERTICAL SCALE:	REV. NO.	DWG DATE
			1-9-2014

ROLL PLOT NO. 24 OF 118



GENERAL PLAN
Continuous Prestressed Concrete Hybrid Bulb Tee Bridge
3 Spans: 94'-0", 119'-0", 119'-0"
Skew: 42°21'07" Right
48'-0" Clear Roadway
Chambers Pike over I-69
Monroe County

RECOMMENDED FOR APPROVAL DESIGN ENGINEER DATE
DESIGNED: MC DRAWN: DES
CHECKED: CHECKED:

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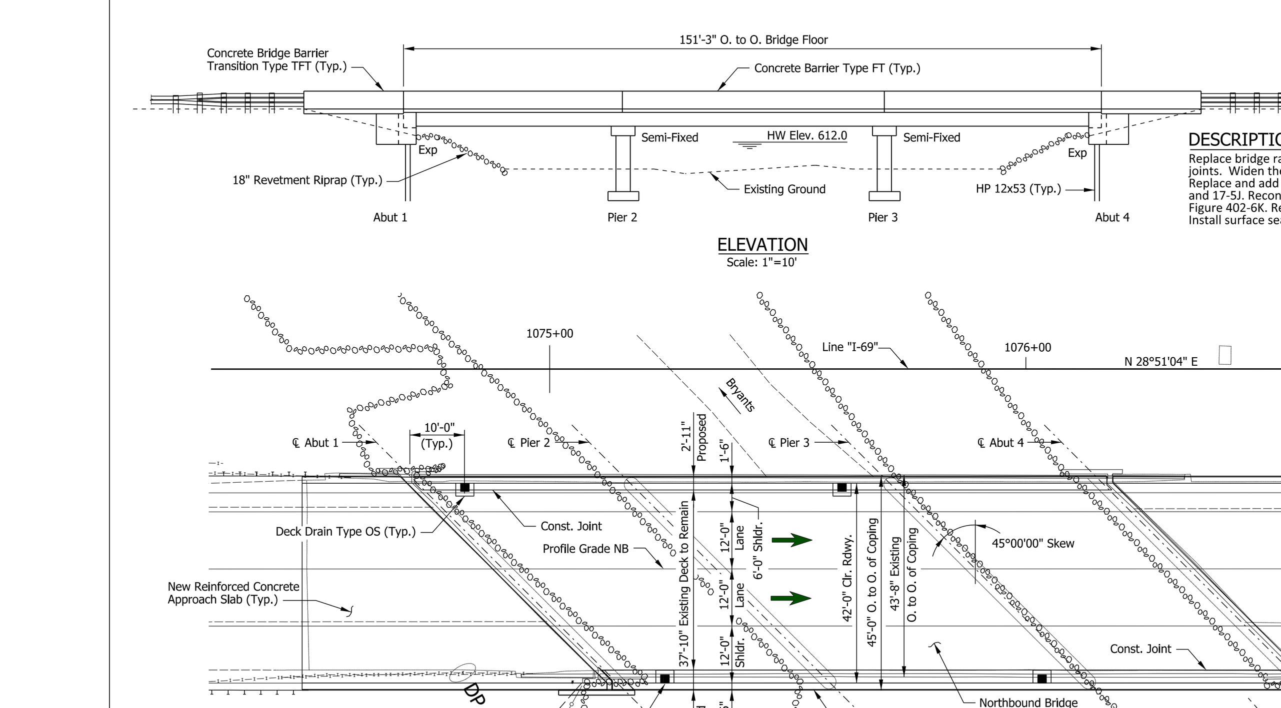
DEPARTMENT OF TRANSPORTATION

CHAMBERS PIKE ROAD OVER I-69
GENERAL PLAN & ELEVATION

SCALE AS NOTED | BRIDGE FILE | DESIGNATION | SURVEY BOOK | SHEETS of | CONTRACT | PROJECT



DESCRIPTION OF WORK:
Replace bridge railings, approach slabs, bridge railing transitions and deck joints. Widen the abutments and superstructure.
Replace and add riprap in accordance with the limits shown in IDM Figures 17-5I and 17-5J. Reconstruct berms in accordance with IDM Chapter 402-6.02(02) and Figure 402-6K. Relocate deck drains. Replace bearings with elastomeric pads. Install surface seal and anti-graffiti coating.

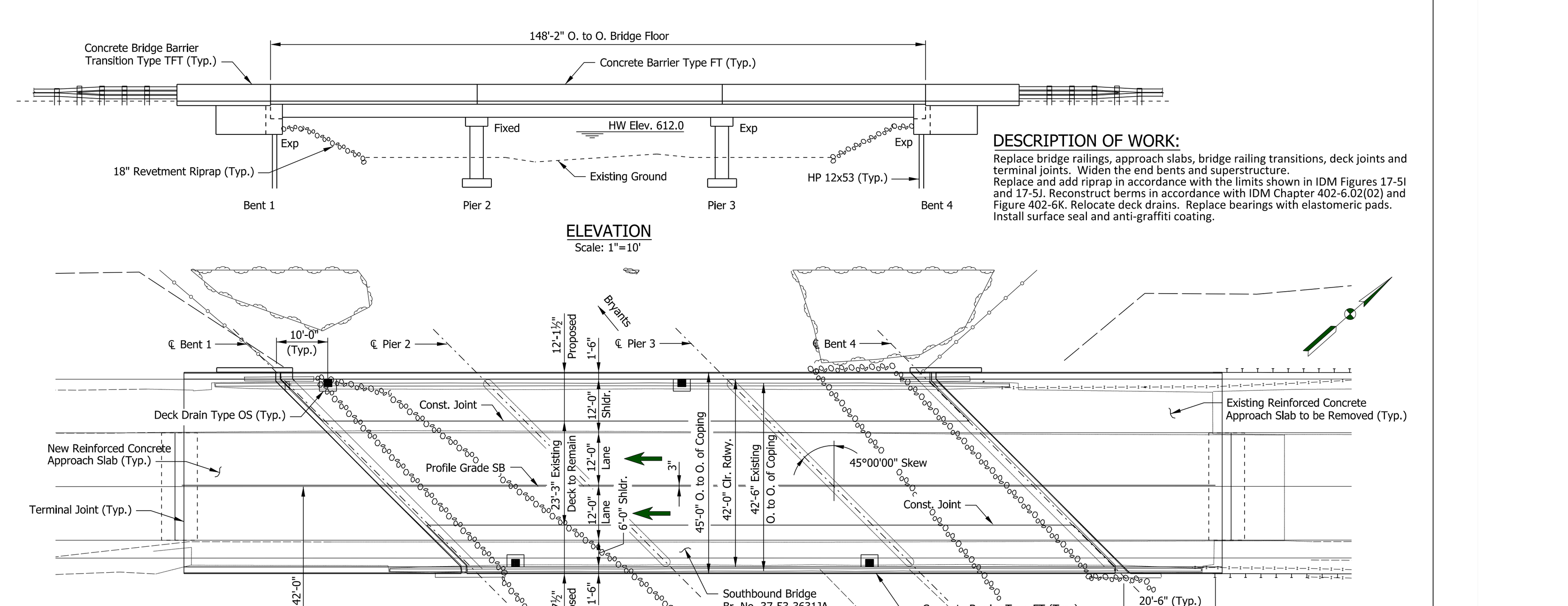
NOTES:
1. All stations, elevations and dimensions shown are based on "As-Built"plans and do not necessarily correspond to structure conditions now existing. Contractor shall verify all relevant dimensions in the field prior to fabrication of all materials.
2. The existing bridge was constructed in 2000 by the Indiana Department of Transportation under Project No. NH-097-0(6).

RECOMMENDED FOR APPROVAL DESIGN ENGINEER DATE
DESIGNED: JMC DRAWN: DES
CHECKED: CHECKED:

INDIANA
DEPARTMENT OF TRANSPORTATION

I-69 NB OVER BRYANTS CREEK
GENERAL PLAN & ELEVATION

SCALE AS NOTED | BRIDGE FILE 37-53-7987 | DESIGNATION 9406190 | SURVEY BOOK | SHEETS of | CONTRACT | PROJECT



DESCRIPTION OF WORK:
Replace bridge railings, approach slabs, bridge railing transitions, deck joints and terminal joints. Widen the end bents and superstructure.
Replace and add riprap in accordance with the limits shown in IDM Figures 17-5I and 17-5J. Reconstruct berms in accordance with IDM Chapter 402-6.02(02) and Figure 402-6K. Relocate deck drains. Replace bearings with elastomeric pads. Install surface seal and anti-graffiti coating.

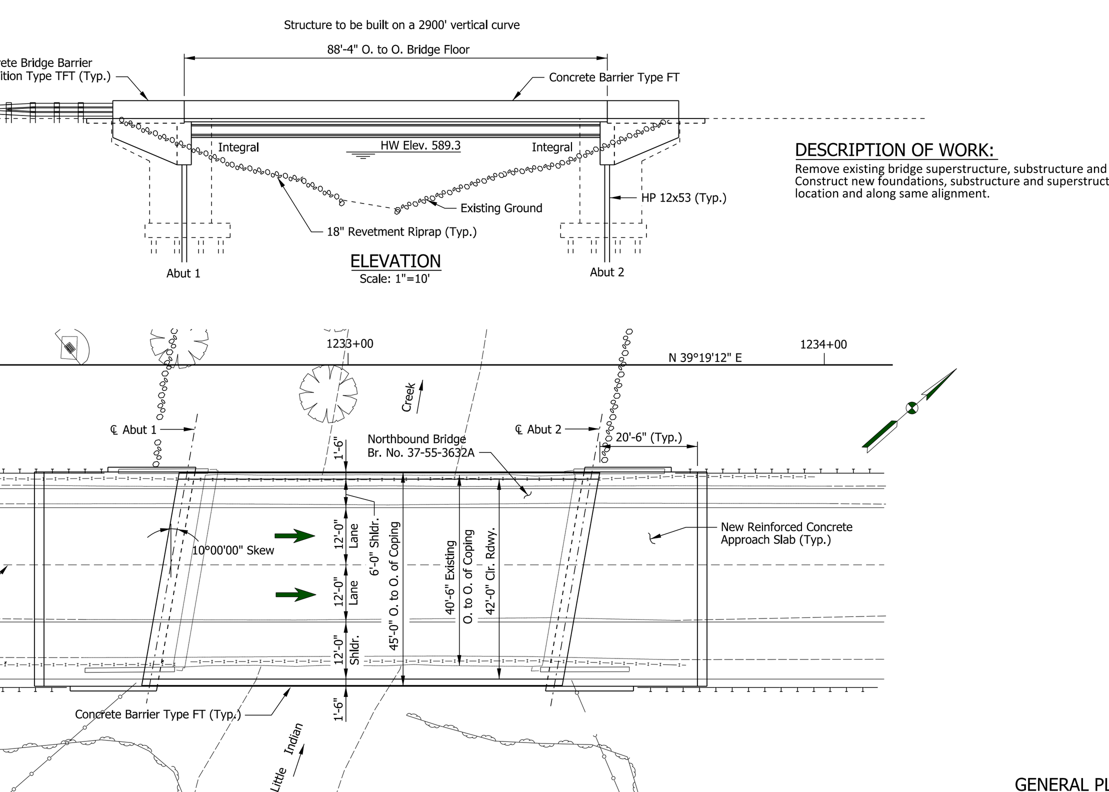
NOTES:
1. All stations, elevations and dimensions shown are based on "As-Built"plans and do not necessarily correspond to structure conditions now existing. Contractor shall verify all relevant dimensions in the field prior to fabrication of all materials.
2. The existing bridge was constructed in 1972 by the Indiana State Highway Commission under Project No. ST-F-428(23).
3. The existing bridge received new concrete barriers, deck drains, a bridge deck overlay, new approach slabs and end bent diaphragm modifications in 2000 by the Indiana Department of Transportation under Project No. NH-097-0(6).

RECOMMENDED FOR APPROVAL DESIGN ENGINEER DATE
DESIGNED: JMC DRAWN: DES
CHECKED: CHECKED:

INDIANA
DEPARTMENT OF TRANSPORTATION

I-69 SB OVER BRYANTS CREEK
GENERAL PLAN & ELEVATION

SCALE AS NOTED | BRIDGE FILE 37-53-3631 | DESIGNATION 9506191 | SURVEY BOOK | SHEETS of | CONTRACT | PROJECT



DESCRIPTION OF WORK:
Remove existing bridge superstructure, substructure and piles.
Construct new foundations, substructure and superstructure in same location and along same alignment.

NOTES:
1. The existing bridge was constructed in 1948 by the Indiana State Highway Commission under Project No. F-28(10).
2. The existing bridge was widened and received an H.A.E. overlay in 1972 by the Indiana State Highway Commission under Project No. ST-F-428(23).

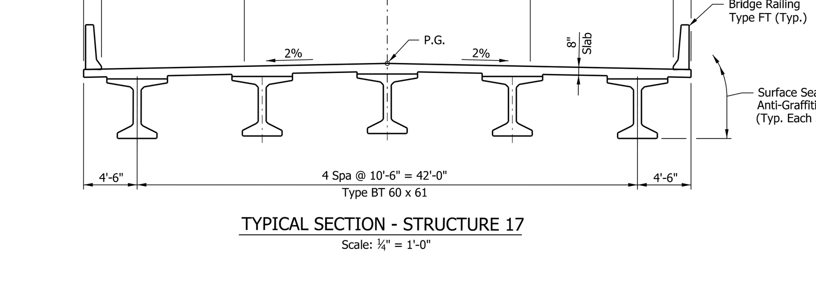
GENERAL PLAN
Prestressed Concrete Hybrid Bulb Tee Bridge
1 Span: 85'-0"
Skew: 10°00'00" Right
42'-0" Clear Roadway
I-69 NB over Little Indian Creek
Morgan County

RECOMMENDED FOR APPROVAL DESIGN ENGINEER DATE
DESIGNED: JMC DRAWN: DES
CHECKED: CHECKED:

INDIANA
DEPARTMENT OF TRANSPORTATION

I-69 NB OVER LITTLE INDIAN CREEK
GENERAL PLAN & ELEVATION

SCALE AS NOTED | BRIDGE FILE 37-55-3632 | DESIGNATION | SURVEY BOOK | SHEETS of | CONTRACT | PROJECT



TYPICAL SECTION - STRUCTURE 17
Scale: ¼" = 1'-0"

GENERAL NOTES:
Reinforcing steel covering shall be 2½" in top and 1" minimum in the bottom of the floor slab and 2" in all other parts, unless noted.

SURFACE SEAL NOTE:
Surface seal shall be applied to the top of decks and approach slabs, all exposed surfaces of concrete railings and railing transitions, and all exposed surfaces of the substructures. Surface seal shall be applied to deck copings in accordance with IDM Figure 17-5A(0). For concrete superstructure structural members, the tops and the outside faces of fascia members shall be surface sealed. The superstructure shall be sealed prior to opening the structure to traffic. Surface seal shall not be applied to an overlay or to the top of bridge deck prior to the placement of an overlay. Developer shall apply surface seal prior to applying the anti-graffiti coating.

ANTI-GRAFFITI COATING NOTE:
Anti-graffiti coating shall be placed on all exposed surfaces of walls and bridges. Anti-graffiti coating shall be placed from the finished ground surface at the base of the wall or substructures to a height of 10 feet above the finished ground surface. The anti-graffiti coating shall be a sacrificial, wax-based, emulsion-type coating.

