

Fabrication Inspection Report: Steel Products

Project No.: _____

Fabrication Start Date: 12 29 00Bridge Name: Portable G4-929Bridge No.: G4 -929 Length 15.24 meters

Licensee: _____

MOF Contact: _____

Fabricator: ST INGER WELDING LTD.Contractor: MOF

	Component Description			Component Description		
	<u>All Components</u>					
	Conformance	Non-Conformance		Conformance	Non-Conformance	
	MM /DD /YY	Item No. (see page 2)	Date Remedy Observed and Accepted	MM /DD /YY	Item No. (see page 2)	Date Remedy Observed and Accepted
PRIOR TO WELDING						
MATERIAL	12 / 29 / 00	/ /		/ /	/ /	
Identification of material/mill certificates	OK		/ /			/ /
Visual quality inspection	OK		/ /			/ /
DIMENSIONS	12 / 29 / 00	/ /		/ /	/ /	
Top flange width 1 (& width 2 if applicable)	OK		/ /			/ /
Top flange thickness	OK		/ /			/ /
Top flange (or flange section) length	OK		/ /			/ /
Top flange flatness, tilt	OK		/ /			/ /
Bottom flange width 1 (& width 2 if applicable)	OK		/ /			/ /
Bottom flange thickness	OK		/ /			/ /
Bottom flange (or flange section) length	OK		/ /			/ /
Bottom flange flatness, tilt	OK		/ /			/ /
Web depth	OK		/ /			/ /
Web thickness	OK		/ /			/ /
Web or web section length	OK		/ /			/ /
Stiffeners horiz/vert bearing	OK		/ /			/ /
Camber	OK		/ /			/ /
Sweep tolerance 1/1000	N/A		/ /			/ /
Web splicing: camber, alignment, holes	N/A		/ /			/ /
Preparation of material, assembly	OK		/ /			/ /
WELDING	12 / 29 / 00	/ /		/ /	/ /	
Procedures approved for each process	OK		/ /			/ /
Electrode classification	OK		/ /			/ /
Consumables checked	OK		/ /			/ /

	Component Description			Component Description		
	<u>All Components</u>					
	Conformance	Non-Conformance		Conformance	Non-Conformance	
WELDING (Con□t)		Item No. (see below)	Date Remedy Observed		Item No. (see below)	Date Remedy Observed
Weld locations	OK		/ /			/ /
Weld sizes, profiles	OK		/ /			/ /
Weld details, workmanship	OK		/ /			/ /
Non-destructive testing results	N/A		/ /			/ /
PRIOR TO SHIPPING	01 / 05 / 01	/ /		/ /	/ /	
Finished product dimensions	OK		/ /			/ /
Camber	OK		/ /			/ /
Sweep	N/A		/ /			/ /
Stiffeners	OK		/ /			/ /
Studs	N/A		/ /			/ /
Surfaces	OK		/ /			/ /

Non-Conformance

Item No.	Description of Non-Conformance

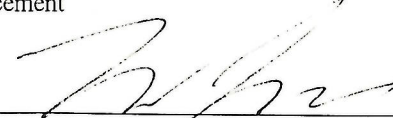
GENERAL COMMENTS: Note overall product acceptability with remarks as above (OK, N/A or NG):

All workmanship and construction material acceptable.

FABRICATION COMPLETION DATE: 01 04 01

REMARKS: OK Item is of acceptable quality
 N/A Item is not applicable
 NG Item quality is not good, needs improvement or replacement


 Inspector's Signature Date: 01 05 01


 Engineer's Signature



Canspec Group
12271 Horseshoe Way
Richmond, BC, Canada V7A 4V4

Phone: (604) 275-3800
Fax: (604) 275-3821

Materials Engineering and Testing
A Rockwood Company

ISO 9002

PROJECT INSPECTION

CLIENT: SARGENT & VAUGHAN ENGINEERING
Unit B, 1595 Bay Street
Victoria, BC
V8R 2B5

JOB NO: 1E0014

REPORT NO: 2

DATE: January 31, 2001

PROJECT: Forestry Bridges

SPECIFICATION: Forest Service Bridge Design
and Construction Manual /
CSA W59-12

ENG. CONSULTANTS: ---

VENDOR: Stinger Welding

EQUIPMENT: Portable G4-929
Prince George Forest Region

ATTENTION: Mr. Dennis Sargent

P.O. NO: Sub-consultant Agreement
August 1, 1998

REPORT BY: C. Fortin

DEFICIENCY SUMMARY:

1.0 December 29, 2000 - Inspection at Stinger Welding - C. Fortin

- 1.1 Shop certification, welding procedures, and welders' qualifications were reviewed — *acceptable*.
- 1.2 Mill certificates were reviewed — *acceptable*.
- 1.3 Submerged-arc and flux-cored welding were proceeding per approved welding procedures, including parameters and consumables.
- 1.4 Fit-ups were *acceptable*.



