

APPENDIX C

Bridge Construction Administration Forms

The latest versions of these forms can be found on Alberta Transportation's website: <https://www.transportation.alberta.ca/919.htm>

**SUMMARY TABLE – APPENDIX C
BRIDGE CONSTRUCTION ADMINISTRATION FORMS**

Form No.	Form Name
C.01	Pile Data
C.02	Final Bridge Construction Report
C.03	Bridge Construction Completion
C.04	Bridge Warranty Inspection
C.05	SL_SLW Girder Inspection Report
C.06	SLC Girder Inspection Report
C.07	NU Girder Inspection Report
C.08	CSP Inspection Report
C.09	SPCSP Inspection Report
C.10	Culvert Installation Inspection Record
C.11	Culvert Barrel Measurements
C.12	Concrete Test Results

PILE DATA

Date: _____

Project: _____ Contract No: _____ Bridge File No. _____

Project Sponsor: _____ Contractor: _____

Consultant Inspector: _____ Piling Sub: _____

Ground/Ice Elevation: _____ Location: Sta _____ : _____ m rt/ft Abut/Pier No: _____

Pile No: _____ Pile Type: _____ Pile Length: _____

Type of Hammer: _____ Mass/Energy of Hammer: _____ kg/kj

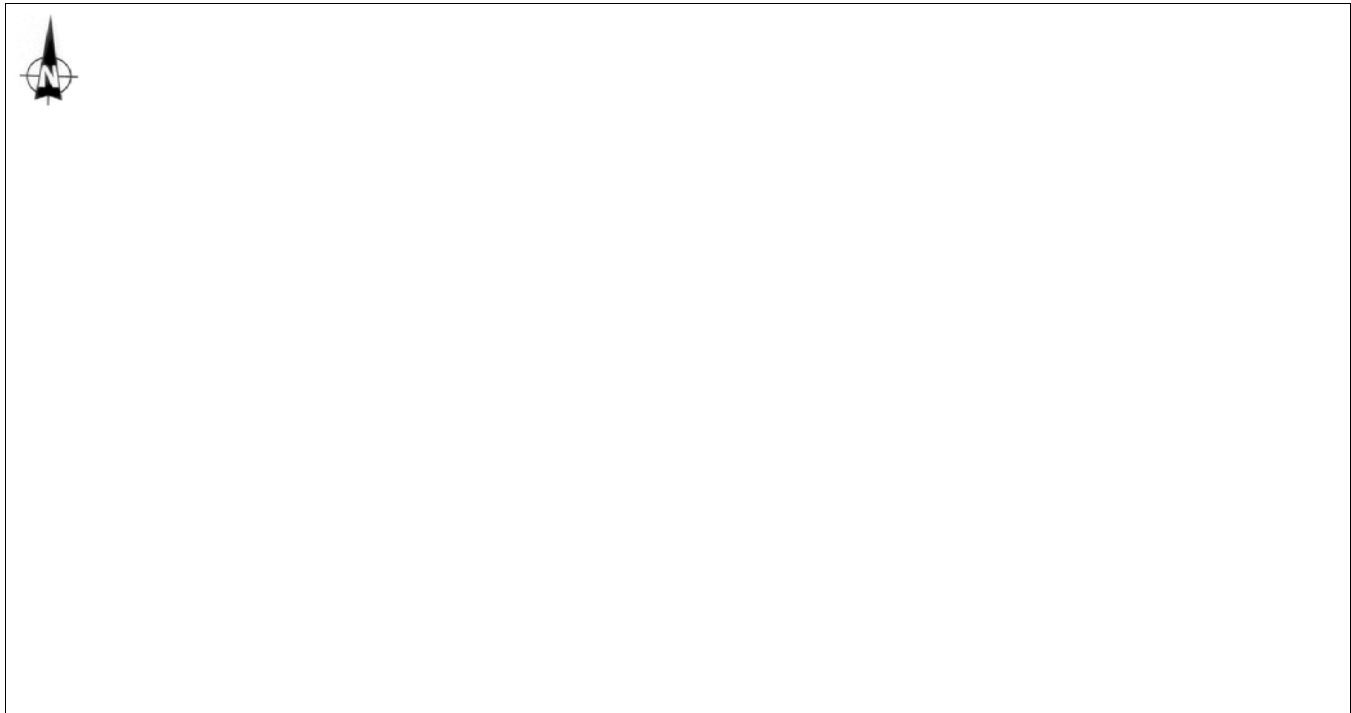
Efficiency Factor: _____

Remarks: _____

Depth of Pile (m)	Number of Blows	Drop of Hammer (m)	Remarks	Depth of Pile (m)	Number of Blows	Drop of Hammer (m)	Remarks
0.00 - 0.25				8:00 - 8.25			
0.25 - 0.50				8.25 - 8.50			
0.50 - 0.75				8.50 - 8.75			
0.75 - 1.00				8.75 - 9.00			
1.00 - 1.25				9.00 - 9.25			
1.25 - 1.50				9.25 - 9.50			
1.50 - 1.75				9.50 - 9.75			
1.75 - 2.00				9.75 - 10.00			
2.00 - 2.25				10.00 - 10.25			
2.25 - 2.50				10.25 - 10.50			
2.50 - 2.75				10.50 - 10.75			
2.75 - 3.00				10.75 - 11.00			
3.00 - 3.25				11.00 - 11.25			
3.25 - 3.50				11.25 - 11.50			
3.50 - 3.75				11.50 - 11.75			
3.75 - 4.00				11.75 - 12.00			
4.00 - 4.25				12.00 - 12.25			
4.25 - 4.50				12.25 - 12.50			
4.50 - 4.75				12.50 - 12.75			
4.75 - 5.00				12.75 - 13.00			
5.00 - 5.25				13.00 - 13.25			
5.25 - 5.50				13.25 - 13.50			
5.50 - 5.75				13.50 - 13.75			
5.75 - 6.00				13.75 - 14.00			
6.00 - 6.25				14.00 - 14.25			
6.25 - 6.50				14.25 - 14.50			
6.50 - 6.75				14.50 - 14.75			
6.75 - 7.00				14.75 - 15.00			
7.00 - 7.25				15.00 - 15.25			
7.25 - 7.50				15.25 - 15.50			
7.50 - 7.75				15.50 - 15.75			
7.75 - 8.00				15.75 - 16.00			