DESIGN DATA:
Live Load: HL-93 loading with impact and distribution of loads in accordance with, Fifth Edition, 2010 A.A.S.H.T.O. LRFD Specifications with all subsequent Iterims through 2010.
Dead Load: Actual weight plus 35 psf (composite) for future wearing surface and 15 psf (non-composite) for permanent metal deck forms.
Floor Slab: Designed for HL-93 loading with a ½" sacrificial wearing surface.
Design Strengths: To be in accordance with, Fifth Edition, 2010 A.A.S.H.T.O. LRFD Specifications and all subsequent Interims through 2010:
Concrete: Class "C", f'c = 4000 psi
Class "B", f'c = 3000 psi
Class "A", f'c = 3500 psi
Reinforcing Steel: Grade 60, fy = 60,000 psi
Prestressed Concrete: f'c = 8000 psi @ 28 days
Initial f'c = 5500 psi @ Release of Strands
Prestressing Strands: 0.5 Dia., 7 Wire LoLax Strands (As = 0.153 in^2)
Minimum Tensile Strength = 270,000 psi
Initial Pull = 30,980 lbs. per strand

SEISMIC DATA:
A.A.S.H.T.O. LRFD Bridge Design Specifications with 2010 Interims.
Seismic Zone 1
S1 = XX
Site Class NN
Fv = XX

GENERAL PLAN
Continuous Prestressed Concrete Hybrid Bulb Tee Bridge
3 Spans: 94'-0", 119'-0", 119'-0"
Skew: 42°21'07" Right
48'-0" Clear Roadway
Chanbers Pike over I-69
Monroe County

RECOMMENDED FOR APPROVAL DESIGN ENGINEER DATE
DESIGNED: MC DRAWN: DES
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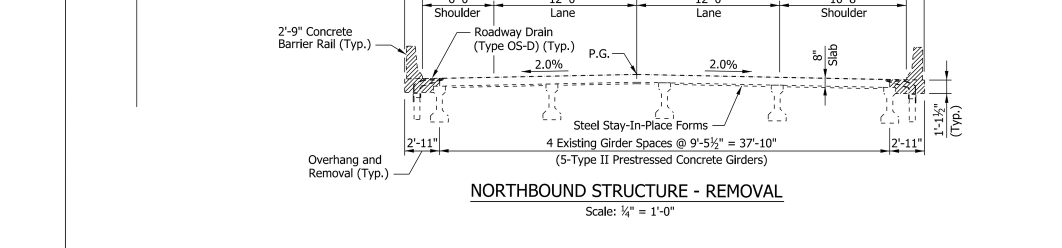
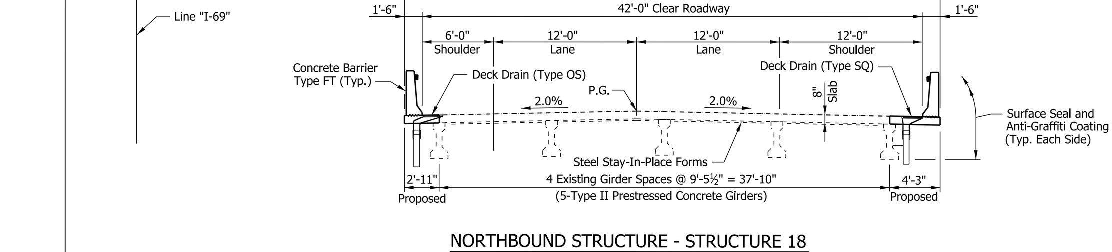
INDIANA
DEPARTMENT OF TRANSPORTATION

CHAMBERS PIKE OVER I-69

SCALE AS NOTED | BRIDGE FILE | DESIGNATION | SURVEY BOOK | SHEETS of | CONTRACT | PROJECT



NORTHBOUND STRUCTURE - REMOVAL
Scale: ¼" = 1'-0"



NORTHBOUND STRUCTURE - STRUCTURE 18
Scale: ¼" = 1'-0"

GENERAL NOTES:
Construction Specifications:
Indiana Department of Transportation Standard Specifications, Edition of 2014.

Design Specifications:
AASHTO Standard Specifications for Highway Bridges, 17th Edition, 2002.

Dead Load:
Includes Allowance of 35 psf for Future Wearing Surface (FWS).
Includes Allowance of 15 psf for Stay-in-Place (SIP) Deck Forms.

Loading Class:
HS20-44 and/or Interstate Alternate Loading.

Composite Design:
Dead Load carried by girders only.

Importance Classification
Essential Bridge IC = I

Seismic Design:
Bridge Site is classified as Seismic Zone 1, with Peak Ground Acceleration (PGA) = 0.170g
Seismic Performance Category (SPC) = B
Seismic Design Category (SDC) = A (IDM Figure 403-3F)

Reinforcing steel shall conform to ASTM Specification A1035 or A615. All reinforcing steel shall be furnished as Grade 100 (ASTM A1035) or as 60 or 75 (ASTM A615). Reinforcing steel shall be epoxy coated, unless noted otherwise.

Stagger Splices unless noted otherwise.

All Bends and Hooks shall meet the requirements of AASHTO Article 8.23. All bend dimensions for reinforcing steel shall be out-to-out of bars. All placement dimensions for reinforcing shall be to center of bars, unless noted otherwise.

All reinforcing shall have 2 inch clear cover, unless noted otherwise.

Stresses

Superstructure	- Class 'C' Concrete ....f'c = 4500 psi
Barriers	- Class 'C' Concrete ....f'c = 4000 psi
Abutments, End Bents & Piers	- Class 'A' Concrete ....f'c = 3500 psi
Footings	- Class 'B' Concrete ....f'c = 3000 psi
Transverse Deck Reinforcing Steel	- Grade 60 ....fs = 20000 psi
All other Reinforcing Steel	- Grade 60 ....fs = 24000 psi

Piles shall be Driven to XX kip.

The use of self-consolidating, lightweight, semi-lightweight, high-strength, and high-performance concrete for permanent bridge structural components is prohibited.

The use of partial depth and full depth precast deck panels are prohibited.

Chamfer all exposed corners 1", unless noted otherwise.

Dimensions shall not be scaled from drawings.

All utilities shown are provided for the contractor's general information only. The locations are approximate. It shall be the contractor's responsibility to determine and coordinate the actual location of utilities in the vicinity of the bridge construction. Existing utility locations shown reflect the findings of the latest available mapping. Refer to relevant design plans for status of existing utilities and new utility information. Bridge construction must be phased with utility construction in some locations. It shall be the contractor's responsibility to identify and coordinate construction in these locations.

SURFACE SEAL NOTE:
Surface seal shall be applied to the top of decks and approach slabs, all exposed surfaces of concrete railings and railing transitions, and all exposed surfaces of the substructures. Surface seal shall be applied to deck copings in accordance with IDM Figure 17-5A(0). For concrete superstructure structural members, the tops and the outside faces of fascia members shall be surface sealed. The superstructure shall be sealed prior to opening the structure to traffic. Surface seal shall not be applied to an overlay or to the top of bridge deck prior to the placement of an overlay. Developer shall apply surface seal prior to applying the anti-graffiti coating.

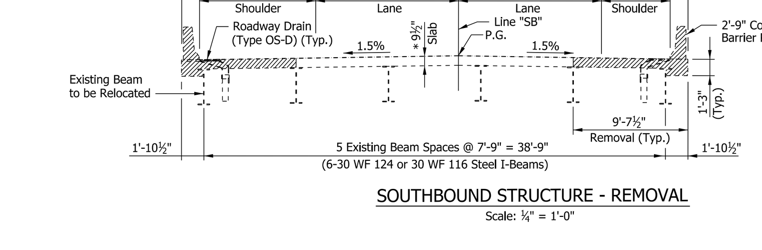
ANTI-GRAFFITI COATING NOTE:
Anti-graffiti coating shall be placed on all exposed surfaces of walls and bridges. Anti-graffiti coating shall be placed from the finished ground surface at the base of the wall or substructures to a height of 10 feet above the finished ground surface. The anti-graffiti coating shall be a sacrificial, wax-based, emulsion-type coating.

RECOMMENDED FOR APPROVAL DESIGN ENGINEER DATE
DESIGNED: JMC DRAWN: DES
CHECKED: CHECKED:

INDIANA
DEPARTMENT OF TRANSPORTATION

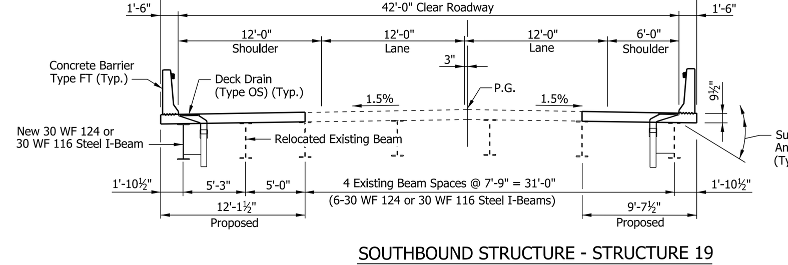
BRYANTS CREEK NB
TYPICAL SECTIONS

SCALE AS NOTED | BRIDGE FILE 37-53-7987 | DESIGNATION 9401690 | SURVEY BOOK | SHEETS of | CONTRACT | PROJECT



SOUTHBOUND STRUCTURE - REMOVAL
Scale: ¼" = 1'-0"

* 1¾" Latex Modified PCC Overlay
7¾" Original Deck Slab



SOUTHBOUND STRUCTURE - STRUCTURE 19
Scale: ¼" = 1'-0"

GENERAL NOTES:
Construction Specifications:
Indiana Department of Transportation Standard Specifications, Edition of 2014.

Design Specifications:
AASHTO Standard Specifications for Highway Bridges, 17th Edition, 2002.

Dead Load:
Includes Allowance of 35 psf for Future Wearing Surface (FWS).
Includes Allowance of 15 psf for Stay-in-Place (SIP) Deck Forms.

Loading Class:
HS20-44 and/or Interstate Alternate Loading.

Composite Design:
Dead Load carried by girders only.

Importance Classification
Essential Bridge IC = I

Seismic Design:
Bridge Site is classified as Seismic Zone 1, with Peak Ground Acceleration (PGA) = 0.170g
Seismic Performance Category (SPC) = B
Seismic Design Category (SDC) = A (IDM Figure 403-3F)

Reinforcing steel shall conform to ASTM Specification A1035 or A615. All reinforcing steel shall be furnished as Grade 100 (ASTM A1035) or as 60 or 75 (ASTM A615). Reinforcing steel shall be epoxy coated, unless noted otherwise.

Stagger Splices unless noted otherwise.

All Bends and Hooks shall meet the requirements of AASHTO Article 8.23. All bend dimensions for reinforcing steel shall be out-to-out of bars. All placement dimensions for reinforcing shall be to center of bars, unless noted otherwise.

All reinforcing shall have 2 inch clear cover, unless noted otherwise.

Stresses

Superstructure	- Class 'C' Concrete ....f'c = 4500 psi
Barriers	- Class 'C' Concrete ....f'c = 4000 psi
Abutments, End Bents & Piers	- Class 'A' Concrete ....f'c = 3500 psi
Footings	- Class 'B' Concrete ....f'c = 3000 psi
Transverse Deck Reinforcing Steel	- Grade 60 ....fs = 20000 psi
All other Reinforcing Steel	- Grade 60 ....fs = 24000 psi

Piles shall be Driven to XX kip.

The use of self-consolidating, lightweight, semi-lightweight, high-strength, and high-performance concrete for permanent bridge structural components is prohibited.

The use of partial depth and full depth precast deck panels are prohibited.

Chamfer all exposed corners 1", unless noted otherwise.

Dimensions shall not be scaled from drawings.

All utilities shown are provided for the contractor's general information only. The locations are approximate. It shall be the contractor's responsibility to determine and coordinate the actual location of utilities in the vicinity of the bridge construction. Existing utility locations shown reflect the findings of the latest available mapping. Refer to relevant design plans for status of existing utilities and new utility information. Bridge construction must be phased with utility construction in some locations. It shall be the contractor's responsibility to identify and coordinate construction in these locations.

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Surface seal shall be applied to the top of decks and approach slabs, all exposed surfaces of concrete railings and railing transitions, and all exposed surfaces of the substructures. Surface seal shall be applied to deck copings in accordance with IDM Figure 17-5A(0). For concrete superstructure structural members, the tops and the outside faces of fascia members shall be surface sealed. The superstructure shall be sealed prior to opening the structure to traffic. Surface seal shall not be applied to an overlay or to the top of bridge deck prior to the placement of an overlay. Developer shall apply surface seal prior to applying the anti-graffiti coating.

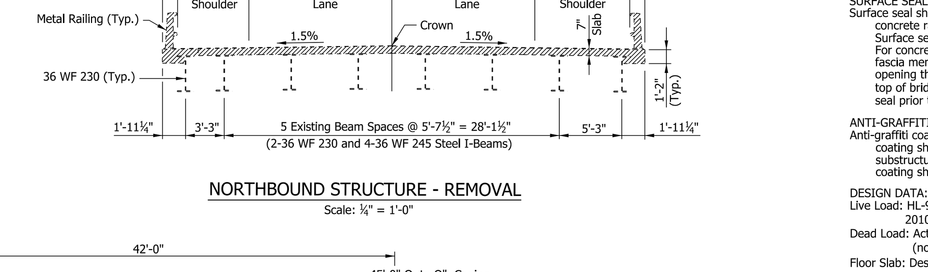
ANTI-GRAFFITI COATING NOTE:
Anti-graffiti coating shall be placed on all exposed surfaces of walls and bridges. Anti-graffiti coating shall be placed from the finished ground surface at the base of the wall or substructures to a height of 10 feet above the finished ground surface. The anti-graffiti coating shall be a sacrificial, wax-based, emulsion-type coating.

RECOMMENDED FOR APPROVAL DESIGN ENGINEER DATE
DESIGNED: JMC DRAWN: DES
CHECKED: CHECKED:

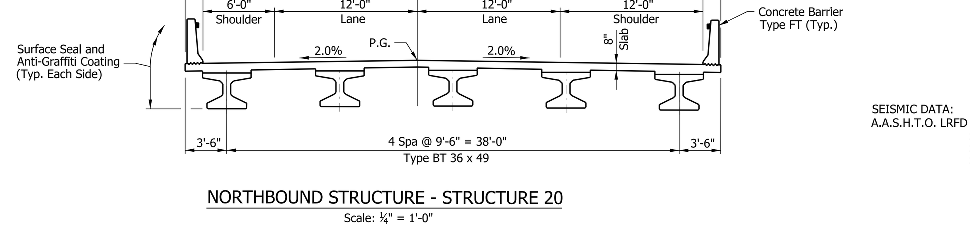
INDIANA
DEPARTMENT OF TRANSPORTATION

BRYANTS CREEK SB
TYPICAL SECTIONS

SCALE AS NOTED | BRIDGE FILE 37-53-3631 | DESIGNATION 9506191 | SURVEY BOOK | SHEETS of | CONTRACT | PROJECT



NORTHBOUND STRUCTURE - REMOVAL
Scale: ¼" = 1'-0"



NORTHBOUND STRUCTURE - STRUCTURE 20
Scale: ¼" = 1'-0"

GENERAL NOTES:
Reinforcing steel covering shall be 2½" in top and 1" minimum in the bottom of the floor slab and 2" in all other parts, unless noted.

SURFACE SEAL NOTE:
Surface seal shall be applied to the top of decks and approach slabs, all exposed surfaces of concrete railings and railing transitions, and all exposed surfaces of the substructures. Surface seal shall be applied to deck copings in accordance with IDM Figure 17-5A(0). For concrete superstructure structural members, the tops and the outside faces of fascia members shall be surface sealed. The superstructure shall be sealed prior to opening the structure to traffic. Surface seal shall not be applied to an overlay or to the top of bridge deck prior to the placement of an overlay. Developer shall apply surface seal prior to applying the anti-graffiti coating.

ANTI-GRAFFITI COATING NOTE:
Anti-graffiti coating shall be placed on all exposed surfaces of walls and bridges. Anti-graffiti coating shall be placed from the finished ground surface at the base of the wall or substructures to a height of 10 feet above the finished ground surface. The anti-graffiti coating shall be a sacrificial, wax-based, emulsion-type coating.

DESIGN DATA:
Live Load: HL-93 loading with impact and distribution of loads in accordance with, Fifth Edition, 2010 A.A.S.H.T.O. LRFD Specifications with all subsequent Iterims through 2010.
Dead Load: Actual weight plus 35 psf (composite) for future wearing surface and 15 psf (non-composite) for permanent metal deck forms.
Floor Slab: Designed for HL-93 loading with a ½" sacrificial wearing surface.
Design Strengths: To be in accordance with, Fifth Edition, 2010 A.A.S.H.T.O. LRFD Specifications and all subsequent Interims through 2010:
Concrete: Class "C", f'c = 4000 psi
Class "B", f'c = 3000 psi
Class "A", f'c = 3500 psi
Reinforcing Steel: Grade 60, fy = 60,000 psi
Prestressed Concrete: f'c = 8000 psi @ 28 days
Initial f'c = 5500 psi @ Release of Strands
Prestressing Strands: 0.5 Dia., 7 Wire LoLax Strands (As = 0.153 in^2)
Minimum Tensile Strength = 270,000 psi
Initial Pull = 30,980 lbs. per strand

SEISMIC DATA:
A.A.S.H.T.O. LRFD Bridge Design Specifications with 2010 Interims.
Seismic Zone 1
S1 = XX
Site Class NN
Fv = XX

GENERAL PLAN
Prestressed Concrete Hybrid Bulb Tee Bridge
1 Span: 85'-0"
Skew: 10°00'00" Right
42'-0" Clear Roadway
I-69 NB over Little Indian Creek
Morgan County

RECOMMENDED FOR APPROVAL DESIGN ENGINEER DATE
DESIGNED: JMC DRAWN: DES
CHECKED: CHECKED:

INDIANA
DEPARTMENT OF TRANSPORTATION

LITTLE INDIAN CREEK NB
TYPICAL SECTIONS

SCALE AS NOTED | BRIDGE FILE 37-55-3632 | DESIGNATION | SURVEY BOOK | SHEETS of | CONTRACT | PROJECT

TECHNICAL PROPOSAL - ROLL PLOT

ITP Exhibit B -
4.2.1.2.b Bridge Structures

LAYOUT MAP

DESIGN SPEED:

MAINLINES	- 70 MPH
RAMPS	- 50 MPH
	- 45 MPH

FUNCTIONAL CLASS: URBAN INTERSTATE

TERRAIN: ROLLING

PRELIMINARY ONLY

This document, and the associated engineering details and material quantities reflect Preliminary Schematic-level Design only. Use of this information for quantity verification, quantity take-offs and construction estimating is the responsibility of others, and is subject to the limitations and accuracy of Preliminary-level design. This document shall not be used for construction.