2.0 January 5, 2001 - Inspection at Stinger Welding - C. Fortin

2.1 In final inspection, all welding was **acceptable**. All dimensions were as per the drawing.
Timber was as specified.

Yours truly,

CANSPEC GROUP INC.

Reviewed by:

A handwritten signature in black ink, appearing to be "CF".

Cy Fortin
CSA W178.2 Level III

A handwritten signature in black ink, appearing to be "AC".

Alex Currie, P.Eng.
CWB III Visual Inspection Supervisor

CF/AC/smo

SCOPE OF SERVICES: The agreement of Canspec Group Inc. to perform services extends only to those services provided for in writing. Under no circumstances shall such services extend beyond the performance of the requested services. It is expressly understood that all descriptions, comments and expressions of opinion reflect the opinions or observations of Canspec based on information and assumptions supplied by the owner/operator and are not intended nor can they be construed as representations or warranties. Canspec is not assuming any responsibilities of the owner/operator and the owner/operator retains complete responsibility for the engineering, manufacture, repair and use decisions as a result of the data or other information provided by Canspec. In no event shall Canspec's liability in respect of the services referred to herein exceed the amount paid for such services.

STANDARD OF CARE: In performing the services provided, Canspec uses the degree, care, and skill ordinarily exercised under similar circumstances by others performing such services in the same or similar locality. No other warranty, expressed or implied, is made or intended by Canspec.



RUSSEL METALS-PRINCE GEORGE
ATTN: DARRELL BECKER
9242 MILWAUKEE WAY
PRINCE GEORGE, BC V2M 2K8
CANADA

RUSSEL METALS-PRINCE GEORGE
ATTN: DARRELL BECKER
9242 MILWAUKEE WAY
PRINCE GEORGE, BC V2M 2K8
CANADA

THIS MATERIAL HAS BEEN MANUFACTURED, TESTED AND FOUND TO MEET THE SPECIFICATIONS AND PURCHASE ORDER REQUIREMENTS
OSM HSLA STRUCTURAL QUALITY PLATE ASTM A588-97 GRADE B CSA-G40.21-98 GRADE 50 AT
CAT III. LCVN 20 FT/LBS AVG @ -20 F (H).

PHYSICAL PROPERTIES									
QTY	DESCRIPTION	HEAT NO.	SLAB	YIELD PSI X 100	TENSILE PSI X 100	% ELONG 8" 2'	% RA	HARDNESS BHN	IMPACTS
4	0.7500 X 96.000M X 720.000 SCHEDULE B: 7208.51.00.00 5 PCS 73510 LBS	+ 106756		580	755	25		LCVN @ -20	DEG F 10.0mm 76 80 103/86 epy
5	1.0000 X 96.000M X 720.000 SCHEDULE B: 7208.51.00.00 2 PCS 39204 LBS	+ 106756		550	745	24		LCVN @ -20	DEG F 10.0mm 85 108 88 /94 epy
15 PCS 186124 LBS TOTALS									

CHEMICAL ANALYSIS

HEAT NO.	C	Mn	P	S	Si	Cu	Ni	V	Cr	Mo	Ti	B	N	Ca	CE
+106756	.14	.91	.007	.008	.34	.30	.16	.038	.032	.47	.02				
+106756	.14	.91	.007	.008	.34	.30	.16	.038	.032	.47	.02				
ALL HEATS INDICATED WITH (+) WERE MELTED AND MANUFACTURED IN THE USA.															
.....	END OF REPORT														

[Signature]
ARISTINE HUNTER
Q.C. RECORDS ADMINISTRATION

I certify the above to be correct as contained in the records of OREGON STEEL MILLS BY

ALGOMA STEEL INC.