Depth of Pile (m)	Number of Blows	Drop of Hammer (m)	Remarks	Depth of Pile (m)	Number of Blows	Drop of Hammer (m)	Remarks
16.00 - 16.25				22.00 - 22.25			
16.25 - 16.50				22.25 - 22.50			
16.50 - 16.75				22.50 - 22.75			
16.75 - 17.00				22.75 - 23.00			
17.00 - 17.25				23.00 - 23.25			
17.25 - 17.50				23.25 - 23.50			
17.50 - 17.75				23.50 - 23.75			
17.75 - 18.00				23.75 - 24.00			
18.00 - 18.25				24.00 - 24.25			
18.25 - 18.50				24.25 - 24.50			
18.50 - 18.75				24.50 - 24.75			
18.75 - 19.00				24.75 - 25.00			
19.00 - 19.25				25.00 - 25.25			
19.25 - 19.50				25.25 - 25.50			
19.50 - 19.75				25.50 - 25.75			
19.75 - 20.00				25.75 - 26.00			
20.00 - 20.25				26.00 - 26.25			
20.25 - 20.50				26.25 - 26.50			
20.50 - 20.75				26.50 - 26.75			
20.75 - 21.00				26.75 - 27.00			
21.00 - 21.25				27.00 - 27.25			
21.25 - 21.50				27.25 - 27.50			
21.50 - 21.75				27.50 - 27.75			
21.75 - 22.00				27.75 - 28.00			

SKETCH OF PILE LOCATION



NOTE: SHOW NORTH ARROW

PILE DATA

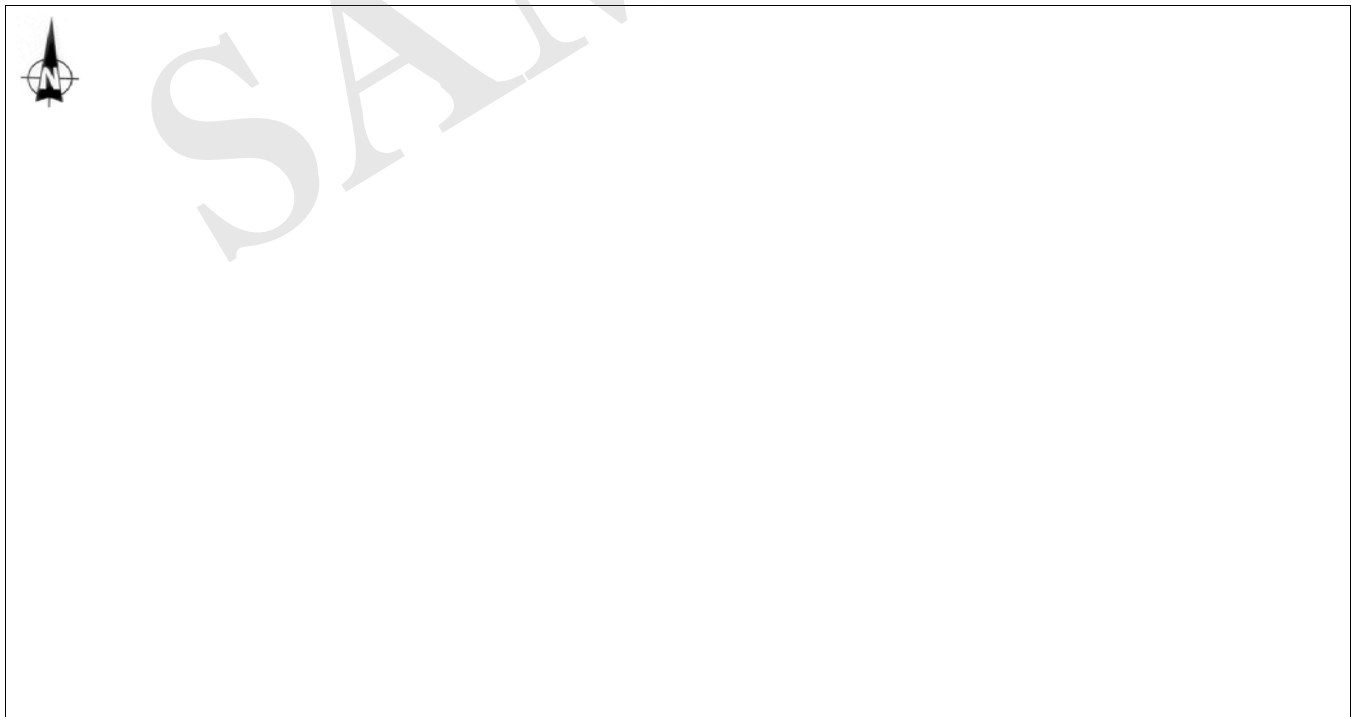
Date: 3-May-08

Project: BF 1504 Contract No: CON0012345 Bridge File No. _____
 Project Sponsor: _____ Contractor: XYZ Contracting
 Consultant Inspector: _____ Piling Sub: ABC Piling
 Ground/Ice Elevation: 1000 Location: Sta _____ : _____ m rt/ft Abut/Pier No: 1
 Pile No: _____ Pile Type: _____ Pile Length: 9.6 m
 Type of Hammer: Delmay D19-42 Mass/Energy of Hammer: _____ kg/kj
 Efficiency Factor: _____
 Remarks: _____