I-69 DEVELOPMENT PARTNERS

STRUCTURES PRELIMINARY DESIGN

ROLL PLOT

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER DATE

DESIGNED: MC DRAWN: DES

APPROVED: CHECKED: MC

ROLLPLOT05 5 OF 7 1-9-2014

ROLL PLOT NO. 24 OF 118

LEGEND:

LAYOUT MAP

DESIGN SPEED:

MAINLINES - 70 MPH
RAMPS - 50 MPH
- 45 MPH

FUNCTIONAL CLASS: URBAN INTERSTATE

TERRAIN: ROLLING

PRELIMINARY ONLY

This document, and the associated engineering details and material quantities reflect Preliminary Schematic-level Design only. Use of this information for quantity verification, quantity take-offs and construction estimating is the responsibility of others, and is subject to the limitations and accuracy of Preliminary-level design. This document shall not be used for construction.

I-69 DEVELOPMENT PARTNERS

STRUCTURES PRELIMINARY DESIGN

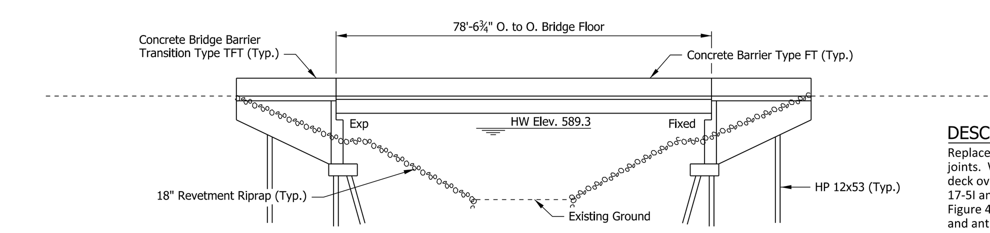
ROLL PLOT

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER DATE

DESIGNED: MC DRAWN: DES
APPROVED: CHECKED: MC

DESIGNATION:	HORIZONTAL SCALE:	DWG NO.	SHT NO.
		ROLLPLOT06	6 OF 7
PROJECT:	VERTICAL SCALE:	REV. NO.	DWG DATE
			1-9-2014

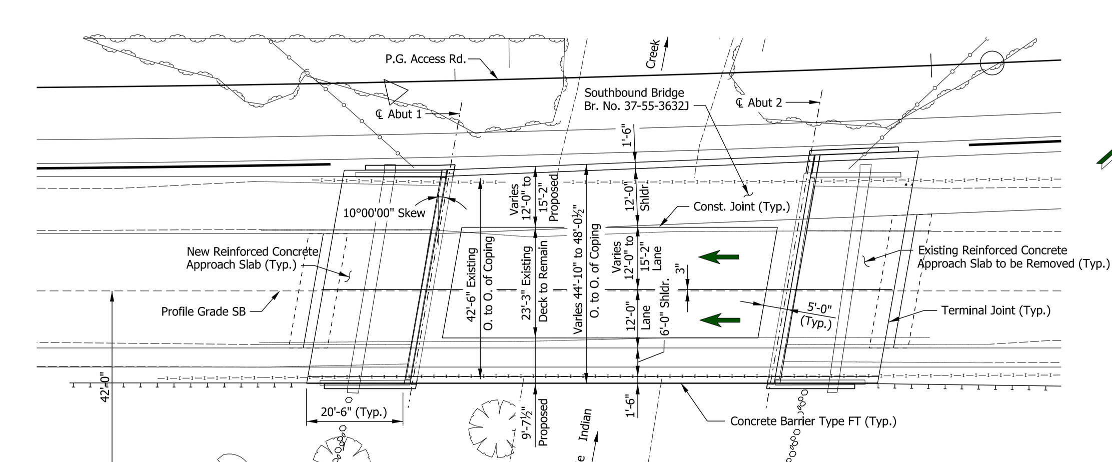
ROLL PLOT NO.
25 OF 118



ELEVATION
Scale: 1"=10'

DESCRIPTION OF WORK:

Replace bridge railings, approach slabs, bridge railing transitions and terminal joints. Widen the abutments and superstructure. Repair spalls in deck and construct deck overlay. Replace and add riprap in accordance with the limits shown in IDM Figures 17-5I and 17-5J. Reconstruct berms in accordance with IDM Chapter 402-6.02(02) and Figure 402-6K. Replace bearings with elastomeric pads. Install surface seal and anti-graffiti coating.

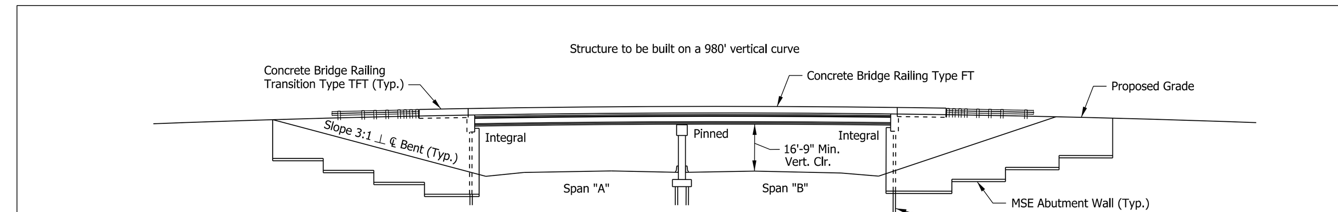


PLAN
Scale: 1"=10'

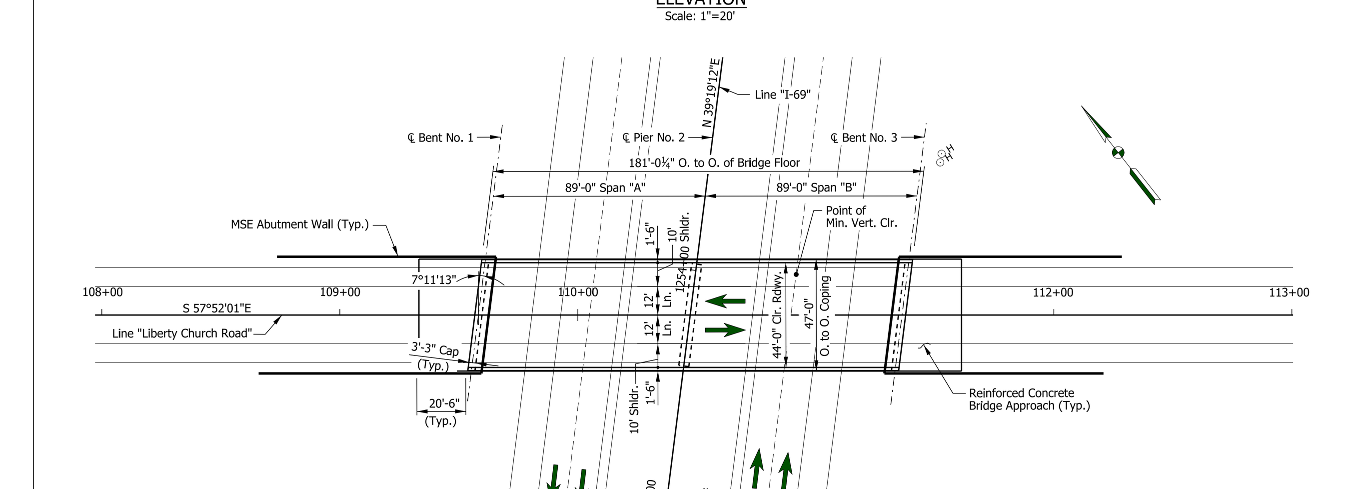
NOTES:
1. All stations, elevations and dimensions shown are based on "As-Built" plans and do not necessarily correspond to structure conditions now existing. Contractor shall verify all relevant dimensions in the field prior to fabrication of all materials.
2. The existing bridge was constructed in in 1972 by the Indiana State Highway Commission under Project No. ST-F-428(23).

RECOMMENDED FOR APPROVAL — DESIGN ENGINEER — DATE
DESIGNED: JMC DRAWN: DES CHECKED: CHECKED:
INDIANA DEPARTMENT OF TRANSPORTATION
I-69 SB OVER LITTLE INDIAN CREEK GENERAL PLAN & ELEVATION
SCALE: AS NOTED | BRIDGE FILE: 37-55-3632 | DESIGNATION | SURVEY BOOK | SHEETS of | CONTRACT | PROJECT

Structure to be built on a 980' vertical curve



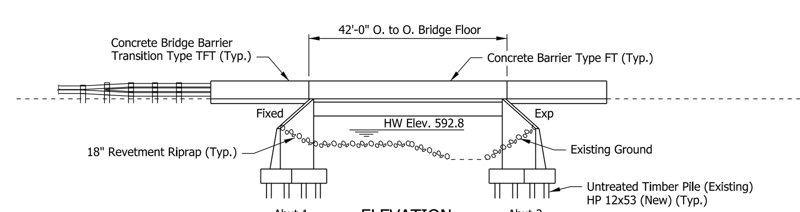
ELEVATION
Scale: 1"=20'



PLAN
Scale: 1"=20'

GENERAL PLAN
Continuous Prestressed Concrete Hybrid Bulb Tee Bridge
2 Spans: 89'-0", 89'-0"
Skew: 7°11'13" Right
44'-0" Clear Roadway
Liberty Church Road over I-69
Morgan County

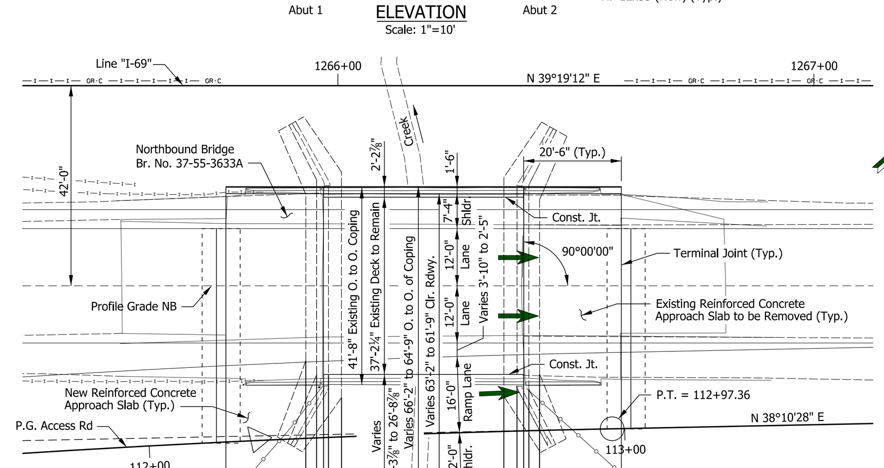
RECOMMENDED FOR APPROVAL — DESIGN ENGINEER — DATE
DESIGNED: MC DRAWN: DES CHECKED: CHECKED:
INDIANA DEPARTMENT OF TRANSPORTATION
LIBERTY CHURCH ROAD OVER I-69 GENERAL PLAN & ELEVATION
SCALE: AS NOTED | BRIDGE FILE | DESIGNATION | SURVEY BOOK | SHEETS of | CONTRACT | PROJECT



ELEVATION
Scale: 1"=10'

DESCRIPTION OF WORK:

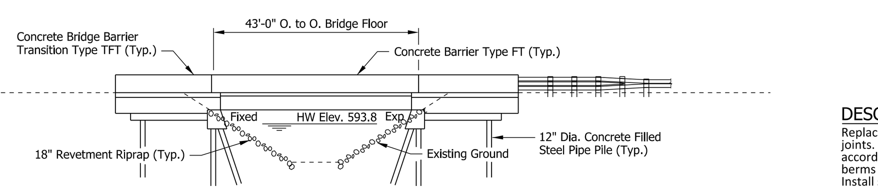
Replace bridge railings, approach slabs, bridge railing transitions and terminal joints. Widen the abutments and superstructure. Replace and add riprap in accordance with the limits shown in IDM Figures 17-5I and 17-5J. Reconstruct berms in accordance with IDM Chapter 402-6.02(02) and Figure 402-6K. Install surface seal and anti-graffiti coating.



PLAN
Scale: 1"=10'

NOTES:
1. All stations, elevations and dimensions shown are based on "As-Built" plans and do not necessarily correspond to structure conditions now existing. Contractor shall verify all relevant dimensions in the field prior to fabrication of all materials.
2. The existing bridge was constructed in 1948 by the Indiana State Highway Commission under Project No. F-428(10).
3. The existing bridge received new concrete barriers, a bridge deck overlay and new approach slabs in 1999 by the Indiana Department of Transportation under Project No. NH-097-2(006).

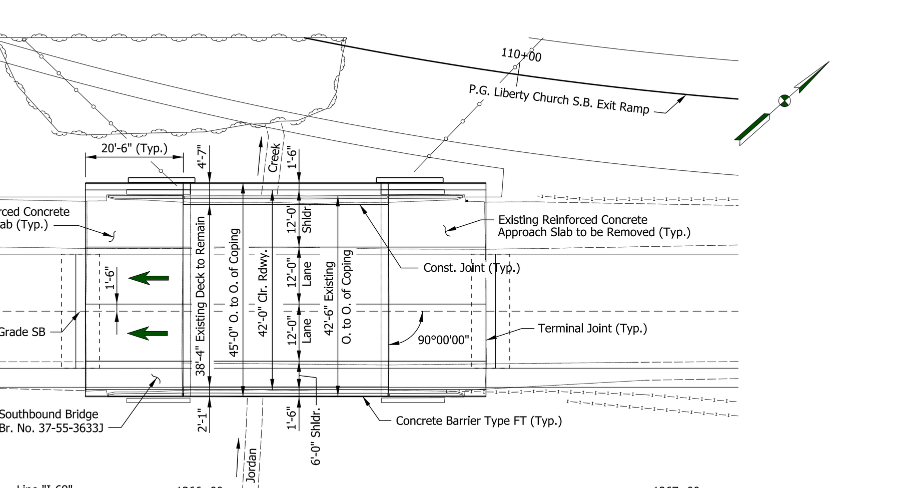
RECOMMENDED FOR APPROVAL — DESIGN ENGINEER — DATE
DESIGNED: JMC DRAWN: DES CHECKED: CHECKED:
INDIANA DEPARTMENT OF TRANSPORTATION
I-69 NB OVER JORDAN CREEK GENERAL PLAN & ELEVATION
SCALE: AS NOTED | BRIDGE FILE: 37-55-3633 | DESIGNATION: 9611540 | SURVEY BOOK | SHEETS of | CONTRACT | PROJECT



ELEVATION
Scale: 1"=10'

DESCRIPTION OF WORK:

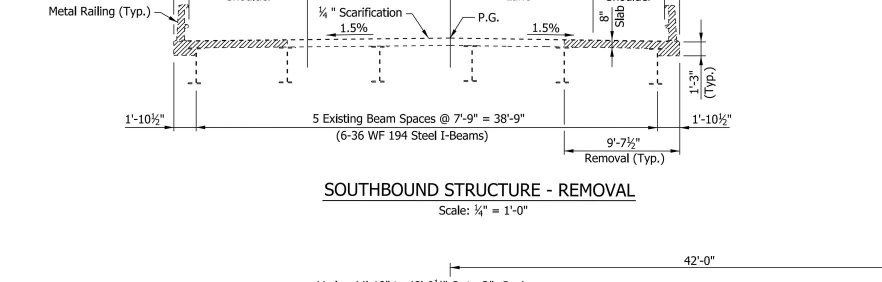
Replace bridge railings, approach slabs, bridge railing transitions and terminal joints. Widen the end bents and superstructure. Replace and add riprap in accordance with the limits shown in IDM Figures 17-5I and 17-5J. Reconstruct berms in accordance with IDM Chapter 402-6.02(02) and Figure 402-6K. Install surface seal and anti-graffiti coating.



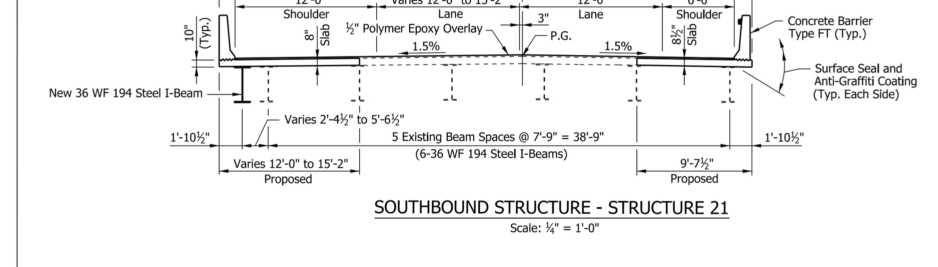
NOTES:
1. All stations, elevations and dimensions shown are based on "As-Built" plans and do not necessarily correspond to structure conditions now existing. Contractor shall verify all relevant dimensions in the field prior to fabrication of all materials.
2. The existing bridge was constructed in in 1972 by the Indiana State Highway Commission under Project No. ST-F-428(23).
3. The existing bridge received new concrete barriers, a bridge deck overlay and new approach slabs in 1999 by the Indiana Department of Transportation under Project No. NH-097-2(006).

PLAN
Scale: 1"=10'

RECOMMENDED FOR APPROVAL — DESIGN ENGINEER — DATE
DESIGNED: JMC DRAWN: DES CHECKED: CHECKED:
INDIANA DEPARTMENT OF TRANSPORTATION
I-69 SB OVER JORDAN CREEK GENERAL PLAN & ELEVATION
SCALE: AS NOTED | BRIDGE FILE: 37-55-3633 | DESIGNATION: 9611540 | SURVEY BOOK | SHEETS of | CONTRACT | PROJECT



SOUTHBOUND STRUCTURE - REMOVAL
Scale: ¼" = 1'-0"



SOUTHBOUND STRUCTURE - STRUCTURE 21
Scale: ¼" = 1'-0"

GENERAL NOTES:

Construction Specifications:
Indiana Department of Transportation Standard Specifications, Edition of 2014.