P.O. Box 1400, Sault Ste. Marie, Ontario Canada P6A 5P2

CUSTOMER PURCHASE ORDER NUMBER	ENTRY DATE	SHIP DATE	TALLY NUMBER	SHIPPER'S NUMBER	CARRIER	MILL ORDER
M6501529	2000/07/05	2000/10/04	200902	02 -	DWC	-608510 13098

CHARGE TO CUSTOMER NAME AND ADDRESS

RUSSEL METALS INC.
9097 MILWAUKEE WAY
PRINCE GEORGE, B.C.
V2N 2K8

SHIP TO CUSTOMER NAME AND ADDRESS

RUSSEL METALS INC.
C/O INTERIOR WAREHOUSE INC
PRINCE GEORGE, B.C.

MILL TEST REPORTS

ALGOMA STEEL INC. HEREBY CERTIFIES THAT THE MATERIAL HEREIN DESCRIBED WAS MADE AND TESTED IN ACCORDANCE WITH THE RULES OF THE SPECIFICATION SHOWN HEREIN AS CONTAINED IN THE SCOPE OF RECORDS AND WITHIN THE SCOPE OF ACCREDITATION OF ISO/IEC GUIDE 25-1990 AS CONTAINED IN THE COMPANY RECORDS.

B. Thomson
MANAGING METALLURGIST

MARK ON B/L FOR DELY TO RUSSEL METALS, 9097 MILWAUKEE WAY
PRINCE GEORGE - FAX COPY OF B/L TO INTERIOR WHSE LTD. @ 250-563-
7854 & RUSSEL METALS @ 250-561-1663 ATTN: MARTIN COPPIN

INSF T/R TEST REPORTS REQUIRED

CUST
USE
RESALE

CUSTOMER ITEM 6 OUR ITEM 006 DIMENSIONS .750 X 96 X 480 " S H I P P E D * * * * *

PLATE NUMBER	HEAT	NO. PIECES	WEIGHT	PLATE NUMBER	HEAT	NO. PIECES	WEIGHT
07775	6593P 53	1	9801	07776	6593P 53	1	9801
SAMPLE GAUGE .7500				TENSILE * % ELONG *			
TEST COND. CR				TEST YIELD KSI			
TEST METH. .2				T KSI 77			

IMPACT TESTS

HEAT	SAMPLE GAUGE	TEST COND. CR	TEST METH. CVN	TEST DIR. L	TEST SHAPE FULL	TEST COUPON TEMP. -22F	TEST * FULLSIZE ENERGY * FTLB FTLB AVG.
6593P	.7500	CR	CVN	L	FULL	-22F	248 262 269 260
* * * * * C H E M I C A L P R O P E R T I E S * * * * *							
HEAT	C	MN	P	S	SI	CR	NI
6593P	.08	1.16	.011	.009	.43	.59	.30
* * * * * M O A L T A L S C B V B T I S N							

WARNING

THE TEST RESULTS AND VALUES REPORTED HEREIN INDICATE ONLY THAT (1) THE PARTICULAR STEEL FOR WHICH THIS CERTIFICATE IS ISSUED MEETS THE MINIMUM SPECIFIED YIELD STRENGTH AND (2) THE CHEMICAL ANALYSIS AND PHYSICAL PROPERTIES OF SUCH STEEL ARE IN CONFORMANCE WITH THE REQUIREMENTS OF THE SPECIFICATION INDICATED. THE RESULTS OR VALUES REPORTED HEREIN CAN NOT BE USED TO QUALIFY THE STEEL FOR ANY SPECIFICATION OTHER THAN THE ONE INDICATED AND CAN NOT BE RELIED UPON FOR ANY PURPOSE (INCLUDING DESIGN OR CALCULATIONS) AS REPRESENTING THE ACTUAL STRENGTH OF SUCH STEEL.

OREGON STEEL MILLS

P.O. BOX 2760, Portland, Oregon 97208 • (503) 286-9651 Fax (503) 240-5268



SOLD TO

TERRA NOVA STEEL & IRON INC.
7812 PROGRESS WAY
TILBURY INDUSTRIAL PARK
DELTA, BC V4G 1A4
CANADA

TERRA NOVA STEEL & IRON INC.
7812 PROGRESS WAY
TILBURY INDUSTRIAL PARK
DELTA, BC V4G 1A4
CANADA

THIS MATERIAL HAS BEEN MANUFACTURED, TESTED AND FOUND TO MEET THE SPECIFICATIONS AND PURCHASE ORDER REQUIREMENTS
OSM HSLA STRUCTURAL QUALITY PLATE ASTM A588-97 GRADE B CSA-G40.21-98 GRADE 50 AT
CAT 3. LCVN 20 FT/LBS AVG @ -20 F (H).