Depth of Pile (m)	Number of Blows	Drop of Hammer (m)	Remarks	Depth of Pile (m)	Number of Blows	Drop of Hammer (m)	Remarks
0.00 - 0.25			pile's own weight	8:00 - 8.25			
0.25 - 0.50			pile's own weight	8.25 - 8.50			
0.50 - 0.75			pile's own weight	8.50 - 8.75			
0.75 - 1.00			pile's own weight	8.75 - 9.00			
1.00 - 1.25	2			9.00 - 9.25			
1.25 - 1.50	2			9.25 - 9.50			
1.50 - 1.75	2			9.50 - 9.75			
1.75 - 2.00	2			9.75 - 10.00			
2.00 - 2.25	2			10.00 - 10.25			
2.25 - 2.50	2			10.25 - 10.50			
2.50 - 2.75	2			10.50 - 10.75			
2.75 - 3.00	2			10.75 - 11.00			
3.00 - 3.25	2			11.00 - 11.25			
3.25 - 3.50	2			11.25 - 11.50			
3.50 - 3.75	4			11.50 - 11.75			
3.75 - 4.00	4			11.75 - 12.00			
4.00 - 4.25	6			12.00 - 12.25			
4.25 - 4.50	8			12.25 - 12.50			
4.50 - 4.75	10			12.50 - 12.75			
4.75 - 5.00	12			12.75 - 13.00			
5.00 - 5.25	11			13.00 - 13.25			
5.25 - 5.50	11			13.25 - 13.50			
5.50 - 5.75	16			13.50 - 13.75			
5.75 - 6.00	16			13.75 - 14.00			
6.00 - 6.25	27			14.00 - 14.25			
6.25 - 6.50	28			14.25 - 14.50			
6.50 - 6.75	28			14.50 - 14.75			
6.75 - 7.00	29			14.75 - 15.00			
7.00 - 7.25	29			15.00 - 15.25			
7.25 - 7.50	36			15.25 - 15.50			
7.50 - 7.75	40			15.50 - 15.75			
7.75 - 8.00	43			15.75 - 16.00			

Depth of Pile (m)	Number of Blows	Drop of Hammer (m)	Remarks	Depth of Pile (m)	Number of Blows	Drop of Hammer (m)	Remarks
16.00 - 16.25				22.00 - 22.25			
16.25 - 16.50				22.25 - 22.50			
16.50 - 16.75				22.50 - 22.75			
16.75 - 17.00				22.75 - 23.00			
17.00 - 17.25				23.00 - 23.25			
17.25 - 17.50				23.25 - 23.50			
17.50 - 17.75				23.50 - 23.75			
17.75 - 18.00				23.75 - 24.00			
18.00 - 18.25				24.00 - 24.25			
18.25 - 18.50				24.25 - 24.50			
18.50 - 18.75				24.50 - 24.75			
18.75 - 19.00				24.75 - 25.00			
19.00 - 19.25				25.00 - 25.25			
19.25 - 19.50				25.25 - 25.50			
19.50 - 19.75				25.50 - 25.75			
19.75 - 20.00				25.75 - 26.00			
20.00 - 20.25				26.00 - 26.25			
20.25 - 20.50				26.25 - 26.50			
20.50 - 20.75				26.50 - 26.75			
20.75 - 21.00				26.75 - 27.00			
21.00 - 21.25				27.00 - 27.25			
21.25 - 21.50				27.25 - 27.50			
21.50 - 21.75				27.50 - 27.75			
21.75 - 22.00				27.75 - 28.00			

SKETCH OF PILE LOCATION



NOTE: SHOW NORTH ARROW



FINAL BRIDGE CONSTRUCTION REPORT

Project: _____ Date: _____
 Contractor: _____ Contract #: _____
 Project Sponsor: _____ Consultant: _____
 Bridge File #: _____

A. General

Bridge Name: _____
 Highway No./Stream: _____
 Location: _____
 Span Lengths: _____
 Girder Type: _____
 Number of Piers: _____
 Vertical Clearance: _____
 Horizontal Clearance: _____

B. Contract

Contract No.: _____
 Contract Tendering Date: _____
 Contract Closing Date: _____
 Contractor: _____
 Site Occupancy Days Bid: _____
 Site Occupancy Days Used: _____
 Specified Completion Date: _____
 Actual Completion Date: _____

 Girder Supplier & Erector: _____
 Date Girder Erected: _____
 Date Grouting Completed: _____
 Type of Grout/Product Name: _____

C. Substructure

I. Abutment #1
 Hammer Type & Size: _____
 Pile Type: _____
 Max/Min Penetration: _____
 Date Completed Seat & Wingwall Pours: _____
 Type of Concrete Finishing & Product Name: _____

II. Abutment #2

Hammer Type & Size: _____
 Pile Type: _____
 Max/Min Penetration: _____
 Date Completed Seat & Wingwall Pours: _____
 Type of Concrete Finishing & Product Name: _____

III. Piers

(i) Type of Foundation: _____
 Spread Footing: _____
 Piles: _____
 Berm or Cofferdam & Description: _____
 Type of Piles: _____
 Max/Min Penetration: _____
 Completion Date: _____
 Type of Concrete Finishing & Product Name: _____
 (ii) _____
 (iii) _____
 (iv) _____

D. Superstructure

I. Deck

Date Poured: _____
 Type of Wearing Surface: _____
 Type of Waterproofing/Product Name: _____
 Date Installed: _____

II. Curbs/Barriers:

Date Completed: _____
 Type of Sealers/Product Name: _____

E. Concrete Data

For each Class of Concrete Provide: a) Concrete Mix Design, b) Concrete Supplier, c) Summary of Test Results

F. General Comments

Bridge Construction Completion

Project Description: _____ Highway: _____ Bridge File #: _____
 Project Sponsor: _____ Project Admin.: _____ Region: _____
 Consultant: _____ Project Manager: _____ Road Authority: _____
 TSB Liaison: _____
 CE Agreement: _____

Contractor: _____ Contract No.: _____
 Project Manager: _____ Site Superintendent: _____
 Bridge Subcontractor: _____
 Project Manager: _____ Site Superintendent: _____

BRIDGE CONSTRUCTION COMPLETION INSPECTION:

Date of Inspection:		BIM Level 1 Inspection Date	
Department Representatives:			
Consultant representatives:			
Contractor Representatives:			
Bridge Subcontractor Rep's:			
Deficiencies		<input type="checkbox"/> None	<input type="checkbox"/> As noted below
		Date All Deficiencies Corrected	
Warranty	Item 1	Length (Year)	End Date
	Item 2	Length (Year)	End Date
	Item 3	Length (Year)	End Date

HOLDBACK RELEASE INFORMATION

Final Progress Date	WCB Clearance Date	Statutory Declaration Date
Quantity Acceptance	Disputed Items	
Claims:	<input type="checkbox"/> None	<input type="checkbox"/> Contractor
	<input type="checkbox"/> Subcontractor	<input type="checkbox"/> Other
Claims Details		

DEFICIENCIES:

No.	Description	Date Corrected
1.		
2.		
3.		
4.		
5.		