Design Specifications:
AASHTO Standard Specifications for Highway Bridges, 17th Edition, 2002.

Dead Load:
Includes Allowance of 35 psf for Future Wearing Surface (FWS).
Includes Allowance of 15 psf for Stay-in-Place (SIP) Deck Forms.

Loading Class:
HS20-44 and/or Interstate Alternate Loading.

Composite Design:
Dead Load carried by girders only.

Importance Classification
Essential Bridge IC = I

Seismic Design:
Bridge Site is classified as Seismic Zone 1, with Peak Ground Acceleration (PGA) = 0.170g
Seismic Performance Category (SPC) = B
Seismic Design Category (SDC) = A (IDM Figure 403-3F)

Reinforcing steel shall conform to ASTM Specification A1035 or A615. All reinforcing steel shall be furnished as Grade 100 (ASTM A1035) or as 60 or 75 (ASTM A615). Reinforcing steel shall be epoxy coated, unless noted otherwise.

Stagger Splices unless noted otherwise.

All Bends and Hooks shall meet the requirements of AASHTO Article 8.23. All bend dimensions for reinforcing steel shall be out-to-out of bars. All placement dimensions for reinforcing shall be to center of bars, unless noted otherwise.

All reinforcing shall have 2 inch clear cover, unless noted otherwise.

Stresses

Superstructure	- Class 'C' Concrete ....f'c = 4500 psi
Barriers	- Class 'C' Concrete ....f'c = 4000 psi
Abutments, End Bents & Piers	- Class 'A' Concrete ....f'c = 3500 psi
Footings	- Class 'B' Concrete ....f'c = 3000 psi
Transverse Deck Reinforcing Steel	- Grade 60 ....fs = 20000 psi
All other Reinforcing Steel	- Grade 60 ....fs = 24000 psi

Piles shall be Driven to XX kip.

The use of self-consolidating, lightweight, semi-lightweight, high-strength, and high-performance concrete for permanent bridge structural components is prohibited.

The use of partial depth and full depth precast deck panels are prohibited.

Chamfer all exposed corners 1", unless noted otherwise.

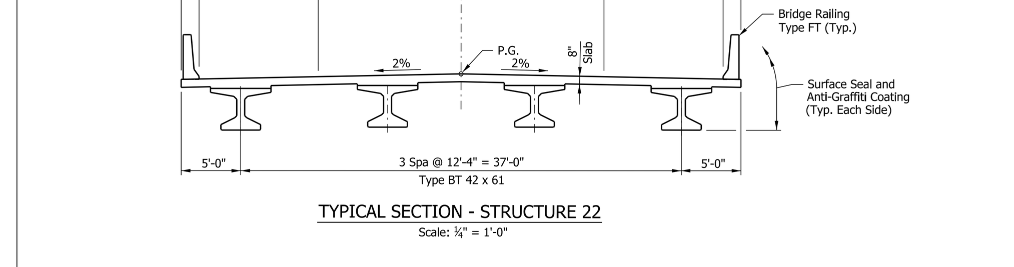
Dimensions shall not be scaled from drawings.

All utilities shown are provided for the contractor's general information only. The locations are approximate. It shall be the contractor's responsibility to determine and coordinate the actual location of utilities in the vicinity of the bridge construction. Existing utility locations shown reflect the findings of the latest available mapping. Refer to relevant design plans for status of existing utilities and new utility information. Bridge construction must be phased with utility construction in some locations. It shall be the contractor's responsibility to identify and coordinate construction in these locations.

SURFACE SEAL NOTE:
Surface seal shall be applied to the top of decks and approach slabs, all exposed surfaces of concrete railings and railing transitions, and all exposed surfaces of the substructures. Surface seal shall be applied to deck copings in accordance with IDM Figure 17-5A(0). For concrete superstructure structural members, the tops and the outside faces of fascia members shall be surface sealed. The superstructure shall be sealed prior to opening the structure to traffic. Surface seal shall not be applied to an overlay or to the top of bridge deck prior to the placement of an overlay. Developer shall apply surface seal prior to applying the anti-graffiti coating.

ANTI-GRAFFITI COATING NOTE:
Anti-graffiti coating shall be placed on all exposed surfaces of walls and bridges. Anti-graffiti coating shall be placed from the finished ground surface at the base of the wall or substructures to a height of 10 feet above the finished ground surface. The anti-graffiti coating shall be a sacrificial, wax-based, emulsion-type coating.

RECOMMENDED FOR APPROVAL — DESIGN ENGINEER — DATE
DESIGNED: JMC DRAWN: DES CHECKED: CHECKED:
INDIANA DEPARTMENT OF TRANSPORTATION
LITTLE INDIAN CREEK SB TYPICAL SECTIONS
SCALE: AS NOTED | BRIDGE FILE: 37-55-3632 | DESIGNATION | SURVEY BOOK | SHEETS of | CONTRACT | PROJECT



TYPICAL SECTION - STRUCTURE 22
Scale: ¼" = 1'-0"

GENERAL NOTES:

Reinforcing steel covering shall be 2½" in top and 1" minimum in the bottom of the floor slab and 2" in all other parts, unless noted.

SURFACE SEAL NOTE:
Surface seal shall be applied to the top of decks and approach slabs, all exposed surfaces of concrete railings and railing transitions, and all exposed surfaces of the substructures. Surface seal shall be applied to deck copings in accordance with IDM Figure 17-5A(0). For concrete superstructure structural members, the tops and the outside faces of fascia members shall be surface sealed. The superstructure shall be sealed prior to opening the structure to traffic. Surface seal shall not be applied to an overlay or to the top of bridge deck prior to the placement of an overlay. Developer shall apply surface seal prior to applying the anti-graffiti coating.

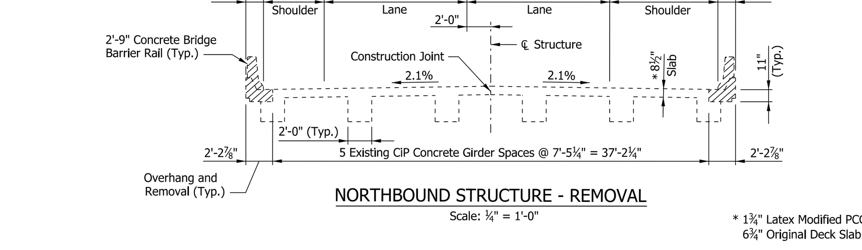
ANTI-GRAFFITI COATING NOTE:
Anti-graffiti coating shall be placed on all exposed surfaces of walls and bridges. Anti-graffiti coating shall be placed from the finished ground surface at the base of the wall or substructures to a height of 10 feet above the finished ground surface. The anti-graffiti coating shall be a sacrificial, wax-based, emulsion-type coating.

DESIGN DATA:
Live Load: HL-93 loading with impact and distribution of loads in accordance with, Fifth Edition, 2010 A.A.S.H.T.O. LRFD Specifications with all subsequent Iterims through 2010.
Dead Load: Actual weight plus 35 psf (composite) for future wearing surface and 15 psf (non-composite) for permanent metal deck forms.
Floor Slab: Designed for HL-93 loading with a ½" sacrificial wearing surface.
Design Strengths: To be in accordance with, Fifth Edition, 2010 A.A.S.H.T.O. LRFD Specifications and all subsequent Interims through 2010:
Concrete: Class "C", f'c = 4000 psi
Class "B", f'c = 3000 psi
Class "A", f'c = 3500 psi
Reinforcing Steel: Grade 60, fy = 60,000 psi
Prestressed Concrete: f'c = 8000 psi @ 28 days
Initial f'c = 5500 psi @ Release of Strands
Prestressing Strands: 0.5 Dia., 7 Wire LoLax Strands (As = 0.153 in 2)
Minimum Tensile Strength = 270,000 psi
Initial Pull = 30,980 lbs. per strand

SEISMIC DATA:
A.A.S.H.T.O. LRFD Bridge Design Specifications with 2010 Interims.
Seismic Zone 1
S1 = XX
Site Class NN
Fv = XX

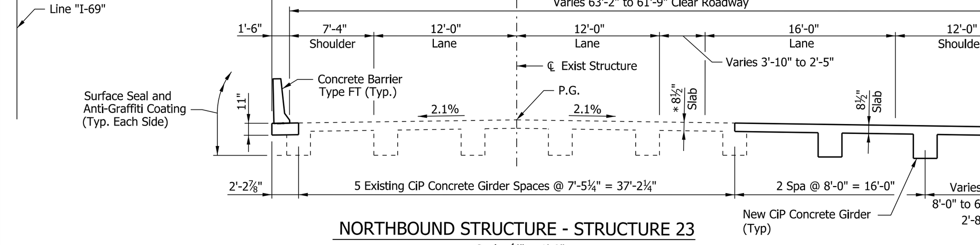
GENERAL PLAN
Continuous Prestressed Concrete Hybrid Bulb Tee Bridge
2 Spans: 89'-0", 89'-0"
Skew: 7°11'13" Right
44'-0" Clear Roadway
Liberty Church Road over I-69
Morgan County

RECOMMENDED FOR APPROVAL — DESIGN ENGINEER — DATE
DESIGNED: MC DRAWN: DES CHECKED: CHECKED:
INDIANA DEPARTMENT OF TRANSPORTATION
LIBERTY CHURCH ROAD OVER I-69
SCALE: AS NOTED | BRIDGE FILE | DESIGNATION | SURVEY BOOK | SHEETS of | CONTRACT | PROJECT



NORTHBOUND STRUCTURE - REMOVAL
Scale: ¼" = 1'-0"

* 1¾" Latex Modified PCC Overlay
6¾" Original Deck Slab



NORTHBOUND STRUCTURE - STRUCTURE 23
Scale: ¼" = 1'-0"

GENERAL NOTES:

Construction Specifications:
Indiana Department of Transportation Standard Specifications, Edition of 2014.

Design Specifications:
AASHTO Standard Specifications for Highway Bridges, 17th Edition, 2002.

Dead Load:
Includes Allowance of 35 psf for Future Wearing Surface (FWS).
Includes Allowance of 15 psf for Stay-in-Place (SIP) Deck Forms.

Loading Class:
HS20-44 and/or Interstate Alternate Loading.

Composite Design:
Dead Load carried by girders only.

Importance Classification
Essential Bridge IC = I

Seismic Design:
Bridge Site is classified as Seismic Zone 1, with Peak Ground Acceleration (PGA) = 0.170g
Seismic Performance Category (SPC) = B
Seismic Design Category (SDC) = A (IDM Figure 403-3F)

Reinforcing steel shall conform to ASTM Specification A1035 or A615. All reinforcing steel shall be furnished as Grade 100 (ASTM A1035) or as 60 or 75 (ASTM A615). Reinforcing steel shall be epoxy coated, unless noted otherwise.

Stagger Splices unless noted otherwise.

All Bends and Hooks shall meet the requirements of AASHTO Article 8.23. All bend dimensions for reinforcing steel shall be out-to-out of bars. All placement dimensions for reinforcing shall be to center of bars, unless noted otherwise.

All reinforcing shall have 2 inch clear cover, unless noted otherwise.

Stresses

Superstructure	- Class 'C' Concrete ....f'c = 4500 psi
Barriers	- Class 'C' Concrete ....f'c = 4000 psi
Abutments, End Bents & Piers	- Class 'A' Concrete ....f'c = 3500 psi
Footings	- Class 'B' Concrete ....f'c = 3000 psi
Transverse Deck Reinforcing Steel	- Grade 60 ....fs = 20000 psi
All other Reinforcing Steel	- Grade 60 ....fs = 24000 psi

Piles shall be Driven to XX kip.

The use of self-consolidating, lightweight, semi-lightweight, high-strength, and high-performance concrete for permanent bridge structural components is prohibited.

The use of partial depth and full depth precast deck panels are prohibited.

Chamfer all exposed corners 1", unless noted otherwise.

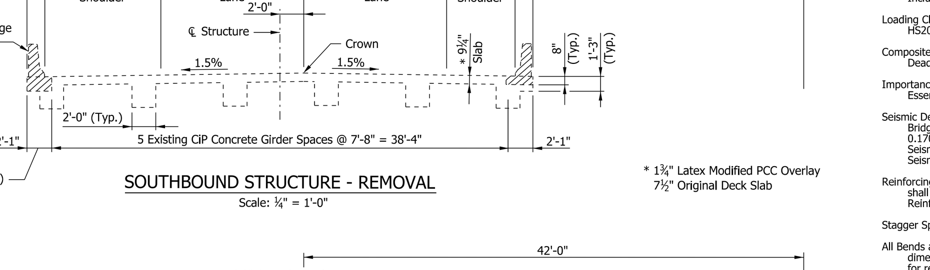
Dimensions shall not be scaled from drawings.

All utilities shown are provided for the contractor's general information only. The locations are approximate. It shall be the contractor's responsibility to determine and coordinate the actual location of utilities in the vicinity of the bridge construction. Existing utility locations shown reflect the findings of the latest available mapping. Refer to relevant design plans for status of existing utilities and new utility information. Bridge construction must be phased with utility construction in some locations. It shall be the contractor's responsibility to identify and coordinate construction in these locations.

SURFACE SEAL NOTE:
Surface seal shall be applied to the top of decks and approach slabs, all exposed surfaces of concrete railings and railing transitions, and all exposed surfaces of the substructures. Surface seal shall be applied to deck copings in accordance with IDM Figure 17-5A(0). For concrete superstructure structural members, the tops and the outside faces of fascia members shall be surface sealed. The superstructure shall be sealed prior to opening the structure to traffic. Surface seal shall not be applied to an overlay or to the top of bridge deck prior to the placement of an overlay. Developer shall apply surface seal prior to applying the anti-graffiti coating.

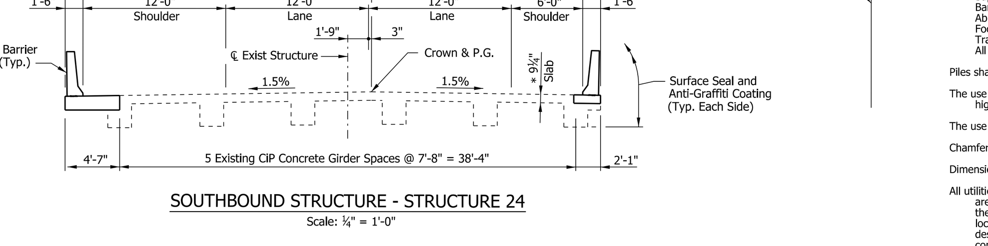
ANTI-GRAFFITI COATING NOTE:
Anti-graffiti coating shall be placed on all exposed surfaces of walls and bridges. Anti-graffiti coating shall be placed from the finished ground surface at the base of the wall or substructures to a height of 10 feet above the finished ground surface. The anti-graffiti coating shall be a sacrificial, wax-based, emulsion-type coating.

RECOMMENDED FOR APPROVAL — DESIGN ENGINEER — DATE
DESIGNED: JMC DRAWN: DES CHECKED: CHECKED:
INDIANA DEPARTMENT OF TRANSPORTATION
I-69 OVER JORDAN CREEK NB TYPICAL SECTIONS
SCALE: AS NOTED | BRIDGE FILE: 37-55-3633 | DESIGNATION: 9611540 | SURVEY BOOK | SHEETS of | CONTRACT | PROJECT



SOUTHBOUND STRUCTURE - REMOVAL
Scale: ¼" = 1'-0"

* 1¾" Latex Modified PCC Overlay
7½" Original Deck Slab



SOUTHBOUND STRUCTURE - STRUCTURE 24
Scale: ¼" = 1'-0"

GENERAL NOTES:

Construction Specifications:
Indiana Department of Transportation Standard Specifications, Edition of 2014.

Design Specifications:
AASHTO Standard Specifications for Highway Bridges, 17th Edition, 2002.

Dead Load:
Includes Allowance of 35 psf for Future Wearing Surface (FWS).
Includes Allowance of 15 psf for Stay-in-Place (SIP) Deck Forms.

Loading Class:
HS20-44 and/or Interstate Alternate Loading.

Composite Design:
Dead Load carried by girders only.

Importance Classification
Essential Bridge IC = I

Seismic Design:
Bridge Site is classified as Seismic Zone 1, with Peak Ground Acceleration (PGA) = 0.170g
Seismic Performance Category (SPC) = B
Seismic Design Category (SDC) = A (IDM Figure 403-3F)

Reinforcing steel shall conform to ASTM Specification A1035 or A615. All reinforcing steel shall be furnished as Grade 100 (ASTM A1035) or as 60 or 75 (ASTM A615). Reinforcing steel shall be epoxy coated, unless noted otherwise.

Stagger Splices unless noted otherwise.

All Bends and Hooks shall meet the requirements of AASHTO Article 8.23. All bend dimensions for reinforcing steel shall be out-to-out of bars. All placement dimensions for reinforcing shall be to center of bars, unless noted otherwise.

