GENERAL NOTES

All work shall be done in accordance with the latest edition of the Colorado Department of Transportation Standard Specifications for Road and Bridge Construction and as noted in the drawings.

The following table gives the minimum lap splice length for epoxy coated reinforcing bars placed in accordance with Subsection 602.06. These splice lengths shall be increased by 25% for bars spaced at less than 6" on center or less than 3" lateral cover.

Bar size	#4	#5	#6	#7	#8	#9	#10	#11
Splice length for Class D Concrete	1'-3"	1'-7"	2'-5"	2'-10"	3'-8"	4'-8"	5'-11"	7'-3"

When the Contractor elects to substitute epoxy coated reinforcement for black reinforcing bars, the minimum lap splice shall be as described above.

Unless otherwise noted in the plans, the following table gives the minimum lap splice length for black reinforcing bars placed in accordance with Subsection 602.06. These splice lengths shall be increased by 25% for bars spaced at less than 6" on center or less than 3" lateral cover.

Bar size	#4	#5	#6	#7	#8	#9	#10	#11
Splice length for Class D Concrete	1'-1"	1'-4"	1'-7"	1'-11"	2'-6"	3'-1"	3'-11"	4'-10"

Splice criteria for Class D Concrete shall also apply to Class DR Concrete, Class DT Concrete, and Concrete (Patching).

All the provisions for bridge deck concrete shall also apply to approach slab concrete.

All reinforcing steel shall be epoxy coated unless otherwise noted.

(N) denotes non-coated reinforcing steel.

Grade 60 reinforcing steel is required.

Expansion joint material shall meet AASHTO Specification M213.

The following structural steel shall be AASHTO M270 Grade 36 (ASTM A709) or Grade 50 (ASTM A709): expansion device anchor bars, cover plates, temporary bridge deck plates and asphaltic joint bridging plates.

The following structural steel shall be AASHTO M270 (ASTM A709) Grade 36 or Grade 50 (ASTM A709): expansion device rails for strip seals.

The following structural steel shall be AASHTO M270 (ASTM A709) Grade 50: expansion device rails for modulars.

Field welding of any kind shall not be permitted on the steel girders unless specifically called for in the plans.

The Contractor shall be responsible for the stability of the structure during all phases of construction.

Falsework and forming may be required.

All falsework shall conform to the requirements of Subsection 601.11 of the 20-- CDOT Standard Specifications for Road and Bridge Construction.

Unless otherwise noted, dimensions contained in these plans are calculated from the "As Constructed Plans". These dimensions may be adjusted to meet the existing structure. The Contractor shall verify all dependent dimensions in the field before ordering or fabricating any material.

All longitudinal and transverse dimensions are measured horizontally and include no correction for grade.

Before removal, the Contractor shall verify the existing HMA thickness on the bridge deck and approach slabs in accordance with the special provisions Removal of Asphalt Mat (Planing)(Special).

All asphalt material and remaining membrane per phase shall be removed from the surface of the concrete deck prior to concrete removal in accordance with the special provisions Removal of Asphalt Mat (Planing)(Special).

After the removal of asphalt and membrane per phase, the entire bridge deck per phase shall be sounded for delamination according to ASTM D-4580. All unsound concrete shall be marked and removed as directed by the Engineer. Costs for sounding shall be included in the work.

Overlay of planed deck areas shall be completed within 14 calendar days following the removal of asphalt planing, unless otherwise approved by the Engineer.

Deck rehabilitation quantities are approximate. Final location shall be determined by the Engineer. Payment will be for the actual area repaired and material used as approved by the Engineer. Rehabilitation quantities in addition to plan quantities will be measured and paid for at the unit price for the appropriate bid item.

The Contractor may stockpile deck repair material at own risk. All unused material shall remain property of the Contractor. CDOT will not purchase leftover materials or pay any restocking fees.

After removal of concrete, all exposed rebar shall be cleaned of all loose concrete by chipping and/or sandblasting, and this shall be included in the cost of the work. Sandblasting shall not be performed on epoxy coated reinforcing steel.

Unless noted otherwise on the plans, the proposed overlay shall be placed to the grade and cross slope of the existing concrete deck.