Draft Submission: _____ Review Meeting: _____ Final Submission: _____

<u>Cost Estimate</u>	<u>Type</u>	<u>Date</u>
Current:	_____	_____
Previous:	_____	_____
Includes: Engineering, Construction, Contingencies, R/W, Detour		

<u>Milestone Schedule</u>	<u>Date</u>
Warranty Inspection (Item 1)	_____
Warranty Inspection (Item 2)	_____

_____	_____	_____
Consultant Project Manager's Signature	Project Administrator's Signature	Project Sponsor's Signature

Copies to: Consultant, TSB, Bridge File

Bridge Warranty Inspection

Bridge File #: _____
 Region: _____
 Road Authority: _____
 Project Description: _____ Highway: _____
 Project Sponsor: _____ Project Admin.: _____ TSB Liaison: _____
 Consultant: _____ Project Manager: _____ CE Agreement: _____

Contractor: _____ Contract No.: _____
 Project Manager: _____ Site Superintendent: _____
 Bridge Subcontractor: _____
 Project Manager: _____ Site Superintendent: _____

BRIDGE WARRANTY INSPECTION				
Date of Warranty Inspection			BIM Level 1 Inspection Date	
Department Representatives				
Consultant representatives				
Contractor Representatives				
Bridge Subcontractor Rep's				
Deficiencies	<input type="checkbox"/> None	<input type="checkbox"/> As Noted Below	Date All Deficiencies Corrected	
Final Acceptance	<input type="checkbox"/> Will Be Issued		<input type="checkbox"/> Pending Rectification of Warranty Items	
Holdback released Date				
Warranty	Item 1	Length (Year)	End Date	
	Item 2	Length (Year)	End Date	
	Item 3	Length (Year)	End Date	

HOLDBACK RELEASE INFORMATION				
Final Progress Date	WCB Clearance Date	Stat. Declaration Date		
Quantity Acceptance	Disputed Items			
Claims	<input type="checkbox"/> None	<input type="checkbox"/> Contractor	<input type="checkbox"/> Subcontractor	<input type="checkbox"/> Other
Claims Details				

DEFICIENCIES:		
No.	Description	Date Corrected
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

Consultant Project Manager's Signature	Project Administrator's Signature	Project Sponsor's Signature

Copies to: Consultant, TSB, Bridge File

SL/SLW GIRDER INSPECTION REPORT

Bridge File #:	
Date:	
By:	
Page:	1 of 5

GIRDER SERIAL NO.					
FAB. MARK NO.					
GIRDER TYPE					
CAST DATE					

A. MATERIAL

1. REINFORCING STEEL

- Tack welding of reinforcing steel is not allowed.

Grade					
Size					
Bends					
Cleanliness					

2. STRAND

- Only low relaxation strand allowed.

Condition, cleanliness					
E (Same as stressing Calcs)					

3. VOIDS

- Splices in sonotubes are not allowed.

Diameter					
Condition					

4. CHANNEL CONNECTORS

- Anchors are properly welded.

Dimensions					
Galvanizing					
Slots deburred					

5. BUFFER ANGLES

- Studs are properly welded.

Dimensions					
Galvanizing					

6. ANCHOR BOLTS

Assembly dimensions					
Galvanizing					

B. FORM SET-UP

- Prior to form set-up approved shop drawings, stressing calculations and mix design on hand.
- Forms clean, straight with mortar tight joints and sprayed with a form release agent.
- Serial number, loading, year of manufacture and fabricator's name cast into the girder.

1. FORM

Length					
Width					
Depth					
Skew					
Sweep					
Bulkheads - braced					

2. STRESSING

- Observe stressing operations, stressing records are maintained by plant's quality control personnel.
- Strand splices inside the member are not allowed.
- Elongation and gauge pressure must be within 5% (combined) of that specified in the approved stressing calcs.
- Strands are recessed 15 mm inside the girder.

Strand pattern, location					
Elongation					
Gauge pressure					

3. REBAR

- Chairs shall be plastic or galvanized metal.

Spacing					
Lap					
Cover					

4. CHANNEL CONNECTORS

Spacing					
Securely held in position					

5. VOIDS

- Hold downs shall be adequate to maintain the final location of voids.

Top cover					
Sealed					
Location					

6. BUFFER ANGLES

5 mm recess					
-------------	--	--	--	--	--

SL/SLW GIRDER INSPECTION REPORT

7. LIFTING HOOKS

Location					
Pockets					
Projection					

8. PLINTHS

Anchor bolt spacing					
Anchor bolt projection					

9. DOWEL HOLES

Hole size & location					
----------------------	--	--	--	--	--

C. CASTING

1. CONCRETE

Unit weight					
Air					
Slump					
Temperature					
Release strength					
28 days strength					

2. PLACING

Drop					
Vibration					

3. VOIDS

Position					
Cover					

4. FINISH

Girder top					
Finish around anchor bolts					

5. INITIAL CURING

After 4 hours of final concrete					
Curing temperature					

SL/SLW GIRDER INSPECTION REPORT

Bridge File #:	
Date:	
By:	
Page:	4 of 5

D. REMOVAL FROM THE FORM

1. STRAND RELEASE SEQUENCE

As per approved sketch					
------------------------	--	--	--	--	--

2. CLEAN UP

Fin removal					
Minor patching (before steam curing)					

3. GIRDER

Length					
Width					
Depth					
Skew					
Sweep					
Camber	24 hours				
	7 days				
	14 days				
	shipping				
Ends					
Bearing area smooth & flat					
Interior units (cavities over 10 mm repaired)					
Exterior units (all cavities repaired)					
Honey-comb	In bearing area				
	At other locations				

E. CURING

1. STEAMING

- Steam curing for four days with 95% - 100% relative humidity and 40° C to 50° C temperature.