All reinforcing shall have 2 inch clear cover, unless noted otherwise.

Stresses

Superstructure	- Class 'C' Concrete ....f'c = 4500 psi
Barriers	- Class 'C' Concrete ....f'c = 4000 psi
Abutments, End Bents & Piers	- Class 'A' Concrete ....f'c = 3500 psi
Footings	- Class 'B' Concrete ....f'c = 3000 psi
Transverse Deck Reinforcing Steel	- Grade 60 ....fs = 20000 psi
All other Reinforcing Steel	- Grade 60 ....fs = 24000 psi

Piles shall be Driven to XX kip.

The use of self-consolidating, lightweight, semi-lightweight, high-strength, and high-performance concrete for permanent bridge structural components is prohibited.

The use of partial depth and full depth precast deck panels are prohibited.

Chamfer all exposed corners 1", unless noted otherwise.

Dimensions shall not be scaled from drawings.

All utilities shown are provided for the contractor's general information only. The locations are approximate. It shall be the contractor's responsibility to determine and coordinate the actual location of utilities in the vicinity of the bridge construction. Existing utility locations shown reflect the findings of the latest available mapping. Refer to relevant design plans for status of existing utilities and new utility information. Bridge construction must be phased with utility construction in some locations. It shall be the contractor's responsibility to identify and coordinate construction in these locations.

SURFACE SEAL NOTE:
Surface seal shall be applied to the top of decks and approach slabs, all exposed surfaces of concrete railings and railing transitions, and all exposed surfaces of the substructures. Surface seal shall be applied to deck copings in accordance with IDM Figure 17-5A(0). For concrete superstructure structural members, the tops and the outside faces of fascia members shall be surface sealed. The superstructure shall be sealed prior to opening the structure to traffic. Surface seal shall not be applied to an overlay or to the top of bridge deck prior to the placement of an overlay. Developer shall apply surface seal prior to applying the anti-graffiti coating.

ANTI-GRAFFITI COATING NOTE:
Anti-graffiti coating shall be placed on all exposed surfaces of walls and bridges. Anti-graffiti coating shall be placed from the finished ground surface at the base of the wall or substructures to a height of 10 feet above the finished ground surface. The anti-graffiti coating shall be a sacrificial, wax-based, emulsion-type coating.

RECOMMENDED FOR APPROVAL — DESIGN ENGINEER — DATE
DESIGNED: JMC DRAWN: DES CHECKED: CHECKED:
INDIANA DEPARTMENT OF TRANSPORTATION
I-69 OVER JORDAN CREEK SB TYPICAL SECTIONS
SCALE: AS NOTED | BRIDGE FILE: 37-55-3633 | DESIGNATION: 9611540 | SURVEY BOOK | SHEETS of | CONTRACT | PROJECT

TECHNICAL PROPOSAL - ROLL PLOT

ITP Exhibit B -
4.2.1.2.b Bridge Structures

LAYOUT MAP

DESIGN SPEED:

MAINLINES - 70 MPH
RAMPS - 50 MPH
- 45 MPH

FUNCTIONAL CLASS: URBAN INTERSTATE

TERRAIN: ROLLING

PRELIMINARY ONLY

This document, and the associated engineering details and material quantities reflect Preliminary Schematic-level Design only. Use of this information for quantity verification, quantity take-offs and construction estimating is the responsibility of others, and is subject to the limitations and accuracy of Preliminary-level design. This document shall not be used for construction.

I-69 DEVELOPMENT PARTNERS

STRUCTURES PRELIMINARY DESIGN

ROLL PLOT

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER DATE

DESIGNED: MC DRAWN: DES
APPROVED: CHECKED: MC

DESIGNATION: HORIZONTAL SCALE: DWG NO. ROLLPLOT06 SHT NO. 6 OF 7
PROJECT: VERTICAL SCALE: REV. NO. DWG DATE 1-9-2014

ROLL PLOT NO.
25 OF 118

LEGEND:

LAYOUT MAP

DESIGN SPEED:

MAINLINES - 70 MPH
RAMPS - 50 MPH
- 45 MPH

FUNCTIONAL CLASS: URBAN INTERSTATE

TERRAIN: ROLLING

PRELIMINARY ONLY

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I-69 DEVELOPMENT PARTNERS

STRUCTURES
PRELIMINARY DESIGN

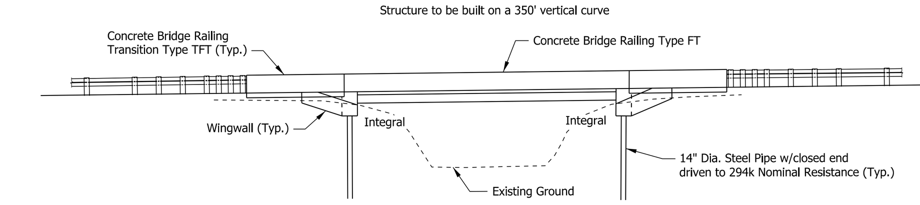
ROLL PLOT

RECOMMENDED FOR APPROVAL: ______ DESIGN ENGINEER DATE

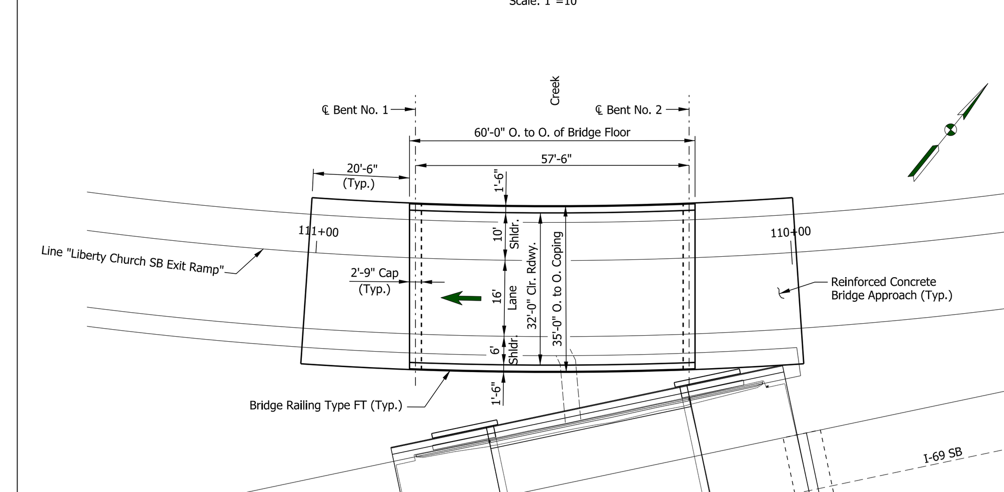
DESIGNED: MC DRAWN: DES
APPROVED: ______ CHECKED: MC

DESIGNATION:	HORIZONTAL SCALE:	DWG NO.	SHT NO.
		ROLLPLOT07	7 OF 7
PROJECT:	VERTICAL SCALE:	REV. NO.	DWG DATE
			1-9-2014

ROLL PLOT NO.
26 OF 118



ELEVATION
Scale: 1"=10'



PLAN
Scale: 1"=10'

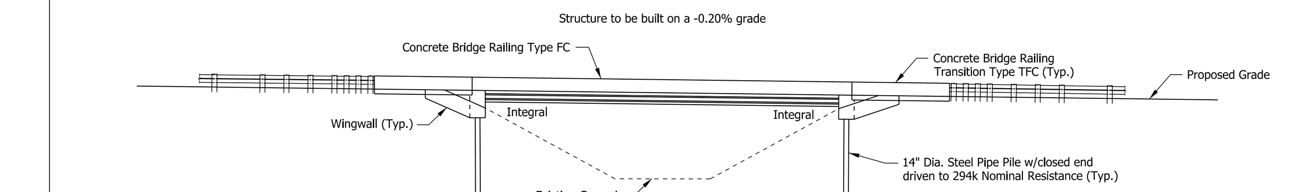
GENERAL PLAN
Prestressed Concrete Box Beam Bridge
1 Span: 57'-6"
Skew: 0°
32'-0" Clear Roadway
Liberty Church Road SB Exit Ramp over Jordan Creek
Morgan County

RECOMMENDED FOR APPROVAL ______ DESIGN ENGINEER DATE
DESIGNED: MC DRAWN: DES
CHECKED: ______ CHECKED: ______

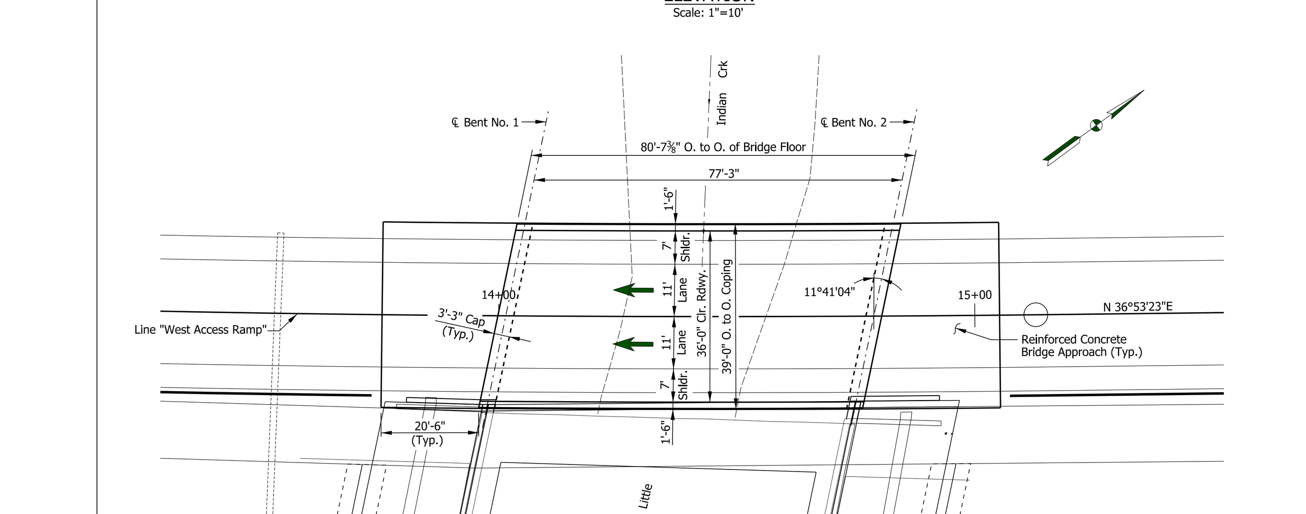
INDIANA
DEPARTMENT OF TRANSPORTATION

LIBERTY CHURCH SB EXIT RAMP OVER JORDAN CRK
GENERAL PLAN & ELEVATION

SCALE: AS NOTED | BRIDGE FILE | DESIGNATION | SURVEY BOOK | SHEETS __ of __ | CONTRACT | PROJECT



ELEVATION
Scale: 1"=10'



PLAN
Scale: 1"=10'

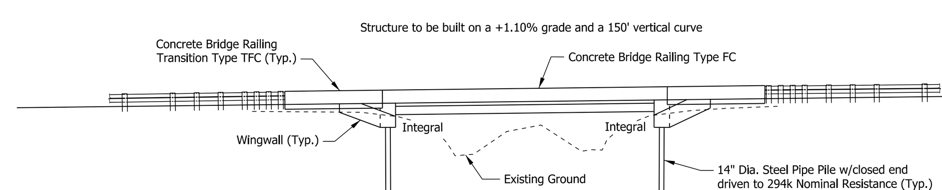
GENERAL PLAN
Prestressed Concrete Hybrid Bulb Tee Bridge
1 Span: 77'-3"
Skew: 11°41'04" Right
36'-0" Clear Roadway
Liberty Church West Access Road over Little Indian Creek
Morgan County

RECOMMENDED FOR APPROVAL ______ DESIGN ENGINEER DATE
DESIGNED: MC DRAWN: DES
CHECKED: ______ CHECKED: ______

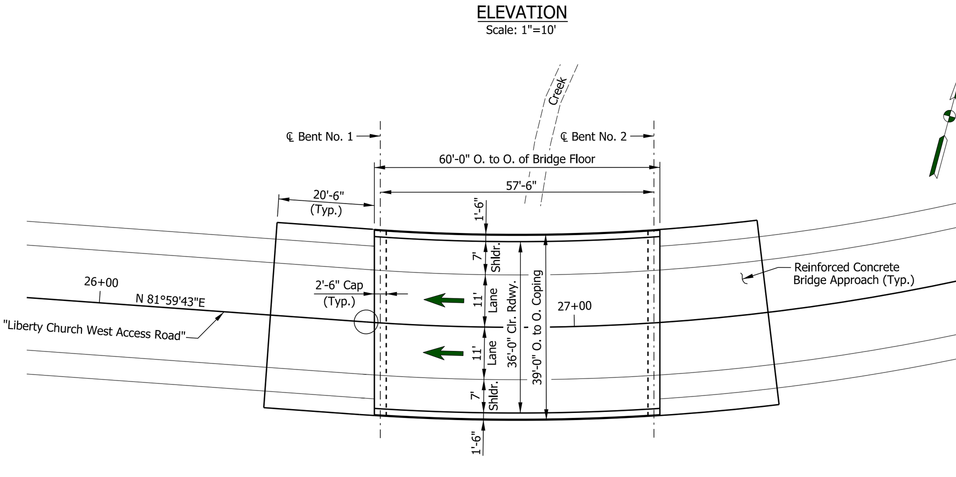
INDIANA
DEPARTMENT OF TRANSPORTATION

WEST ACCESS ROAD OVER LITTLE INDIAN CRK
GENERAL PLAN & ELEVATION

SCALE: AS NOTED | BRIDGE FILE | DESIGNATION | SURVEY BOOK | SHEETS __ of __ | CONTRACT | PROJECT



ELEVATION
Scale: 1"=10'



PLAN
Scale: 1"=10'

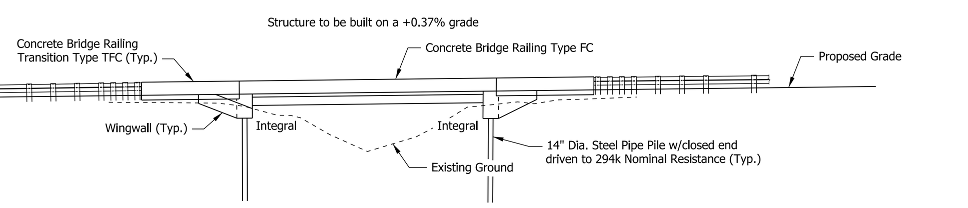
GENERAL PLAN
Prestressed Concrete Box Beam Bridge
1 Span: 57'-6"
Skew: 0°
36'-0" Clear Roadway
Liberty Church West Access Road over Jordan Creek
Morgan County

RECOMMENDED FOR APPROVAL ______ DESIGN ENGINEER DATE
DESIGNED: MC DRAWN: DES
CHECKED: ______ CHECKED: ______

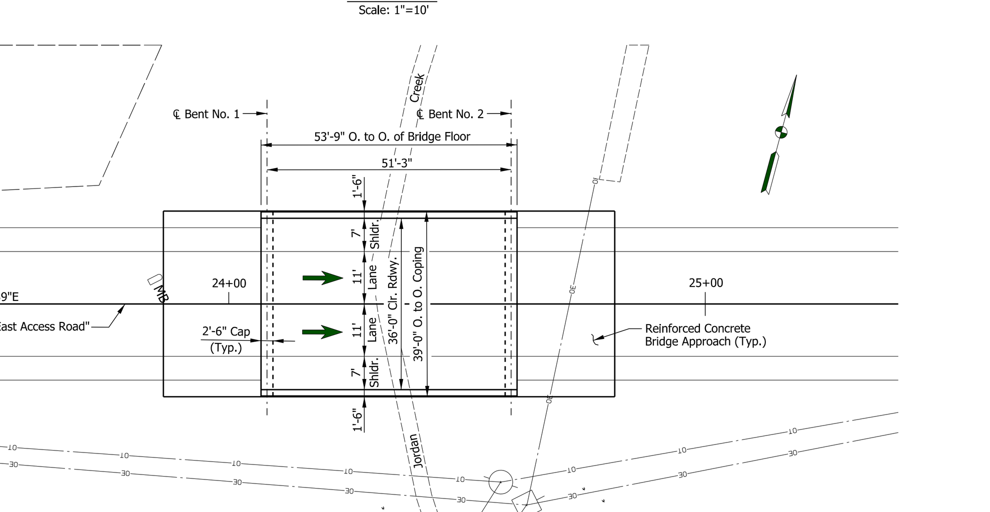
INDIANA
DEPARTMENT OF TRANSPORTATION

LIBERTY CHURCH WEST ACCESS OVER JORDAN CRK
GENERAL PLAN & ELEVATION

SCALE: AS NOTED | BRIDGE FILE | DESIGNATION | SURVEY BOOK | SHEETS __ of __ | CONTRACT | PROJECT



ELEVATION
Scale: 1"=10'



PLAN
Scale: 1"=10'

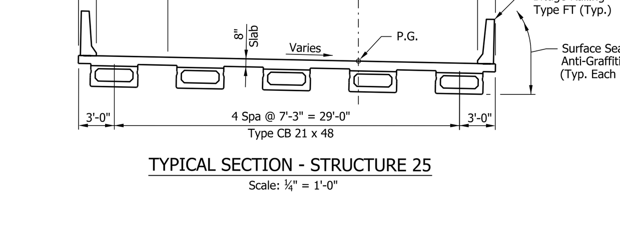
GENERAL PLAN
Prestressed Concrete Box Beam Bridge
1 Span: 51'-3"
Skew: 0°
36'-0" Clear Roadway
Liberty Church East Access Road over Jordan Creek
Morgan County

RECOMMENDED FOR APPROVAL ______ DESIGN ENGINEER DATE
DESIGNED: MC DRAWN: DES
CHECKED: ______ CHECKED: ______

INDIANA
DEPARTMENT OF TRANSPORTATION

LIBERTY CHURCH EAST ACCESS OVER JORDAN CRK
GENERAL PLAN & ELEVATION

SCALE: AS NOTED | BRIDGE FILE | DESIGNATION | SURVEY BOOK | SHEETS __ of __ | CONTRACT | PROJECT



TYPICAL SECTION - STRUCTURE 25
Scale: ¼" = 1'-0"

GENERAL NOTES:
Reinforcing steel covering shall be 2½" in top and 1" minimum in the bottom of the floor slab and 2" in all other parts, unless noted.

