

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 COLDERS NO. 30313 AND 30227, 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 THE TYPE 7 BRIDGE RAIL SHALL BE CLASS 2. ALL OTHER EXPOSED CONCRETE SURFACES SHALL RECEIVE A CLASS 1 FINISH TO ONE FOOT BELOW THE 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 ARE 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 THERE TO. 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

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's = 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"

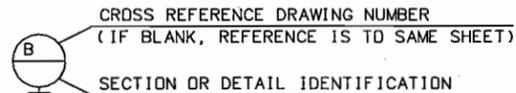
THE ABOVE SPLICE LENGTHS SHALL BE INCREASED BY 20 PERCENT FOR 3 BAR BUNDLES AND 33 PERCENT FOR 4 BAR BUNDLES.

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



INDEX OF DRAWINGS

SHEET NO.	TITLE
B1	GENERAL INFORMATION
B2	GENERAL LAYOUT (1 OF 2)
B3	GENERAL LAYOUT (2 OF 2)
B4	CONSTRUCTION LAYOUT
B5	FOUNDATION LAYOUT
B6	CAISSON AND DRIVEN PILE DETAILS
B7	ABUTMENT 1 DIMENSIONS (1 OF 2)
B8	ABUTMENT 1 DIMENSIONS (2 OF 2)
B9	ABUTMENT 3 DIMENSIONS (1 OF 2)
B10	ABUTMENT 3 DIMENSIONS (2 OF 2)
B11	ABUTMENT REINFORCING (1 OF 2)
B12	ABUTMENT REINFORCING (2 OF 2)
B13	PIER 2 DIMENSIONS
B14	COLUMN DETAILS
B15	PIER CAP AND DIAPHRAGM DETAILS (1 OF 3)
B16	PIER CAP AND DIAPHRAGM DETAILS (2 OF 3)
B17	PIER CAP AND DIAPHRAGM DETAILS (3 OF 3)
B18	GROUT PAD DETAILS
B19	SUPERSTRUCTURE SECTION
B20	SLAB REINFORCING PLAN
B21	PRESTRESSED CONCRETE U-GIRDER (1 OF 3)
B22	PRESTRESSED CONCRETE U-GIRDER (2 OF 3)
B23	PRESTRESSED CONCRETE U-GIRDER (3 OF 3)

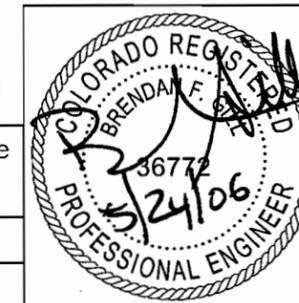
PROJECT STANDARD DRAWINGS

SHEET NO.	TITLE
BS1	BACKFILL AT ABUTMENTS
BS2	MECHANICALLY STABILIZED BACKFILL
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)
BS24	APPROACH SLAB TYPE IV DETAILS (1 OF 2)
BS25	APPROACH SLAB TYPE IV DETAILS (2 OF 2)
BS26	ARCHITECTURAL RAIL DETAILS (1 OF 3)
BS27	ARCHITECTURAL RAIL DETAILS (2 OF 3)
BS28	ARCHITECTURAL RAIL DETAILS (3 OF 3)

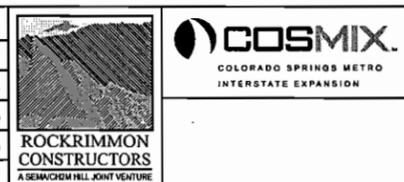
BRIDGE DESCRIPTION

TWO SPAN (88'-6", 79'-9") PRESTRESSED COLORADO U-GIRDER BRIDGE WITH CAST-IN-PLACE CONCRETE SLAB CARRYING BIJOU STREET OVER I-25. STRUCTURE IS 114'-6" OUT TO OUT, WITH SIDEWALKS AND BRIDGE RAIL TYPE 10M.

ROCKRIMMON
CONSTRUCTORS
RELEASED FOR
CONSTRUCTION



ISSUE RECORD			
DESIGNED BY:	NO.	DESCRIPTION	DATE
B.F.G.	A	60% DESIGN SUBMITTAL	02/22/06
Detailed By:	B	90% DESIGN SUBMITTAL	04/24/06
M.M.M.	1	APPROVED FOR CONSTRUCTION SUBMITTAL	05/24/06
Checked By:			
A.M.L.			



DESIGN SEGMENT 1
BIJOU STREET OVER I-25
GENERAL INFORMATION

File Name	DS1-BR00-GN01.DGN
Structure Number	I-17-00

Project No./Code	IM 0252-370 S.A. 14740
Project Dwg. No.	DS1-00-B1
Structure Sheet No.	B1 of 23