Temperature					
Relative Humidity					
Date unit in					
Day unit out					

**SL/SLW GIRDER
INSPECTION REPORT**

F. FINISHES

1. SEALER

Type					
Application					

2. GIRDER FINISHES

Top					
Bottom					
Sides					

G. FINAL

1. CHANNEL CONNECTORS

Clean inside & outside					
------------------------	--	--	--	--	--

2. ANCHOR BOLTS

Bolt clean					
Nuts free to spin					

3. STORAGE

Safe					
Blocking					



SLC GIRDER INSPECTION REPORT

Bridge File #:	
Date:	
By:	
Page:	1 of 5

GIRDER SERIAL NO.					
FAB. MARK NO.					
GIRDER TYPE					
CAST DATE					

A. MATERIAL

1. REINFORCING STEEL

- Tack welding of reinforcing steel is not allowed.

Grade					
Size					
Bends					
Cleanliness					

2. STRAND

- Only low relaxation strand allowed.

Condition, cleanliness					
E (Same as stressing Calcs)					

3. VOIDS

- Splices in sonotubes are not allowed.


Diameter					
Condition					

4. ANCHOR BOLTS

Assembly dimensions					
Galvanizing					

5. INSERTS

Size					
Galvanizing					

	SLC GIRDER INSPECTION REPORT	Bridge File #:
		Date:
		By:
		Page: 2 of 5

B. FORM SET-UP

- Prior to form set-up, approved shop drawings, stressing calculations and mix design on hand.
- Forms clean, straight with mortar tight joints and sprayed with a form release agent.
- Serial number, loading, year of manufacture and fabricator's name cast into the girder.

1. FORM

Length					
Width					
Depth					
Skew					
Sweep					
Bulkheads - braced					

2. STRESSING

- Observe stressing operations, stressing records are maintained by plant's quality control personnel.
- Strand splices inside the member are not allowed.
- Elongation and gauge pressure must be within 5% (combined) of that specified in the approved stressing calc's.
- Check length and sheathing for unbonded strands.
- Strand are recessed 15 mm inside the girder.

Strand pattern					
Elongation					
Gauge pressure					

3. REBAR

- Chairs shall be plastic.

Spacing					
Lap					
Cover					
Projection					

4. VOIDS

- Hold downs shall be adequate to maintain the final location of voids.

Top cover					
Sealed					
Location					

SLC GIRDER INSPECTION REPORT

Bridge File #:	
Date:	
By:	
Page:	3 of 5

B. FORM SET-UP (Continued)

5. LIFTING HOOKS

Location					
Pockets					
Projection					

6. DOWEL HOLES

Hole size & location					
----------------------	--	--	--	--	--

7. INSERTS

Location					
----------	--	--	--	--	--

C. CASTING

1. CONCRETE

Unit weight					
Air					
Slump					
Temperature					
Release strength					
28 days strength					

2. PLACING

Drop					
Vibration					

3. VOIDS

Position					
Cover					

4. FINISH

Girder top					
Curb Top					
Finish around anchor bolts					

5. INITIAL CURING

After 4 hours of final concrete					
Curing temperature					

D. REMOVAL FROM THE FORM

1. STRAND RELEASE SEQUENCE

As per approved sketch					
------------------------	--	--	--	--	--

2. CLEAN UP

Fin removal					
Minor patching					

3. GIRDER

Length					
Width					
Depth					
Skew					
Sweep					
Camber	24 hours				
	7 days				
	14 days				
	shipping				
Ends					
Bearing area smooth & level					
Interior units (cavities over 10 mm repaired)					
Exterior units (all cavities repaired)					
Honey-comb	In bearing area				
	At other locations				

E. CURING

1. STEAMING

- Steam curing for four days with 95% - 100% relative humidity and 40° C to 50° C temperature.

Temperature					
Relative Humidity					
Date unit in					
Date unit out					

**SLC GIRDER
INSPECTION REPORT**

Bridge File #:

Date:

By:

Page: 5 of 5

F. FINISHES

1. SEALER

Type					
Application					

2. GIRDER FINISHES

Top					
Bottom					
Sides					

G. FINAL

1. SANDBLASTING


Diaphragms					
Ends					

2. ANCHOR BOLTS

Bolt clean					
Nuts free to spin					

3. STORAGE

Safe					
Blocking					

	NU GIRDER INSPECTION REPORT			Bridge File #:	
				Date:	
				By:	
				Page:	1 of 5

GIRDER SERIAL NO.					
FAB. MARK NO.					
GIRDER TYPE					
CAST DATE					

A. MATERIAL

1. REINFORCING STEEL

- Tack welding of reinforcing steel is not allowed.

1a. REINFORCING STEEL (WWF)

Grade					
Size					
Bends					
% Elongation					
General condition of welds					
Cleanliness					

1b. REINFORCING STEEL (BLACK, MMFX)

Grade					
Size					
Bends					
Cleanliness					

2. STRAND

- Only low relaxation strand allowed.

Condition, cleanliness					
E (Same as stressing calcs)					

3. SHOE PLATE

Size					
Flatness					
Galvanizing					
Weld quality (studs, bars)					

4. POST TENSIONING DUCT

- Check condition, any damage or hole in the duct not acceptable.

Size, thickness					
-----------------	--	--	--	--	--

5. INSERTS

Size					
Galvanizing					

B. FORM SET-UP

- Prior to form set-up, approved shop drawings, stressing calculations and mix design on hand.
- Forms clean, straight with mortar tight joints and sprayed with a form release agent.
- Serial number, loading, year of manufacture and fabricator's name cast into the girder.

1. FORM

Length (correction for shrinkage)				
Width				
Depth				
Skew				
Level				
Sweep				
Diaphragm plates held in place				
Shoe plate held in place				
Bulkheads - braced				

2. STRESSING

- Observe stressing operations, stressing records are maintained by plant's quality control personnel.
- Strand splices inside the member are not allowed.
- Elongation and gauge pressure must be within 5% (combined) of that specified in the approved stressing calcs.
- Check length and sheathing for un-bonded strands.
- Strand are recessed 15 mm inside the girder.

Strand pattern				
Location of deflection points				
Number of debonded strands				
Length of debonded strands				
Elongation				
Gauge pressure				

3. REBAR

- Chairs shall be plastic.