SURFACE SEAL NOTE:
Surface seal shall be applied to the top of decks and approach slabs, all exposed surfaces of concrete railings and railing transitions, and all exposed surfaces of the substructures. Surface seal shall be applied to deck copings in accordance with IDM Figure 17-5A(0). For concrete superstructure structural members, the tops and the outside faces of fascia members shall be surface sealed. The superstructure shall be sealed prior to opening the structure to traffic. Surface seal shall not be applied to an overlay or to the top of bridge deck prior to the placement of an overlay. Developer shall apply surface seal prior to applying the anti-graffiti coating.

ANTI-GRAFFITI COATING NOTE:
Anti-graffiti coating shall be placed on all exposed surfaces of walls and bridges. Anti-graffiti coating shall be placed from the finished ground surface at the base of the wall or substructures to a height of 10 feet above the finished ground surface. The anti-graffiti coating shall be a sacrificial, wax-based, emulsion-type coating.

DESIGN DATA:
Live Load: HL-93 loading with impact and distribution of loads in accordance with, Fifth Edition, 2010 A.A.S.H.T.O. LRFD Specifications with all subsequent Iterims through 2010.
Dead Load: Actual weight plus 35 psf (composite) for future wearing surface and 15 psf (non-composite) for permanent metal deck forms.
Floor Slab: Designed for HL-93 loading with a ½" sacrificial wearing surface.
Design Strengths: To be in accordance with, Fifth Edition, 2010 A.A.S.H.T.O. LRFD Specifications and all subsequent Interims through 2010:
Concrete: Class "C", f'c = 4000 psi
Class "B", f'c = 3000 psi
Class "A", f'c = 3500 psi
Reinforcing Steel: Grade 60, fy = 60,000 psi
Prestressed Concrete: f'c = 8000 psi @ 28 days
Initial f'c = 5500 psi @ Release of Strands
Prestressing Strands: 0.5 Dia., 7 Wire LoLax Strands (As = 0.153 in^2)
Minimum Tensile Strength = 270,000 psi
Initial Pull = 30,980 lbs. per strand

SEISMIC DATA:
A.A.S.H.T.O. LRFD Bridge Design Specifications with 2010 Interims.
Seismic Zone 1
S1 = XX
Site Class NN
Fv = XX

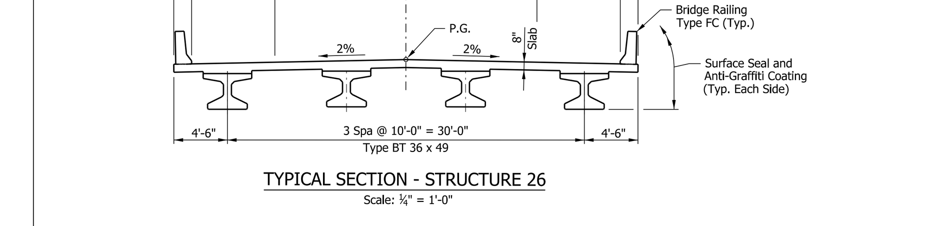
GENERAL PLAN
Prestressed Concrete Box Beam Bridge
1 Span: 57'-6"
Skew: 0°
32'-0" Clear Roadway
Liberty Church Road SB Exit Ramp over Jordan Creek
Morgan County

RECOMMENDED FOR APPROVAL ______ DESIGN ENGINEER DATE
DESIGNED: MC DRAWN: DES
CHECKED: ______ CHECKED: ______

INDIANA
DEPARTMENT OF TRANSPORTATION

LIBERTY CHURCH SB EXIT OVER JORDAN CREEK

SCALE: AS NOTED | BRIDGE FILE | DESIGNATION | SURVEY BOOK | SHEETS __ of __ | CONTRACT | PROJECT



TYPICAL SECTION - STRUCTURE 26
Scale: ¼" = 1'-0"

GENERAL NOTES:
Reinforcing steel covering shall be 2½" in top and 1" minimum in the bottom of the floor slab and 2" in all other parts, unless noted.

SURFACE SEAL NOTE:
Surface seal shall be applied to the top of decks and approach slabs, all exposed surfaces of concrete railings and railing transitions, and all exposed surfaces of the substructures. Surface seal shall be applied to deck copings in accordance with IDM Figure 17-5A(0). For concrete superstructure structural members, the tops and the outside faces of fascia members shall be surface sealed. The superstructure shall be sealed prior to opening the structure to traffic. Surface seal shall not be applied to an overlay or to the top of bridge deck prior to the placement of an overlay. Developer shall apply surface seal prior to applying the anti-graffiti coating.

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Anti-graffiti coating shall be placed on all exposed surfaces of walls and bridges. Anti-graffiti coating shall be placed from the finished ground surface at the base of the wall or substructures to a height of 10 feet above the finished ground surface. The anti-graffiti coating shall be a sacrificial, wax-based, emulsion-type coating.

DESIGN DATA:
Live Load: HL-93 loading with impact and distribution of loads in accordance with, Fifth Edition, 2010 A.A.S.H.T.O. LRFD Specifications with all subsequent Iterims through 2010.
Dead Load: Actual weight plus 35 psf (composite) for future wearing surface and 15 psf (non-composite) for permanent metal deck forms.
Floor Slab: Designed for HL-93 loading with a ½" sacrificial wearing surface.
Design Strengths: To be in accordance with, Fifth Edition, 2010 A.A.S.H.T.O. LRFD Specifications and all subsequent Interims through 2010:
Concrete: Class "C", f'c = 4000 psi
Class "B", f'c = 3000 psi
Class "A", f'c = 3500 psi
Reinforcing Steel: Grade 60, fy = 60,000 psi
Prestressed Concrete: f'c = 8000 psi @ 28 days
Initial f'c = 5500 psi @ Release of Strands
Prestressing Strands: 0.5 Dia., 7 Wire LoLax Strands (As = 0.153 in^2)
Minimum Tensile Strength = 270,000 psi
Initial Pull = 30,980 lbs. per strand

SEISMIC DATA:
A.A.S.H.T.O. LRFD Bridge Design Specifications with 2010 Interims.
Seismic Zone 1
S1 = XX
Site Class NN
Fv = XX

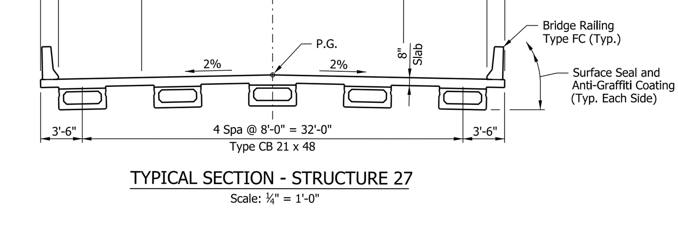
GENERAL PLAN
Prestressed Concrete Hybrid Bulb Tee Bridge
1 Span: 77'-3"
Skew: 11°41'04" Right
36'-0" Clear Roadway
Liberty Church West Access Road over Little Indian Creek
Morgan County

RECOMMENDED FOR APPROVAL ______ DESIGN ENGINEER DATE
DESIGNED: MC DRAWN: DES
CHECKED: ______ CHECKED: ______

INDIANA
DEPARTMENT OF TRANSPORTATION

WEST ACCESS ROAD OVER LITTLE INDIAN CREEK

SCALE: AS NOTED | BRIDGE FILE | DESIGNATION | SURVEY BOOK | SHEETS __ of __ | CONTRACT | PROJECT



TYPICAL SECTION - STRUCTURE 27
Scale: ¼" = 1'-0"

GENERAL NOTES:
Reinforcing steel covering shall be 2½" in top and 1" minimum in the bottom of the floor slab and 2" in all other parts, unless noted.

SURFACE SEAL NOTE:
Surface seal shall be applied to the top of decks and approach slabs, all exposed surfaces of concrete railings and railing transitions, and all exposed surfaces of the substructures. Surface seal shall be applied to deck copings in accordance with IDM Figure 17-5A(0). For concrete superstructure structural members, the tops and the outside faces of fascia members shall be surface sealed. The superstructure shall be sealed prior to opening the structure to traffic. Surface seal shall not be applied to an overlay or to the top of bridge deck prior to the placement of an overlay. Developer shall apply surface seal prior to applying the anti-graffiti coating.

ANTI-GRAFFITI COATING NOTE:
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DESIGN DATA:
Live Load: HL-93 loading with impact and distribution of loads in accordance with, Fifth Edition, 2010 A.A.S.H.T.O. LRFD Specifications with all subsequent Iterims through 2010.
Dead Load: Actual weight plus 35 psf (composite) for future wearing surface and 15 psf (non-composite) for permanent metal deck forms.
Floor Slab: Designed for HL-93 loading with a ½" sacrificial wearing surface.
Design Strengths: To be in accordance with, Fifth Edition, 2010 A.A.S.H.T.O. LRFD Specifications and all subsequent Interims through 2010:
Concrete: Class "C", f'c = 4000 psi
Class "B", f'c = 3000 psi
Class "A", f'c = 3500 psi
Reinforcing Steel: Grade 60, fy = 60,000 psi
Prestressed Concrete: f'c = 8000 psi @ 28 days
Initial f'c = 5500 psi @ Release of Strands
Prestressing Strands: 0.5 Dia., 7 Wire LoLax Strands (As = 0.153 in^2)
Minimum Tensile Strength = 270,000 psi
Initial Pull = 30,980 lbs. per strand

SEISMIC DATA:
A.A.S.H.T.O. LRFD Bridge Design Specifications with 2010 Interims.
Seismic Zone 1
S1 = XX
Site Class NN
Fv = XX

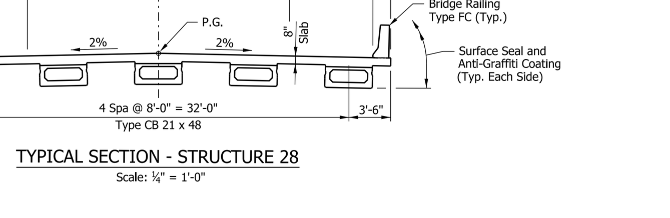
GENERAL PLAN
Prestressed Concrete Box Beam Bridge
1 Span: 57'-6"
Skew: 0°
36'-0" Clear Roadway
Liberty Church West Access Road over Jordan Creek
Morgan County

RECOMMENDED FOR APPROVAL ______ DESIGN ENGINEER DATE
DESIGNED: MC DRAWN: DES
CHECKED: ______ CHECKED: ______

INDIANA
DEPARTMENT OF TRANSPORTATION

LIBERTY CHURCH WEST ACCESS ROAD
OVER JORDAN CREEK

SCALE: AS NOTED | BRIDGE FILE | DESIGNATION | SURVEY BOOK | SHEETS __ of __ | CONTRACT | PROJECT



TYPICAL SECTION - STRUCTURE 28
Scale: ¼" = 1'-0"

GENERAL NOTES:
Reinforcing steel covering shall be 2½" in top and 1" minimum in the bottom of the floor slab and 2" in all other parts, unless noted.

SURFACE SEAL NOTE:
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Dead Load: Actual weight plus 35 psf (composite) for future wearing surface and 15 psf (non-composite) for permanent metal deck forms.
Floor Slab: Designed for HL-93 loading with a ½" sacrificial wearing surface.
Design Strengths: To be in accordance with, Fifth Edition, 2010 A.A.S.H.T.O. LRFD Specifications and all subsequent Interims through 2010:
Concrete: Class "C", f'c = 4000 psi
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Reinforcing Steel: Grade 60, fy = 60,000 psi
Prestressed Concrete: f'c = 8000 psi @ 28 days
Initial f'c = 5500 psi @ Release of Strands
Prestressing Strands: 0.5 Dia., 7 Wire LoLax Strands (As = 0.153 in^2)
Minimum Tensile Strength = 270,000 psi
Initial Pull = 30,980 lbs. per strand

SEISMIC DATA:
A.A.S.H.T.O. LRFD Bridge Design Specifications with 2010 Interims.
Seismic Zone 1
S1 = XX
Site Class NN
Fv = XX

GENERAL PLAN
Prestressed Concrete Box Beam Bridge
1 Span: 51'-3"
Skew: 0°
36'-0" Clear Roadway
Liberty Church East Access Road over Jordan Creek
Morgan County

RECOMMENDED FOR APPROVAL ______ DESIGN ENGINEER DATE
DESIGNED: MC DRAWN: DES
CHECKED: ______ CHECKED: ______

INDIANA
DEPARTMENT OF TRANSPORTATION

LIBERTY CHURCH EAST ACCESS ROAD
OVER JORDAN CREEK

SCALE: AS NOTED | BRIDGE FILE | DESIGNATION | SURVEY BOOK | SHEETS __ of __ | CONTRACT | PROJECT

TECHNICAL PROPOSAL - ROLL PLOT

ITP Exhibit B -
4.2.1.2.b Bridge Structures

LAYOUT MAP

DESIGN SPEED:

MAINLINES - 70 MPH
RAMPS - 50 MPH
- 45 MPH

FUNCTIONAL CLASS: URBAN INTERSTATE

TERRAIN: ROLLING

PRELIMINARY ONLY

This document, and the associated engineering details and material quantities reflect Preliminary Schematic-level Design only. Use of this information for quantity verification, quantity take-offs and construction estimating is the responsibility of others, and is subject to the limitations and accuracy of Preliminary-level design. This document shall not be used for construction.

I-69 DEVELOPMENT PARTNERS

STRUCTURES
PRELIMINARY DESIGN

ROLL PLOT

RECOMMENDED FOR APPROVAL: ______ DESIGN ENGINEER DATE

DESIGNED: MC DRAWN: DES
APPROVED: ______ CHECKED: MC

DESIGNATION: | HORIZONTAL SCALE: | DWG NO. ROLLPLOT07 | SHT NO. 7 OF 7
PROJECT: | VERTICAL SCALE: | REV. NO. | DWG DATE 1-9-2014

ROLL PLOT NO.
26 OF 118

LEGEND:

- WORK AREA
- OPEN TO TRAFFIC
- REMOVALS
- TEMPORARY PAVEMENT
- COMPLETED CLOSED
- LTD. ACCESS RIGHT-OF-WAY
- RIGHT-OF-WAY
- TEMPORARY RIGHT-OF-WAY
- GUARDRAIL

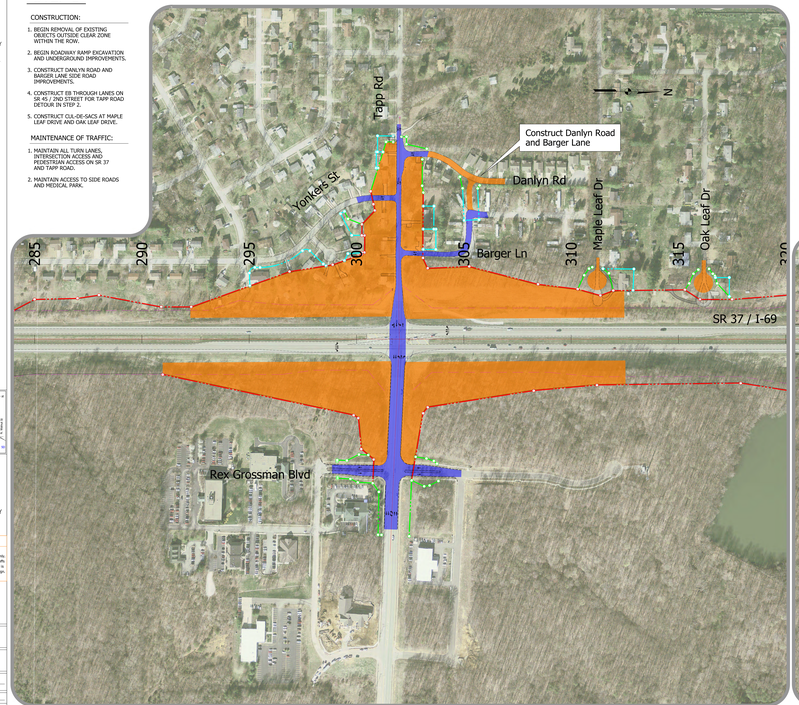
STEP 1

CONSTRUCTION:

1. BEGIN REMOVAL OF EXISTING OBJECTS OUTSIDE CLEAR ZONE WITHIN THE ROW.
2. BEGIN ROADWAY RAMP EXCAVATION AND UNDERGROUND IMPROVEMENTS.
3. CONSTRUCT DANLYN ROAD AND BARGER LANE SIDE ROAD IMPROVEMENTS.
4. CONSTRUCT EB THROUGH LANES ON SR 45 / 2ND STREET FOR TAPP ROAD DETOUR IN STEP 2.
5. CONSTRUCT CUL-DE-SACS AT MAPLE LEAF DRIVE AND OAK LEAF DRIVE.

