GENERAL NOTES

A COLORED STRUCTURAL CONCRETE COATING FINISH WILL BE REQUIRED, AS SHOWN ON THE PLANS, ON EXPOSED CONCRETE SURFACES. THE COLOR SHALL BE EQUIVALENT TO FEDERAL STANDARD 595B COLOR NO. 30313, AND IS TO BE SELECTED FROM TEST PANELS PROVIDED BY THE CONTRACTOR.

EXPANSION JOINT MATERIAL SHALL MEET AASHTO SPECIFICATION M213.

THE FINAL FINISH FOR THE SURFACES OF CURBS SHALL BE CLASS 2, ALL OTHER EXPOSED CONCRETE SURFACES SHALL RECEIVE A CLASS 1 FINAL FINISH TO ONE FOOT BELOW GROUND LINE.

GRADE 60 REINFORCING STEEL IS REQUIRED.

ALL REINFORCING STEEL SHALL BE EPOXY COATED UNLESS OTHERWISE NOTED.

(N) DENOTES NON COATED REINFORCING STEEL.

FOR STRUCTURE NUMBER INSTALLATION, SEE STANDARD S-614-12.

LEVELING PADS OR UNLAMINATED BEARINGS... THEY SHALL BE CUT OR MOLDED FROM AASHTO ELASTOMER GRADE 3, 4, OR 5 AS DESCRIBED IN TABLES 705-1 AND 705-2 WITH A DUROMETER (SHORE "A") HARDNESS OF 60.

STAY IN PLACE STEEL DECK FORMS ARE REQUIRED.

THE INFORMATION SHOWN ON THESE PLANS CONCERNING THE TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO. THE CONTRACTOR SHALL CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO AT 1-800-922-1987 AT LEAST 2 DAYS (NOT INCLUDING THE DAY OF NOTIFICATION) PRIOR TO ANY EXCAVATION OR OTHER EARTHWORK.

DESIGN DATA

AASHTO, THIRD EDITION LRFD, 2004

DESIGN METHOD: LOAD AND RESISTANCE FACTOR DESIGN

LIVE LOAD: HL-93 (DESIGN TRUCK OR TANDEM, AND DESIGN LANE LOAD) + COLORADO PERMIT VEHICLE

DEAD LOAD: ASSUMES 36 LBS. PER SQ. FT. FOR FUTURE BRIDGE DECK OVERLAY ASSUMES 5 LBS. PER SQ. FT. FOR STAY IN PLACE FORMS.
ASSUMES WEIGHT OF DRAINAGE PIPE.

REINFORCED CONCRETE:

CLASS D CONCRETE: f'c = 4,500 psi
REINFORCING STEEL: fy = 60,000 psi

CAISSON CONCRETE:

CLASS BZ CONCRETE: f'c = 4,000 psi
REINFORCING STEEL: fy = 60,000 psi

DECK CONCRETE:

CLASS H CONCRETE: f'c = 4,500 psi
REINFORCING STEEL: fy = 60,000 psi

PRESTRESSED CONCRETE:

CLASS PS CONCRETE: f'c = (SEE GIRDER DETAILS)
f'ci = 270,000 psi

REINFORCING

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.

BAR SIZE	#4	#5	#6	#7	#8	#9	#10	#11
SPLICE LENGTH FOR CLASS D & CLASS H CONCRETE	1'-7"	2'-0"	2'-6"	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.

THE FOLLOWING TABLE GIVES THE MINIMUM LAP SPLICE LENGTH FOR BLACK REINFORCING BARS PLACED IN ACCORDANCE WITH SUBSECTION 602.06.

BAR SIZE	#4	#5	#6	#7	#8	#9	#10	#11
SPLICE LENGTH FOR CLASS D & CLASS H CONCRETE	1'-4"	1'-8"	2'-0"	2'-4"	3'-1"	3'-10"	4'-11"	6'-0"

THE ABOVE SPLICE LENGTHS SHALL BE INCREASED BY 20 PERCENT FOR 3 BAR BUNDLES AND 33 PERCENT FOR 4 BAR BUNDLES.

THE ABOVE SPLICE LENGTHS MAY BE REDUCED BY 20% WHEN 3" OF CLEAR COVER EXISTS AND BAR SPACING IS 6" OR GREATER ON CENTER.

ALL SPLICES SHALL BE STAGGERED UNLESS SHOWN OTHERWISE.