Lap				
Cover				
Projection				

4. BLOCKOUT

Dimensions				
------------	--	--	--	--

B. FORM SET-UP (Continued)

5. DUCTS

- Ducts have smooth alignment without sharp kinks or bends.
- Ducts shall be free of grease, oil and any contaminants.
- Ducts are securely tied to restrict horizontal and vertical movement.
- Grout vent tubes are placed at high and low ends.

Location					
----------	--	--	--	--	--

6. LIFTING DEVICE

Location					
Pockets					

7. DIAPHRAGMS

Location of diaphragms					
Hole location					

8. INSERTS

Location					
----------	--	--	--	--	--

C. CASTING

1. CONCRETE

Unit weight					
Air					
Slump					
Temperature					
Release strength					
28 days strength					

2. PLACING

Drop					
Vibration					

3. FINISH

Girder top					
------------	--	--	--	--	--

4. INITIAL CURING

After 4 hours of final concrete					
Curing temperature					

D. REMOVAL FROM THE FORM

1. STRAND RELEASE SEQUENCE

As per approved sketch					
------------------------	--	--	--	--	--


2. CLEAN UP

Fin removal					
Clean up of projecting bar					
Minor patching (before steam curing)					

3. GIRDER

Length					
Width					
Depth					
Skew					
Sweep					
Camber	24 hours				
	7 days				
	14 days				
	shipping				
Ends					
Bearing areas smooth & level					
Interior units (cavities over 10 mm repaired)					
Exterior units (all cavities repaired Class 2/3 finish)					
Girder Cracks	Bearing Area				
	Anchorage area				
/Spalls	Outside bearing /anchorage area				
	Bearing or Major honeycomb				

- Major honeycombs/spalls are described as honeycomb/spalls that are more than 30 mm or more than 0.1 m² in area.

	NU GIRDER INSPECTION REPORT	Bridge File #:
		Date:
		By:
		Page: 5 of 5

E. CURING

1. STEAMING

- Steam curing for four days with 95% - 100% relative humidity and 40° C to 50° C temperature.

Temperature					
Relative Humidity					
Date unit in					
Date unit out					

F. FINISHES

1. SEALER

Type					
Application					

2. GIRDER FINISHES

Top					
Bottom					
Sides					

G. FINAL

1. SANDBLASTING

Diaphragms					
Blockouts					
Ends					

2. STORAGE

Safe					
Blocking					

NU GIRDER INSPECTION REPORT

Bridge File #: 5213
Date: 1-Apr-13
By: Insp. Name.
Page: 1 of 5

GIRDER SERIAL NO.	889	890	891	892	
FAB. MARK NO.	888-06-01	888-06-01	888-06-01B	888-06-01B	
GIRDER TYPE	NU	NU	NU	NU	
CAST DATE	1-Oct-12	2-Oct-12	3-Oct-12	5-Oct-12	

A. MATERIAL

1. REINFORCING STEEL

- Tack welding of reinforcing steel is not allowed.

1a. REINFORCING STEEL (WWF)

Grade	480	480	480	480	
Size	MD 45, 65, 90, 103	MD 45, 65, 90, 103	MD 45, 65, 90, 103	MD 45, 65, 90, 103	
Bends	60 ϕ , 80 ϕ OK	60 ϕ , 80 ϕ OK	60 ϕ , 80 ϕ OK	60 ϕ , 80 ϕ OK	
% Elongation in 8"	2.5,3.5,4.0,4.8	2.5,3.5,4.0,4.8	2.5,3.5,4.0,4.8	2.5,3.5,4.0,4.8	
General condition of welds	ok	ok	ok	ok	
Cleanliness	ok	ok	ok	ok	

1b. REINFORCING STEEL (BLACK, MMFX)

Grade	400W, 100	400W, 100	400W, 100	400W, 100	
Size	10 m , 15 m	10 m , 15 m	10 m , 15 m	10 m , 15 m	
Bends	OK	OK	OK	OK	
Cleanliness	OK	OK	OK	OK	

2. STRAND

- Only low relaxation strand allowed.

Condition, cleanliness	OK	OK	OK	OK	
E (Same as stressing calcs)	Yes	Yes	Yes	Yes	

3. SHOE PLATE

Size (mm x mm)	1186 x1010	1186 x1010	1186 x1010	1186 x1010	
Flatness	OK	OK	OK	OK	
Galvanizing	OK	OK	OK	OK	
Weld quality (studs, bars)	OK	OK	OK	OK	

4. POST TENSIONING DUCT

- Check condition, any damage or hole in the duct not acceptable.

Size, thickness	N/A	N/A	N/A	N/A	
-----------------	-----	-----	-----	-----	--

5. INSERTS

Size	3/4" - 1"	3/4" - 1"	3/4" - 1"	3/4" - 1"	
Galvanizing	OK	OK	OK	OK	

B. FORM SET-UP

- Prior to form set-up, approved shop drawings, stressing calculations and mix design on hand.
- Forms clean, straight with mortar tight joints and sprayed with a form release agent.
- Serial number, loading, year of manufacture and fabricator's name cast into the girder.

1. FORM

Length (correct for shrinkage)	40632	40632	40632	40632	
Width (mm)	1260,185,1010	1260,185,1010	1260,185,1010	1260,185,1010	
Depth (mm)	2000	2000	2000	2000	
Skew	20° LHF	20° LHF	20° LHF	20° LHF	
Level	± 3 mm	± 3 mm	± 3 mm	± 3 mm	
Sweep	± 6 mm	± 6 mm	± 6 mm	± 6 mm	
Diaphragm plates held in place	N/A	N/A	N/A	N/A	
Shoe plate held in place	Yes	Yes	Yes	Yes	
Bulkheads - braced- angle clips	Yes	Yes	Yes	Yes	

2. STRESSING

- Observe stressing operations, stressing records are maintained by plant's quality control personnel.
- Strand splices inside the member are not allowed.
- Elongation and gauge pressure must be within 5% (combined) of that specified in the approved stressing calcs.
- Check length and sheathing for un-bonded strands.
- Strand are recessed 15 mm inside the girder.