MAINTENANCE OF TRAFFIC:

1. MAINTAIN ALL TURN LANES, INTERSECTION ACCESS AND PEDESTRIAN ACCESS ON SR 37 AND TAPP ROAD.
2. MAINTAIN ACCESS TO SIDE ROADS AND MEDICAL PARK.



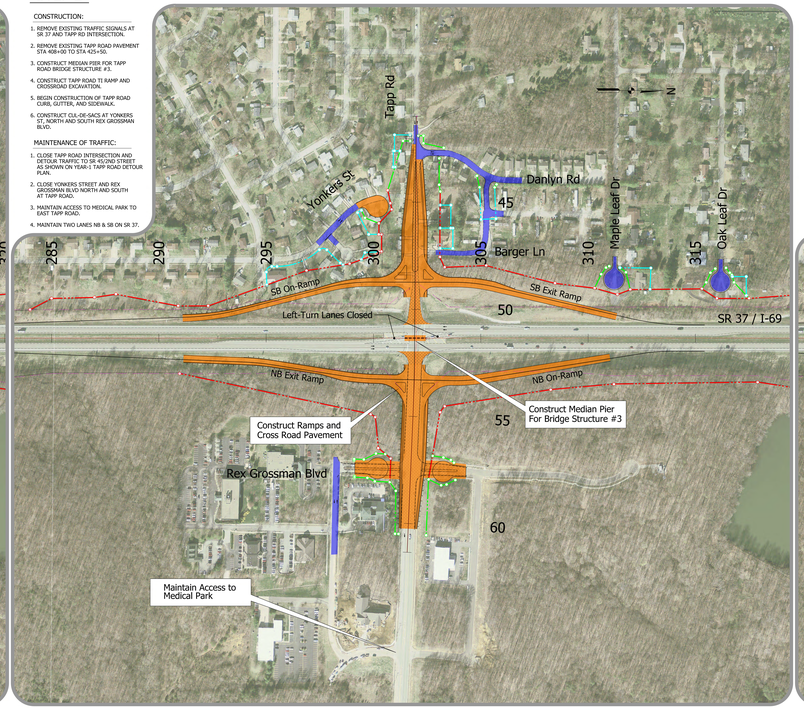
STEP 2

CONSTRUCTION:

1. REMOVE EXISTING TRAFFIC SIGNALS AT SR 37 AND TAPP RD INTERSECTION.
2. REMOVE EXISTING TAPP ROAD PAVEMENT STA 408+00 TO STA 425+50.
3. CONSTRUCT MEDIAN PIER FOR TAPP ROAD BRIDGE STRUCTURE #3.
4. CONSTRUCT TAPP ROAD TI RAMP AND CROSSROAD EXCAVATION.
5. BEGIN CONSTRUCTION OF TAPP ROAD CURB, GUTTER, AND SIDEWALK.
6. CONSTRUCT CUL-DE-SACS AT YONKERS ST, NORTH AND SOUTH REX GROSSMAN BLVD.

MAINTENANCE OF TRAFFIC:

1. CLOSE TAPP ROAD INTERSECTION AND DETOUR TRAFFIC TO SR 45/2ND STREET AS SHOWN ON YEAR-1 TAPP ROAD DETOUR PLAN.
2. CLOSE YONKERS STREET AND REX GROSSMAN BLVD NORTH AND SOUTH AT TAPP ROAD.
3. MAINTAIN ACCESS TO MEDICAL PARK TO EAST TAPP ROAD.
4. MAINTAIN TWO LANES NB & SB ON SR 37.



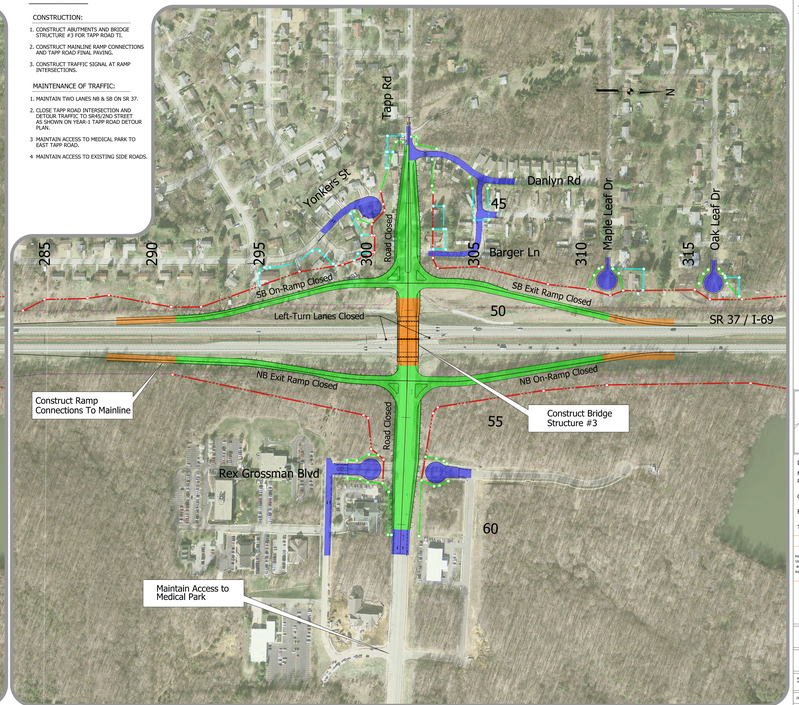
STEP 3

CONSTRUCTION:

1. CONSTRUCT ABUTMENTS AND BRIDGE STRUCTURE #3 FOR TAPP ROAD TI.
2. CONSTRUCT MAINLINE RAMP CONNECTIONS AND TAPP ROAD FINAL PAVING.
3. CONSTRUCT TRAFFIC SIGNAL AT RAMP INTERSECTIONS.

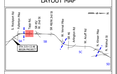
MAINTENANCE OF TRAFFIC:

1. MAINTAIN TWO LANES NB & SB ON SR 37.
2. CLOSE TAPP ROAD INTERSECTION AND DETOUR TRAFFIC TO SR45/2ND STREET AS SHOWN ON YEAR-1 TAPP ROAD DETOUR PLAN.
3. MAINTAIN ACCESS TO MEDICAL PARK TO EAST TAPP ROAD.
4. MAINTAIN ACCESS TO EXISTING SIDE ROADS.



SCALE: 1 INCH = 100 FEET (HORIZONTAL)

LAYOUT MAP



DESIGN SPEED:

MAINLINES	- 70 MPH
RAMPS	- 50 MPH
	- 45 MPH
CROSS STREETS	- 35 MPH

FUNCTIONAL CLASS: RURAL HIGHWAY

TERRAIN: ROLLING

PRELIMINARY ONLY

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I-69 DEVELOPMENT PARTNERS

MAINTENANCE OF TRAFFIC (MOT) YEAR 1

SUBSECTION 5B
ROLL PLOT
TAPP ROAD

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER	DATE
DESIGNED: RG	DRAWN: CC
APPROVED:	CHECKED: SD

DESIGNATION	HORIZONTAL SCALE	ZONE NO	SHT NO
	1" = 50'	DEP-A-R06-L-NC	1 OF 7
PROJECT	VERTICAL SCALE	REV. NO	ZONE DATE
	N/A		12-20-2019

ROLL PLOT NO.
27 OF 118

SCALE: 1 INCH = 100 FEET (HORIZONTAL)

LAYOUT MAP

DESIGN SPEED:

MAINLINES	- 70 MPH
RAMPS	- 50 MPH
	- 45 MPH
CROSS STREETS	- 35 MPH

FUNCTIONAL CLASS: RURAL HIGHWAY

TERRAIN: ROLLING

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I-69 DEVELOPMENT PARTNERS

MAINTENANCE OF TRAFFIC (MOT) YEAR 1

SUBSECTION 5B
ROLL PLOT
TAPP ROAD

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER	DATE
DESIGNED: RG	DRAWN: CC
APPROVED:	CHECKED: SD

DESIGNATION	HORIZONTAL SCALE	ZONE NO	SHT NO
	1" = 50'	DEP-A-R06-L-NC	1 OF 7
PROJECT	VERTICAL SCALE	REV. NO	ZONE DATE
	N/A		12-20-2019

ROLL PLOT NO.
27 OF 118

LEGEND:

- WORK AREA
- OPEN TO TRAFFIC
- REMOVALS
- TEMPORARY PAVEMENT
- COMPLETED CLOSED
- LTD. ACCESS RIGHT-OF-WAY
- RIGHT-OF-WAY
- TEMPORARY RIGHT-OF-WAY
- GUARDRAIL

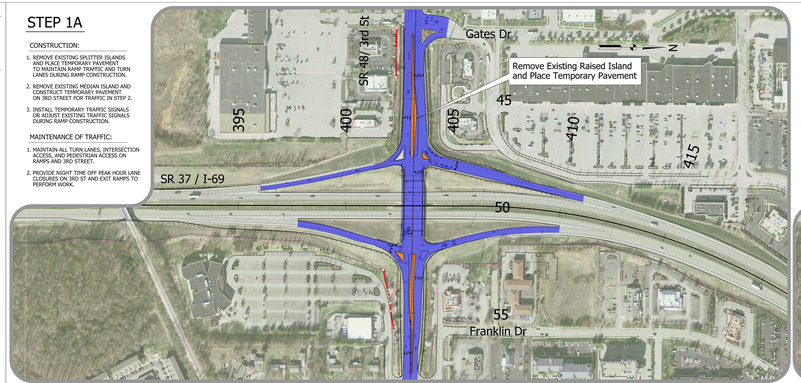
STEP 1A

CONSTRUCTION:

1. REMOVE EXISTING SPLITTER ISLANDS AND PLACE TEMPORARY PAVEMENT TO MAINTAIN RAMP TRAFFIC AND TURN LANES DURING RAMP CONSTRUCTION.
2. REMOVE EXISTING MEDIAN ISLAND AND CONSTRUCT TEMPORARY PAVEMENT ON 3RD STREET FOR TRAFFIC IN STEP 2.
3. INSTALL TEMPORARY TRAFFIC SIGNALS OR ADJUST EXISTING TRAFFIC SIGNALS DURING RAMP CONSTRUCTION.

MAINTENANCE OF TRAFFIC:

1. MAINTAIN ALL TURN LANES, INTERSECTION ACCESS, AND PEDESTRIAN ACCESS ON RAMPS AND 3RD STREET.
2. PROVIDE NIGHT TIME OFF PEAK HOUR LANE CLOSURES ON 3RD ST AND EXIT RAMPS TO PERFORM WORK.



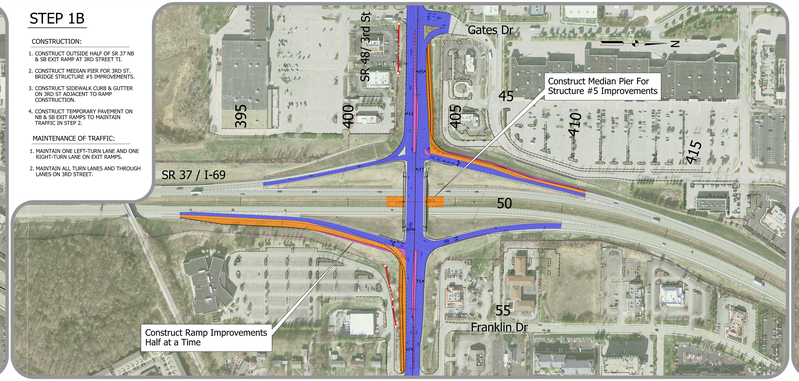
STEP 1B

CONSTRUCTION:

1. CONSTRUCT OUTSIDE HALF OF SR 37 NB & SB EXIT RAMP AT 3RD STREET TL.
2. CONSTRUCT MEDIAN PIER FOR 3RD ST. BRIDGE STRUCTURE #5 IMPROVEMENTS.
3. CONSTRUCT SIDEWALK CURB & GUTTER ON 3RD ST ADJACENT TO RAMP CONSTRUCTION.
4. CONSTRUCT TEMPORARY PAVEMENT ON NB & SB EXIT RAMPS TO MAINTAIN TRAFFIC IN STEP 2.

MAINTENANCE OF TRAFFIC:

1. MAINTAIN ONE LEFT-TURN LANE AND ONE RIGHT-TURN LANE ON EXIT RAMPS.
2. MAINTAIN ALL TURN LANES AND THROUGH LANES ON 3RD STREET.



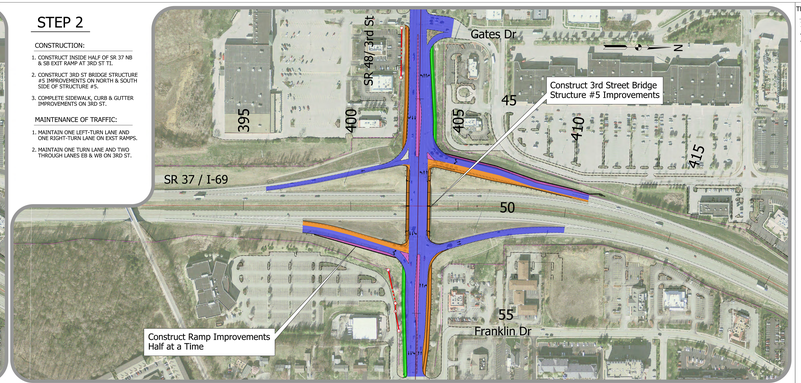
STEP 2

CONSTRUCTION:

1. CONSTRUCT INSIDE HALF OF SR 37 NB & SB EXIT RAMP AT 3RD ST TL.
2. CONSTRUCT 3RD ST BRIDGE STRUCTURE #5 IMPROVEMENTS ON NORTH & SOUTH SIDE OF STRUCTURE #5.
3. COMPLETE SIDEWALK, CURB & GUTTER IMPROVEMENTS ON 3RD ST.

MAINTENANCE OF TRAFFIC:

1. MAINTAIN ONE LEFT-TURN LANE AND ONE RIGHT-TURN LANE ON EXIT RAMPS.
2. MAINTAIN ONE TURN LANE AND TWO THROUGH LANES EB & WB ON 3RD ST.



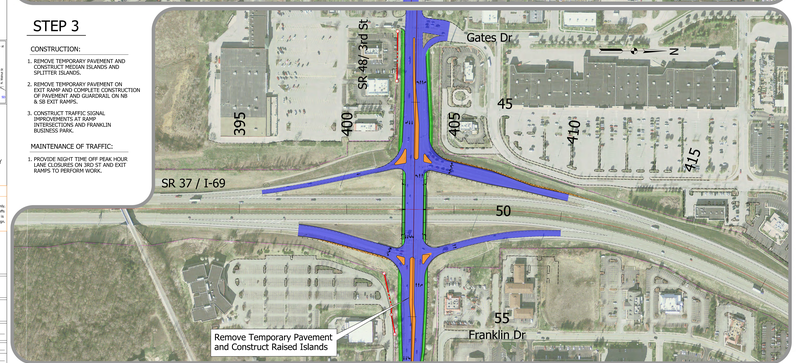
STEP 3

CONSTRUCTION:

1. REMOVE TEMPORARY PAVEMENT AND CONSTRUCT MEDIAN ISLANDS AND SPLITTER ISLANDS.
2. REMOVE TEMPORARY PAVEMENT ON EXIT RAMP AND COMPLETE CONSTRUCTION OF PAVEMENT AND GUARDRAIL ON NB & SB EXIT RAMPS.
3. CONSTRUCT TRAFFIC SIGNAL IMPROVEMENTS AT RAMP INTERSECTIONS AND FRANKLIN BUSINESS PARK.