REPORT OF CHEMICAL/PHYSICAL TESTS

CERTIFICATE NO	DATE	PAGE
625063	Oct 31, 2000	1
MILL ORDER NO.	DATE	
126097		
CUSTOMER ORDER NO.		
5195		
JOB/REQ. NO.		
SHIPPING NO.	DATE	
625063	10/31/2000	
CARRIER		
UNKNOWN		
CAR/TRUCK NO.		
222A		

PHYSICAL PROPERTIES

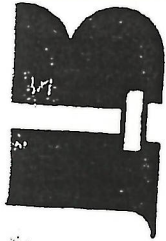
Q&A ITEM NO	DESCRIPTION	HEAT NO.	SLAB	YIELD PSI X 100	TENSILE PSI X 100	% ELONG 8" 2"	% RA	HARDNESS BHN	BEND TEST	IMPACTS
2	0.3750 X 96.000M X 600.000 SCHEDULE B: 7208.52.00.00 3 PCS 18378 LBS	+ 107543		660	795	23				
3	0.5000 X 96.000M X 600.000 SCHEDULE B: 7208.51.00.00 3 PCS 24504 LBS	+ 108254		635 640	790 775	23 23				
	6 PCS 42882 LBS TOTALS									

CHEMICAL ANALYSIS

HEAT NO.	C	Mn	P	S	Si	Cu	Ni	V	Cr	Mo	Ti	B	N ₂	Ca	CE	McQaid Ebn Grain Size
+107543	.14	.93	.008	.017	.34	.30	.19	.024	.035	.51	.02					
+108254	.13	.91	.005	.005	.33	.33	.18	.025	.027	.49	.03					
ALL HEATS INDICATED WITH (+) WERE MELTED AND MANUFACTURED IN THE USA.																
.....	END OF REPORT															

Kristine Huntwork
KRISTINE HUNTWORK

I certify the above to be correct as contained in the records of OREGON STEEL MILLS BY Q.C. RECORDS ADMINISTRATOR



Denote Plant Of Origin:

55 - Kankakee, Illinois Steel Division
58 - Birmingham, Alabama Steel Division
70 - Seattle, Washington Steel Division
84 - Jackson, Mississippi Steel Division

CERTIFIED MILL TEST REPORT

SOLD • RUSSEL METALS INC
TO • 9097 MILWAUKEE WAY
• PRINCE GEORGE, BC

V2N2K8 CANADA

SHIP • RUSSEL METALS INC
TO • 9097 MILWAUKEE WAY
• PRINCE GEORGE, BC

BIRMINGHAM STEEL CORP
SEATTLE, WA STEEL DIVISION
2424 SW ANDOVER
SEATTLE, WA. 98106-1100
(206)933-2222

51971010
DATE: 11/30/98

B.L. NO.: 70-W94032

LOAD NO.: 7000077878

HEAT NO.*	DESCRIPTION	PHYSICAL TESTS				CHEMICAL TESTS											
		YIELD P.S.I.	TENSILE P.S.I.	ELONG	Bend	WT%	DEF	C	Mn		P	Mo	S	V	Si	Cb	Cu
									Ni	Cr							
J# : 00887 99I2199	SEATTLE WA STEEL DIVISION 4x4x3/8" Ang 40' (A588B)	52,530 362MPa	72,000 496MPa	23.4%		-1.2%		.16 .10	.99 .55	.012 .02	.032 .019				.19		.30
J# : 916 99I0944	SEATTLE WA STEEL DIVISION 2x2x1/4" Ang 20' (44W/A36) ASME SA36-95 ASTM A36-96	48,290 333MPa	71,320 492MPa	31.3%				.16 .10	.73 .12	.015 .02	.038				.23		.32
99I2108	CSA G40.21-87 GR 44W SEATTLE WA STEEL DIVISION 3x3x3/16" Ang 40' (44W/A36) ASTM A36-96 ASME SA36-95	48,620 335MPa	70,730 488MPa	31.3%		-1.6%		.16 .14	.65 .11	.009 .03	.026				.19		.28
98I5423	CSA G40.21-87 GR 44W SEATTLE WA STEEL DIVISION 3x4.1# Ch 20' (44W/A36) ASTM A36-96 ASME SA36-95	48,100 332MPa	69,500 479MPa	32.0%		-1.3%		.15 .12	.67 .08	.009 .02	.027				.21		.35
99I1563	CSA G40.21-87 GR 44W SEATTLE WA STEEL DIVISION 4x5.4# Ch 20' (44W/A36) ASTM A36-96 ASME SA36-95 CSA G40.21-87 GR 44W	50,440 348MPa	72,450 500MPa	32.8%		-1.8%		.18 .10	.70 .10	.009 .02	.032				.21		.27