Strand pattern	60 -OK	60 -OK	60 -OK	60 -OK	
Location of deflection points	20-80mm out OK	20-80mm out OK	20-80mm out OK	20-80mm out OK	
Number of debonded strands	None	None	None	None	
Length of debonded strands	N/A	N/A	N/A	N/A	
Elongation (mm)	585 -615	580-620	585-620	585-620	
Gauge pressure (Psi)	4850 - 4600	4850 - 4600	4850 - 4600	4850 - 4600	

3. REBAR

- Chairs shall be plastic.

Lap 10M bar	500	500	500	500	
Cover (mm)	25-35	25-35	25-35	25-35	
Projection (mm)	200 - 210	200 - 210	200 - 210	200 - 210	

4. BLOCKOUT (for field cutting of top strands)

Dimensions	100x200x60	100x200x60	100x200x60	100x200x60	
------------	------------	------------	------------	------------	--

	NU GIRDER INSPECTION REPORT			Bridge File #: 5213	
				Date: 1-Apr-13	
				By: Insp. Name.	
				Page: 3 of 5	

B. FORM SET-UP (Continued)

5. DUCTS

- Ducts have smooth alignment without sharp kinks or bends.
- Ducts shall be free of grease, oil and any contaminants.
- Ducts are securely tied to restrict horizontal and vertical movement.
- Grout vent tubes are placed at high and low ends.

Location	N/A	N/A	N/A	N/A	
----------	-----	-----	-----	-----	--

6. LIFTING DEVICE

Location ± 20 mm	2000,1770, 2230,2000	2000,1770, 2230,2000	2000,1770, 2230,2000	2000,1770, 2230,2000	
Pockets	N/A				

7. DIAPHRAGMS

Location of diaphragms	OK	OK	OK	OK	
Hole location	OK	OK	OK	OK	

8. INSERTS

Location	OK	OK	OK	OK	
----------	----	----	----	----	--

C. CASTING

1. CONCRETE

Unit weight (kg/m ³)	2285	2265	2260	2276	
Air (%)	5.5	5.8	6.4	6.4	
Slump (mm)	260	265	260	250	
Temperature (°C)	20.5	20.5	23.3	23	
Release strength (MPa)	67.5	46	45.8	46.9	
28 days strength (MPa)	79.2	81.6	79.6	82.8	

2. PLACING

Drop	OK	OK	OK	OK	
Vibration	OK	OK	OK	OK	

3. FINISH

Girder top	OK	OK	OK	OK	
------------	----	----	----	----	--

4. INITIAL CURING

After 4 hours of final concrete	Yes	Yes	Yes	Yes	
Curing temperature (°C)	36-53	39-58	38-51	N/A	

NU GIRDER INSPECTION REPORT

Bridge File #: 5213

Date: 1-Apr-13

By: Insp. Name.

Page: 4 of 5

D. REMOVAL FROM THE FORM

1. STRAND RELEASE SEQUENCE

As per approved sketch	OK	OK	OK	OK	
------------------------	----	----	----	----	--

2. CLEAN UP

Fin removal	OK	OK	OK	OK	
Clean up of projecting bar	OK	OK	OK	OK	
Minor patching (before steam curing)	OK	OK	OK	OK	

3. GIRDER

Length (m)		40.590	40.590	40.580	40.585	
Width (mm)		1262,187,1011	1262,487,1012	1263,187,1012	1263,187,1012	
Depth (mm)		2005	2005	2005	2005	
Skew (°)		20 LHF	20 LHF	20 LHF	20 LHF	
Sweep		20	20	20	20	
Camber (mm)	24 hours	+59	+59	+61	+55	
	7 days	N/A	N/A	N/A	N/A	
	14 days	N/A	N/A	N/A	N/A	
	shipping	+65	+71	+66	+63	
Ends		OK	OK	OK	OK	
Bearing areas smooth & level		Yes	Yes	Yes	Yes	
Interior units (cavities over 10 mm repaired)		Yes	Yes	Yes	Yes	
Exterior units (all cavities repaired Class 2/3 finish)		Yes	Yes	Yes	Yes	
Girder	Bearing Area	None	None	None	None	
	Anchorage area	0.15 mm WIDE	0.15 mm WIDE	0.15 mm WIDE	0.15 mm WIDE	
Cracks	Outside bearing /anchorage area	None	None	None	None	
Honeycomb /Spalls	Bearing or	None	None	None	None	
	Major honeycomb	None	None	None	None	

- Major honeycombs/spalls are described as honeycomb/spalls that are more than 30 mm or more than 0.1 m² in area.

NU GIRDER INSPECTION REPORT

Bridge File #: 5213

Date: 1-Apr-13

By: Insp. Name.

Page: 5 of 5

E. CURING

1. STEAMING

- Steam curing for four days with 95% - 100% relative humidity and 40° C to 50° C temperature.

Temperature (° C)	55-57	55-57	55-57	55-57	
Relative Humidity (%)	99	99	99	99	
Date unit in	22-Oct-12	23-Oct-13	24-Oct-13	25-Oct-13	
Date unit out	25-Oct-13	29-Oct-13	29-Oct-13	29-Oct-13	

F. FINISHES

1. SEALER

Type	None	None	None	None	
Application	N/A	N/A	N/A	N/A	

2. GIRDER FINISHES

Top	(Nail Rake 6mm x 6mm x 15mm)	OK	OK	OK	OK	
Bottom	Class 1	N/A	N/A	N/A	N/A	
Sides	Class 1 and Class 3 Ext.	OK	OK	OK	OK	

G. FINAL

1. SANDBLASTING

Diaphragms	OK	OK	OK	OK	
Blockouts	N/A	N/A	N/A	N/A	
Ends	OK	OK	OK	OK	

2. STORAGE

Safe	OK	OK	OK	OK		
Blocking	concrete block, plywood top	OK	OK	OK	OK	



CSP Inspection Report

Bridge File

Date:

By:

Page:

Project: _____ **Supplier:** _____

MEASUREMENTS

	Required	Measured				
Locations						
Corrugation						
Thickness						
Diameter						
Span*						
Rise*						
Corner Radius*						
Length						

* Span, Rise and Corner Radius are for pipe arch

VISUAL INSPECTION

Recorrugated Ends: (Lockseam in the corrugated ends does not contain any visible cracks in the base metal) _____

Profiles: (For a round pipe, major axis dia. shall not exceed minor axis dia. by more than 2%) _____