MAINTENANCE OF TRAFFIC:

1. PROVIDE NIGHT TIME OFF PEAK HOUR LANE CLOSURES ON 3RD ST AND EXIT RAMPS TO PERFORM WORK.



SCALE: 1 INCH = 100 FEET (HORIZONTAL)

LAYOUT MAP

DESIGN SPEED:

MAINLINES - 70 MPH
RAMPS - 50 MPH
- 45 MPH
CROSS STREETS - 35 MPH

FUNCTIONAL CLASS: RURAL HIGHWAY

TERRAIN: ROLLING

PRELIMINARY ONLY

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I-69 DEVELOPMENT PARTNERS

MAINTENANCE OF TRAFFIC (MOT) YEAR 1

SUBSECTION 5B
ROLL PLOT
SR 48/ 3RD STREET

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER DATE

DESIGNED: NG DRAWN: CC
APPROVED: CHECKED: SD

DESIGNATION:	HORIZONTAL SCALE:	2400 NO:	007 NO:
	1" = 50'	DIR A-R&L-NO:	2.00 T:
PROJECT:	VERTICAL SCALE:	RDX NO:	2400 DATE:
	N/A		1/4/2019

ROLL PLOT NO.
28 OF 118

TECHNICAL PROPOSAL - ROLL PL

ITP Exhibit B -
4.2.1.1.a Construction Staging, Traffic Control and Sequencing

SCALE: 1 INCH = 100 FEET (HORIZONTAL)

LAYOUT MAP

DESIGN SPEED:

MAINLINES - 70 MPH
RAMPS - 50 MPH
- 45 MPH
CROSS STREETS - 35 MPH

FUNCTIONAL CLASS: RURAL HIGHWAY

TERRAIN: ROLLING

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I-69 DEVELOPMENT PARTNERS

MAINTENANCE OF TRAFFIC (MOT) YEAR 1

SUBSECTION 5B
ROLL PLOT
SR 48/ 3RD STREET

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER DATE

DESIGNED: NG DRAWN: CC
APPROVED: CHECKED: SD

DESIGNATION:	HORIZONTAL SCALE:	2400 NO:	007 NO:
	1" = 50'	DIR A-R&L-NO:	2.00 T:
PROJECT:	VERTICAL SCALE:	RDX NO:	2400 DATE:
	N/A		1/4/2019

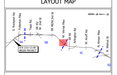
ROLL PLOT NO.
28 OF 118

LEGEND:

- WORK AREA
- OPEN TO TRAFFIC
- REMOVALS
- TEMPORARY PAVEMENT
- COMPLETED CLOSED
- LTD. ACCESS RIGHT-OF-WAY
- RIGHT-OF-WAY
- TEMPORARY RIGHT-OF-WAY
- GUARDRAIL

SCALE: 1 INCH = 100 FEET (HORIZONTAL)

LAYOUT MAP



DESIGN SPEED:

MAINLINES - 70 MPH
RAMPS - 50 MPH
- 45 MPH
CROSS STREETS - 35 MPH

FUNCTIONAL CLASS: RURAL HIGHWAY

TERRAIN: ROLLING

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I-69 DEVELOPMENT PARTNERS

MAINTENANCE OF TRAFFIC (MOT) YEAR 2

SUBSECTION 5B
ROLL PLOT
VERNAL PIKE

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: TG DRAWN: CC

APPROVED: CHECKED: SD

DESIGNATION	HORIZONTAL SCALE	DWG NO	SHT NO
	1" = 50'	DP-MOT-R5b-002	2 OF 7
PROJECT	VERTICAL SCALE	REV. NO	DWG DATE
	N/A		12-20-2019

ROLL PLOT NO.
29 OF 118

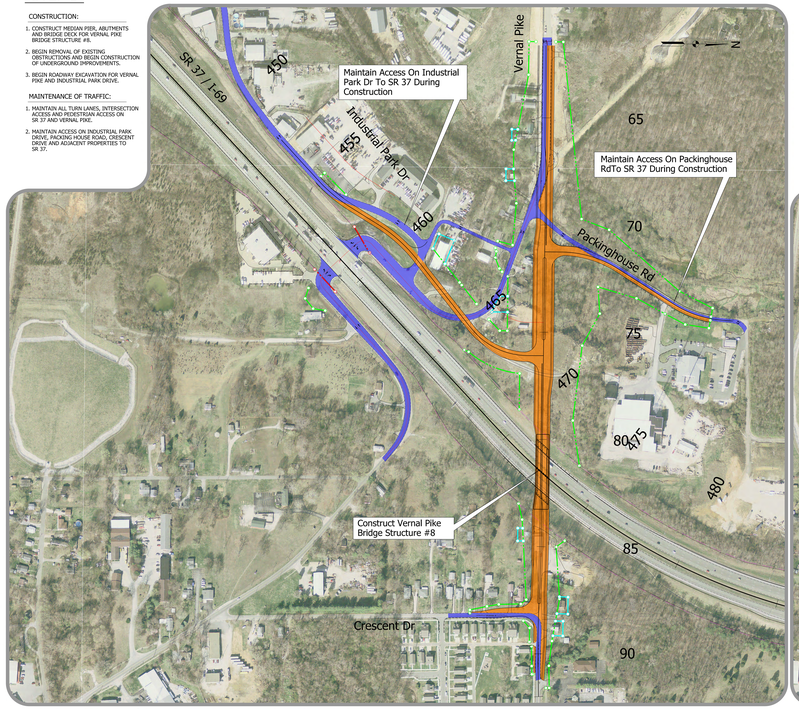
STEP 1

CONSTRUCTION:

1. CONSTRUCT MEDIAN PIER, ABUTMENTS AND BRIDGE DECK FOR VERNAL PIKE BRIDGE STRUCTURE #8.
2. BEGIN REMOVAL OF EXISTING OBSTRUCTIONS AND BEGIN CONSTRUCTION OF UNDERGROUND IMPROVEMENTS.
3. BEGIN ROADWAY EXCAVATION FOR VERNAL PIKE AND INDUSTRIAL PARK DRIVE.

MAINTENANCE OF TRAFFIC:

1. MAINTAIN ALL TURN LANES, INTERSECTION ACCESS AND PEDESTRIAN ACCESS ON SR 37 AND VERNAL PIKE.
2. MAINTAIN ACCESS ON INDUSTRIAL PARK DRIVE, PACKING HOUSE ROAD, CRESCENT DRIVE AND ADJACENT PROPERTIES TO SR 37.



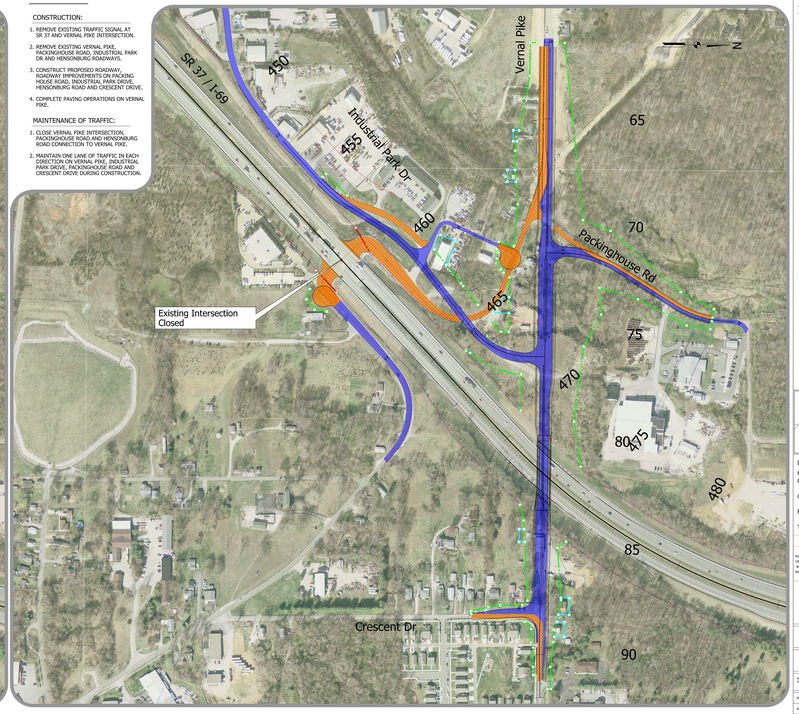
STEP 2

CONSTRUCTION:

1. REMOVE EXISTING TRAFFIC SIGNAL AT SR 37 AND VERNAL PIKE INTERSECTION.
2. REMOVE EXISTING VERNAL PIKE, PACKINGHOUSE ROAD, INDUSTRIAL PARK DR AND HENSONBURG ROADWAYS.
3. CONSTRUCT PROPOSED ROADWAY, ROADWAY IMPROVEMENTS ON PACKING HOUSE ROAD, INDUSTRIAL PARK DRIVE, HENSONBURG ROAD AND CRESCENT DRIVE.
4. COMPLETE PAVING OPERATIONS ON VERNAL PIKE.

MAINTENANCE OF TRAFFIC:

1. CLOSE VERNAL PIKE INTERSECTION, PACKINGHOUSE ROAD AND HENSONBURG ROAD CONNECTION TO VERNAL PIKE.
2. MAINTAIN ONE LANE OF TRAFFIC IN EACH DIRECTION ON VERNAL PIKE, INDUSTRIAL PARK DRIVE, PACKINGHOUSE ROAD AND CRESCENT DRIVE DURING CONSTRUCTION.



ROLL PLOT NO.
29 OF 118

TECHNICAL PROPOSAL - ROLL PLOT

ITP Exhibit B -
4.2.1.1.a Construction Staging, Traffic Control and Sequencing

SCALE: 1 INCH = 100 FEET (HORIZONTAL)

LAYOUT MAP

DESIGN SPEED:

MAINLINES - 70 MPH
RAMPS - 50 MPH
- 45 MPH
CROSS STREETS - 35 MPH

FUNCTIONAL CLASS: RURAL HIGHWAY

TERRAIN: ROLLING

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I-69 DEVELOPMENT PARTNERS

MAINTENANCE OF TRAFFIC (MOT) YEAR 2

SUBSECTION 5B
ROLL PLOT
VERNAL PIKE

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: TG DRAWN: CC

APPROVED: CHECKED: SD

DESIGNATION	HORIZONTAL SCALE	DWG NO	SHT NO
	1" = 50'	DP-MOT-R5b-002	2 OF 7
PROJECT	VERTICAL SCALE	REV. NO	DWG DATE
	N/A		12-20-2019

LEGEND:

- WORK AREA
- OPEN TO TRAFFIC
- REMOVALS
- TEMPORARY PAVEMENT
- COMPLETED CLOSED
- LTD. ACCESS RIGHT-OF-WAY
- RIGHT-OF-WAY
- TEMPORARY RIGHT-OF-WAY
- GUARDRAIL

SCALE: 1 INCH = 100 FEET (HORIZONTAL)

LAYOUT MAP

STEP 1

CONSTRUCTION:

1. BEGIN REMOVAL OF EXISTING OBJECTS OUTSIDE CLEAR ZONE WITHIN THE ROW.
2. REMOVE EXISTING FULLERTON PIKE ROADWAY PAVEMENT STA 32+20 TO STA 74+00.
3. CONSTRUCT RETAINING WALL ALONG NORTH SIDE OF FULLERTON PIKE ROAD.
4. CONSTRUCT MEDIAN PIER AND BRIDGE ABUTMENTS FOR FULLERTON PIKE BRIDGE STRUCTURE #2.
5. CONSTRUCT FINAL PAVEMENT:
   A) SR 37/I-69 MAIN LINE MEDIAN PAVEMENT STA 240+75 TO STA 252+25.
   B) FULLERTON PIKE ROAD STA 32+20 TO STA 45+00 AND STA 53+00 TO STA 74+00.
   C) NB EXIT RAMP
   D) NB ON-RAMP
   E) SB ON-RAMP
   F) SB EXIT RAMP
6. CONSTRUCT TRAFFIC SIGNALS AT NB AND SB RAMP INTERSECTIONS AT FULLERTON PIKE ROAD.

MAINTENANCE OF TRAFFIC:

1. CLOSE FULLERTON PIKE ROAD FROM STA 32+20 TO STA 74+00. DETOUR TRAFFIC TO TAPP ROAD TI VIA LEONARD SPRINGS ROAD AND ROCKPORT ROAD. SEE YEAR-2 FULLERTON PIKE DETOUR PLAN.
2. CLOSE NB AND SB LEFT-TURN LANES ON SR 37 AT FULLERTON PIKE ROAD.
3. MAINTAIN TWO THROUGH LANES NB AND SB ON SR 37/I-69.
4. MAINTAIN ROCKPORT ROAD NB AND SB THROUGH TRAFFIC AT THE INTERSECTION WITH EXISTING FULLERTON PIKE ROAD DURING CONSTRUCTION.

DESIGN SPEED:

MAINLINES	- 70 MPH
RAMPS	- 50 MPH
	- 45 MPH
CROSS STREETS	- 35 MPH

FUNCTIONAL CLASS: RURAL HIGHWAY

TERRAIN: ROLLING

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I-69 DEVELOPMENT PARTNERS

MAINTENANCE OF TRAFFIC (MOT) YEAR 2

SUBSECTION 5A
ROLL PLOT
FULLERTON PIKE ROAD

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: TG DRAWN: CC

APPROVED: CHECKED: SD

DESIGNATION:	HORIZONTAL SCALE:	2400 NO	2017 NO
	1" = 50'	DRY-A-WALL-INC	A-08 T
PROJECT:	VERTICAL SCALE:	400 NO	2400 DATE
	N/A		1/4/2018

ROLL PLOT NO.
30 OF 118

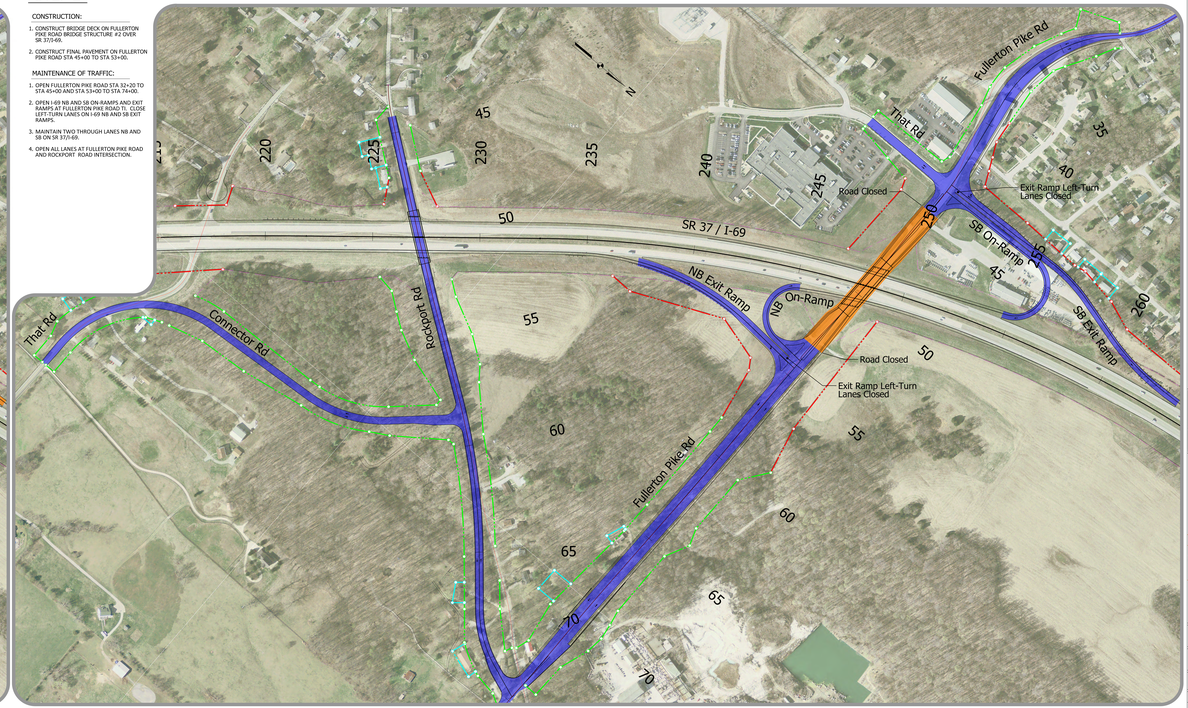
STEP 2

CONSTRUCTION:

1. CONSTRUCT BRIDGE DECK ON FULLERTON PIKE ROAD BRIDGE STRUCTURE #2 OVER SR 37/I-69.
2. CONSTRUCT FINAL PAVEMENT ON FULLERTON PIKE ROAD STA 45+00 TO STA 53+00.

MAINTENANCE OF TRAFFIC:

1. OPEN FULLERTON PIKE ROAD STA 32+20 TO STA 45+00 AND STA 53+00 TO STA 74+00.
2. OPEN I-69 NB AND SB ON-RAMPS AND EXIT RAMPS AT FULLERTON PIKE ROAD TI. CLOSE LEFT-TURN LANES ON I-69 NB AND SB EXIT RAMPS.
3. MAINTAIN TWO THROUGH LANES NB AND SB ON SR 37/I-69.
4. OPEN ALL LANES AT FULLERTON PIKE ROAD AND ROCKPORT ROAD INTERSECTION.



SCALE: 1 INCH = 100 FEET (HORIZONTAL)

LAYOUT MAP

DESIGN SPEED:

MAINLINES	- 70 MPH
RAMPS	- 50 MPH
	- 45 MPH
CROSS STREETS	- 35 MPH

FUNCTIONAL CLASS: RURAL HIGHWAY

TERRAIN: ROLLING

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I-69 DEVELOPMENT PARTNERS

MAINTENANCE OF TRAFFIC (MOT) YEAR 2

SUBSECTION 5A
ROLL PLOT
FULLERTON PIKE ROAD

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: TG DRAWN: CC

APPROVED: CHECKED: SD

DESIGNATION:	HORIZONTAL SCALE:	2400 NO	2017 NO
	1" = 50'	DRY-A-WALL-INC	A-08 T
PROJECT:	VERTICAL SCALE:	400 NO	2400 DATE
	N/A		1/4/2018

ROLL PLOT NO.
30 OF 118

TECHNICAL PROPOSAL - ROLL PLOT

ITP Exhibit B -
4.2.1.1.a Construction Staging, Traffic Control and Sequencing