REVERSE FOR PLANT OF ORIGIN

BY CERTIFY THAT THE ABOVE FIGURES ARE CORRECT AS CONTAINED IN THE RECORDS OF THE CORPORATION

MANUFACTURING PROCESSES OF THE STEEL MATERIALS

ING HAVE

6

GIBALDO

REVERSE FOR PLANT OF ORIGIN

BY CERTIFY THAT THE ABOVE FIGURES ARE CORRECT AS CONTAINED IN THE RECORDS OF THE CORPORATION.
MANUFACTURING PROCESSES OF THE STEEL MATERIALS IN THIS PRODUCT, INCLUDING
ING, HAVE OCCURRED WITHIN THE UNITED STATES IN COMPLIANCE WITH THE "BUY
AN" PROVISION OF THE SURFACE TRANSPORTATION ASSISTANCE ACT OF 1980

G. GIRALDO

SIGNED

M&T ORDER # 1171

CUSTOMER: STINGER WELDING

1

TRUCK \$:

TOTAL PKGS: 1



Figure 1 Fit-up of main girder.



Figure 2

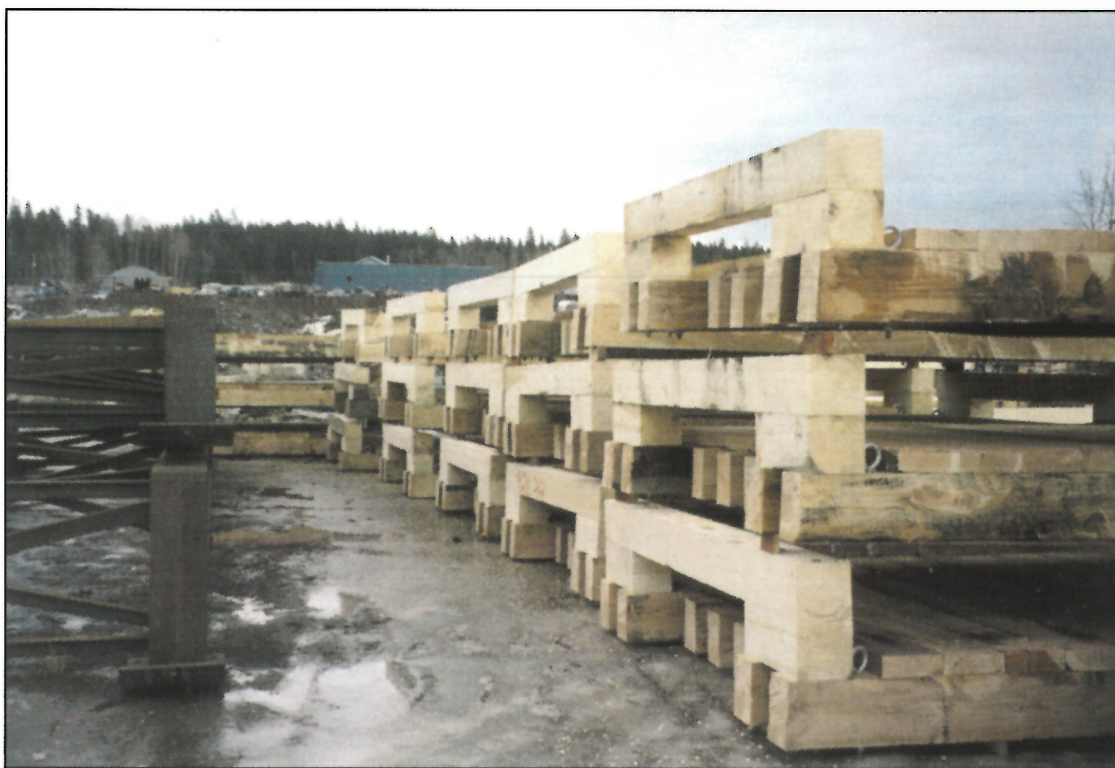


Figure 3

PRINCE GEORGE FOREST REGION

FACSIMILE TRANSMISSION HEADER

Date: DEC. 11 / 2000

Time: 3:00

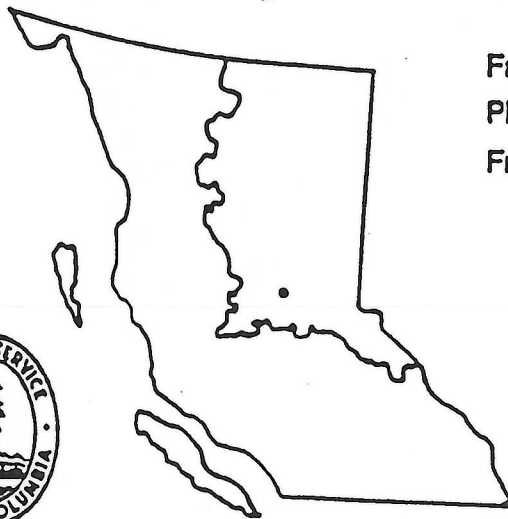
To: SARGENT & VAUGHAN
ENGINEERING LTD.

Location: UNIT B - 1595 BAY ST.
VICTORIA, B.C.

Fax: (250) 370-9223

Phone: _____

From: TIM SILBERNAGEL
BRIDGE TECHNICIAN



Ministry of Forests
1011 Fourth Avenue
Prince George, B.C.
V2L 3H9
Phone: (604) 565-6100
Fax: (604) 565-6671

Pages to follow: 4

Message: BRIDGES WILL BE FABRICATED AT
STINGER WELDING IN PRINCE
GEORGE.

A handwritten signature in dark ink, appearing to be "Tim Silbernagel", written over several horizontal lines.

INSPECTION REQUEST/COMPLETION CERTIFICATE

(for Highways' in-plant inspection of MOF bridges)

Bridge superstructure

(a) purchased through P.C.

req. no. 448872C

p.o. no. _____

(b) part of supply/erect contract Bridge No. _____

File No. G4-929

FOREST REGION: PRINCE GEORGE

CONTACT: TIM SILBERNAGEL

BRIDGE NAME: PORTABLE #G4-929

PHONE: (250) 565-4125

BRIDGE DESCRIPTION:

(a) # girders/beams 2

(b) steel girders ☒ or concrete box beams ☐ or