All saw water, coring waste, concrete washout and any other construction debris shall be collected and disposed of off site in accordance with all applicable Federal, State, and Local Regulations at no additional cost to the project. Under no circumstances shall such material be allowed to enter any natural or manmade water way or storm drain.

The Contractor shall protect pedestrians and traveling public from any falling debris during the construction work. Any debris which falls on paths or roadways shall be removed immediately. This work will not be measured and paid for separately, but shall be included in the cost of the work.

The Contractor is responsible for making their own determination as to the type and location of utilities as may be necessary to avoid damage thereto. The Contractor shall contact the Utility Notification Center of Colorado at 811 (1-800-922-1987) at least three business days (two full business days in advance not including the day of notification) prior to any excavation or other earthwork.

Manufacturer's representatives will be required on-site during installation of expansion devices and placement of polyester concrete overlay. See Project Special Provisions.

Lead-based paint is present on the existing structure. Removal of hazardous material shall be in accordance with Section 250, as well as applicable EPA and OSHA regulations. Cutting or burning of painted surfaces is prohibited unless lead-based paints are neutralized or removed prior to cutting procedures or lead fumes are properly contained.

The Contractor shall take all steps to avoid contaminating state waters, in accordance with subsection 107.25.

WELDING AND STEEL REPAIR NOTES

All welding be performed by AWS Certified Welders.

All safety requirements for welding procedures by OHSA shall be followed.

The welding inspector shall be on AWS Certified Welding Inspector (CWI) in conformance with the provisions of AWS QC1.

Personnel performing nondestructive testing shall be qualified in accordance with AWS D1.5, 6.1.3.4.

After repair is complete, surface shall be prepared for paint per SSPC-SP1 and SSPC-SP2.

Certified surface shall be painted in accordance with SSPC-Paint 20, Type II, Level I.

INDEX OF DRAWINGS

B-100-1AR

B01 GENERAL INFORMATION
B02 ---

Designer/Detailer:

This sheet lists the various general notes and design data which are commonly used on bridge preservation and repair projects. They shall be modified as necessary for specific projects.
The number of calendar days a deck is left open shall be discussed with the Region.

DESIGN DATA

AASHTO Standard Specification for Highway Bridges, Sixteenth Edition, 1996, with 1997 interims for bar splice table.

Reinforced Concrete:

Class D Concrete:	f'c = 4,500 psi
Class DF Concrete:	f'c = 4,500 psi
Class DR Concrete:	f'c = 4,500 psi
Class DT Concrete:	f'c = 4,500 psi
Concrete (Patching):	f'c = 4,500 psi
Reinforcing Steel:	fy = 60,000 psi

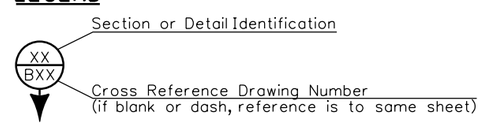
Structural Steel:	AASHTO M270 (ASTM A709) GRADE 36	fy = 36,000 psi
	AASHTO M270 (ASTM A709)Grade 50W	fy = 50,000 psi
	AASHTO M270 (ASTM A709)Grade 50	fy = 50,000 psi

ABBREVIATIONS

(Per M-100-2 or as shown below)

Ea	= Each
BF	= Back Face
FF	= Front Face
FFBW	= Front Face Backwall
RC	= Reinforced Concrete
WSEL	= Water Surface Elevation

LEGEND



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Revision Dates: 3/22 | 3/23 | 9/ 24

INITIALS | DESIGN | DATE | DETAIL | DATE | QUANTITY | DATE
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Checked By

All seals for this set of drawings are applied to the cover page(s)

Print Date: $DATE$
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Unit Information Unit Leader Initials

Sheet Revisions

Date:	Comments	Init.

Colorado Department of Transportation
2829 West Howard Place, 3rd Floor
Denver, CO 80204
Phone: 303-512-4079
FAX: 303-757-9197
Staff Bridge Branch Initials

As Constructed
No Revisions:
Revised:
Void:

GENERAL INFORMATION

Designer:	XXXXXXXX	Structure Numbers	X-XX-XX
Detailer:	XXXXXXXX		X-XX-XX
Sheet Subset:	BRIDGE	Subset Sheets:	BXX of XXX

Project No./Code
Project Number
Code
Sheet Number

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