ABBREVIATIONS

E.F. = EACH FACE
F.F. = FAR FACE
N.F. = NEAR FACE
WP = WORKING POINT

CROSS REFERENCE DRAWING NUMBER
(IF BLANK, REFERENCE IS TO SAME SHEET)

SECTION OR DETAIL IDENTIFICATION

INDEX OF DRAWINGS

SHEET NO.	TITLE
B1	GENERAL INFORMATION
B2	GENERAL LAYOUT (1 OF 2)
B3	GENERAL LAYOUT (2 OF 2)
B4	CONSTRUCTION LAYOUT & FOUNDATION LAYOUT (1 OF 2)
B5	CONSTRUCTION LAYOUT & FOUNDATION LAYOUT (2 OF 2)
B6	CAISSON AND DRIVEN PILE DETAILS
B7	ABUTMENT 1 DIMENSIONS
B8	ABUTMENT 5 DIMENSIONS
B9	ABUTMENT DETAILS
B10	ABUTMENT REINFORCING (1 OF 2)
B11	ABUTMENT REINFORCING (2 OF 2)
B12	PIER 2 DIMENSIONS
B13	PIER 3 DIMENSIONS
B14	PIER 4 DIMENSIONS
B15	TYPICAL PIER COLUMN DETAILS
B16	PIER CAP AND DIAPHRAGM DETAILS (1 OF 2)
B17	PIER CAP AND DIAPHRAGM DETAILS (2 OF 2)
B18	SUPERSTRUCTURE SECTION
B19	SLAB REINFORCING PLAN
2 B20	PRESTRESSED CONCRETE I-GIRDER (1 OF 3)
B21	PRESTRESSED CONCRETE I-GIRDER (2 OF 3)
B22	PRESTRESSED CONCRETE I-GIRDER (3 OF 3)
B23	ENGINEERING GEOLOGY
B24	BRIDGE HYDRAULIC INFORMATION (1 OF 3)
B25	BRIDGE HYDRAULIC INFORMATION (2 OF 3)
B26	BRIDGE HYDRAULIC INFORMATION (3 OF 3)

PROJECT STANDARD DRAWINGS

SHEET NO.	TITLE
BS1	BACKFILL AT ABUTMENTS
BS2	MECHANICALLY STABILIZED BACKFILL
BS6	BRIDGE RAIL TYPE 10M MODIFIED (1 OF 2)
BS7	BRIDGE RAIL TYPE 10M MODIFIED (1 OF 2)
2 BS8	APPROACH SLAB TYPE I DETAILS (1 OF 3)
BS9	APPROACH SLAB TYPE I DETAILS (2 OF 3)
BS10	APPROACH SLAB TYPE I DETAILS (3 OF 3)
BS11	BRIDGE EXPANSION DEVICE DETAILS TYPE I (1 OF 3)
BS12	BRIDGE EXPANSION DEVICE DETAILS TYPE I (2 OF 3)
BS13	BRIDGE EXPANSION DEVICE DETAILS TYPE I (3 OF 3)
BS14	BRIDGE DRAIN DETAILS TYPE I
BS15	LIGHT POLE ATTACHMENT DETAILS

BRIDGE DESCRIPTION

FOUR SPAN (88'-1", 90'-8½", 114'-8½", 98'-8½")
PRESTRESSED BULB TEE GIRDER BRIDGE WITH
CAST-IN-PLACE CONCRETE SLAB CARRYING
I-25 SBCD OVER MONUMENT CREEK.
STRUCTURE IS 42'-0" OUT TO OUT,
WITH TYPE 10M BRIDGE RAIL.

ROCKRIMMON CONSTRUCTORS
RELEASED FOR CONSTRUCTION

COLORADO REGISTERED PROFESSIONAL ENGINEER
BRENDAN A. [illegible]
36772
11/21/05

Computer File Information
Date Plotted: 11/21/2005
Time Plotted: 1:55:26 PM
Plotted By: jrichac3
CAD Ver: MicroStation V8 2004
AFC ERP*3
3275D4.DS3
Scale: DScale
Units: US Survey Foot
Bridge

Designed By: B.F.G.	ISSUE RECORD		
	NO.	DESCRIPTION	DATE
Detailed By: M.M.M.	A	60% DESIGN SUBMITTAL	10/04/05
	1	APPROVED FOR CONSTRUCTION SUBMITTAL ERP *2	10/14/05
Checked By: A.M.L.	2	APPROVED FOR CONSTRUCTION SUBMITTAL ERP *3	11/21/05

ROCKRIMMON CONSTRUCTORS
COSMIX. COLORADO SPRINGS METRO INTERSTATE EXPANSION

DESIGN SEGMENT 3
NORTHBOUND CD OVER MONUMENT CREEK
GENERAL INFORMATION

File Name: DS3-BRNP-GN01.dgn
Structure Number: I-17-NP
Project No./Code: IM 0252-370 S.A. 14740
Project Dwg. No.: DS3-NP-B1
Structure Sheet No.: B1 of 26