concrete I-girders ☐

(c) span 15.24 m

(d) special features TIMBER DECK MODULES

CONTRACTOR:

STINGER WELDING LTD.

CONTACT: WILLIE MASON

ADDRESS:

9797 PENN ROAD
PRINCE GEORGE, B.C.
V2N 4M6

PHONE: (250) 561-9200

LICENSEE (if applicable):

N/A

CONTACT: N/A

ADDRESS:

PHONE: N/A

FORWARD TO: MINISTRY OF TRANSPORTATION AND HIGHWAYS,
8149 NORDEL WAY, DELTA, B.C. V4G 8A9
ATTENTION: PLANT INSPECTION ENGINEER
FAX: (604) 660-8384

TO BE COMPLETED BY MOFH

INSPECTOR _____

DATE OF FINAL INSPECTION: _____

The bridge superstructure named above and detailed in drawings _____
prepared by _____ has been completed by the fabricator _____
and is

- ☐ satisfactory in all respects; no modifications were necessary.
☐ satisfactory in all respects; the following modifications were required:

Mill certificates and/or concrete test results are enclosed, and a copy of this inspection certificate has been forwarded to the fabricator.

Signature of Inspector: _____

Sargent & Vaughan Engineering Ltd.
1595 Bay Street, Unit B
Victoria, B.C.
V8R 2B5
Phone: (250) 370-9221
Fax: (250) 370-9223



**Sargent & Vaughan
Engineering**

NO OF PAGES: _____ (including cover page) ☐ THIS IS YOUR ONLY COPY
URGENT ☐ ☐ ORIGINAL TO FOLLOW BY MAIL OR COURIER

TO: Tim Silbernagel FAX NO: 250-565-6671
COMPANY: MOF PRINCE GEORGE DATE: Dec. 11, 2000

FROM: Angelo G. Rivera PROJECT NO: G4-927, G4-928
RE: Request for Inspection & G4-930
(PROJ. NAME)

CC: _____ CC: _____
FAX NO: _____ FAX NO: _____

Dear Tim:

We would appreciate very much if you can
send us the Request for Inspection for the following
bridges that are going to be fabricated at Stinger Welding:
P.O. for \$14,926.50 — G4-930
P.O. for \$65,013.20 — G4-927 & G4-928 + G4-929
Thank you & have a good day.

Angelo