Lockseam: (No. of seams checked) _____

Termination of Lockseam: (Ends deburred, welded with 75 mm long fillet welds and painted with zinc rich paint) _____


Galvanizing: (Quality, thickness 1.7 mils each side for single galvanizing) _____

Type, No. of Couplers & Hardware: _____

Sloped Ends: _____

Elbows: _____

Comments:

	<h2 style="margin: 0;">SPCSP Inspection Report</h2>	Bridge File #:
		Date:
		By:
		Page:

Project: _____ **Supplier:** _____

MEASUREMENTS

Pile:		1	2	3	4	5	6	7
Plate Size:	(N)							
Plate	Required number							
Thickness:	Measured (mm)							
Corrugation	Pitch (mm)							
Profile:	Depth (mm)							
Shop Radii:	(mm)							
Test Chord	(=0.75 x chord length)							
Rise:	Required (mm)							
	Measured @ centre							
	Measured @ end							
Plate Length:	(mm)							

VISUAL INSPECTION

Galvanizing: (Quality, thickness 1.7 mils each side for single galvanizing) _____

Bolt Holes: (Holes round, deburred & centre of hole on centre of corrugation) _____

Stacking of Plates: (Stacking of plates nesting properly with no gaps between plates) _____

Sloped Ends: _____

Hardware: _____

Comments:

	SPCSP Inspection Report		Bridge File #: 12345	
			Date:	date
			By:	inspector name
			Page:	X of X

Project: Hwy XX:xx

Supplier: XYZ Industries

MEASUREMENTS

Pile:		1	2	3	4	5	6	7
Plate Size:	(N)	5	5	5	5	5	5	various
Plate	Required number	20	20	20	20	20	20	12
Thickness:	Measured (mm)	3	3	3	3	3	3	3
Corrugation	Pitch (mm)	152	151	152	151	151	151	151
Profile:	Depth (mm)	51	51	51	51	51	51	51
Shop Radii:	(mm)	1981	1981	1981	1981	1981	1981	1981
Test Chord	(=0.75 x chord length)	2438	2438	2438	2438	2438	2438	1828
Rise:	Required (mm)	420	420	420	420	420	420	224
	Measured @ centre	425	425	426	425	425	426	228
	Measured @ end	426	426	426	425	425	425	226
Plate Length:	(mm)	1220	1219	1219	1219	1219	1219	1222

VISUAL INSPECTION

Galvanizing: (Quality, thickness 1.7 mils each side for single galvanizing) comment required, touchups, damage?

Bolt Holes: (Holes round, deburred & centre of hole on centre of corrugation, hole size) comment required

Stacking of Plates: (Stacking of plates nesting properly with no gaps between plates) comment per Bridge Specification

Sloped Ends: 2:1 step Bevel or other

Hardware: list all components for shipping

Comments:

Inspection noted conformance, order ready to ship after contacting ABC Consultant



CULVERT INSTALLATION Inspection Record

Project: _____ Contract #: _____ Bridge File _____

Contractor: _____

Project Sponsor: _____ Consultant Inspector: _____

STRUCTURAL FILL	DESIGNATION REQUIRED	SOURCE	TESTED BY	APPROVED BY
Granular Fill	Des 2 - Class 20 or			
Crush	Des 2 - Class 40			
Pit run	Des 6 - Class 80			
Clay Fill				

INSTALLATION	INSPECTED BY	DATE	COMMENTS
Culvert Settings			
Excavation			
Bedding			
Assembly			
Backfill			
Haunch Area			
Sidewall Area			

COMPACTION EQUIPMENT	_____		

Lift Thickness _____ mm	Passes per Lift _____		

CONCRETE END TREATMENT	INSPECTED BY	DATE	COMMENTS
Rebar and Formwork			
Finished Work			
Concrete Compressive Strength			
Riprap			
Special Features			
Final Trimming/Cleanup			

Please return form to Project Sponsor



CULVERT INSTALLATION

Inspection Record

Project: _____ Hwy XX:xx _____ Contract #: CON00123456 Bridge File #: 12345
 Contractor: _____
 Project Sponsor: _____ Consultant Inspector: _____

STRUCTURAL FILL	DESIGNATION REQUIRED	SOURCE	TESTED BY	APPROVED BY
Granular Fill	Des 2 - Class 20 or	Borrow, or pit	Geotech Sub -cons	Prime Consultant
Crush	Des 2 - Class 40	Borrow, or pit	Geotech Sub -cons	Prime Consultant
Pit run	Des 6 - Class 80	Borrow, or pit	Geotech Sub -cons	Prime Consultant
Clay Fill		Borrow, or pit	Geotech Sub -cons	Prime Consultant

INSTALLATION	INSPECTED BY	DATE	COMMENTS
Culvert Settings	inspector	date	camber and inverts per design,
Excavation	inspector	date	firm , competent, no additional
Bedding	inspector	date	per design, no issues
Assembly	inspector	date	minor issues with hole alignment
Backfill	inspector	date	oversize cobbles removed
Haunch Area	inspector	date	hand tamped in corrugation
Sidewall Area	inspector	date	no issues

COMPACTION			
EQUIPMENT Sheep foot roller, jumping jack, hand plate tamper			
Lift Thickness	<u>150</u>	mm	Passes per Lift <u>6</u>

CONCRETE END TREATMENT	INSPECTED BY	DATE	COMMENTS
Rebar and Formwork	inspector	date	min cover provided, per std. dwgs.
Finished Work	inspector	date	finished and covered for cure
Concrete Compressive Strength	inspector	date	# cylinders & date, check lab
Riprap	inspector	date	per spec, gradation good, cloth in
Special Features	inspector	date	sideslope handrail in place
Final Trimming/Cleanup	inspector	date	erosion control still in place.

Please return form to Project Sponsor



CULVERT BARREL MEASUREMENTS

Project: _____ Contract #: _____ Bridge File #: _____
 From: _____ To: _____
 Contractor: _____
 Project Sponsor: _____ Consultant's Inspector: _____

Design Dimensions & Allowable Limits		Design Dimension (mm)	Maximum Dimension (mm)	Minimum Dimension (mm)	
	Rise				
	Span				

Actual Measurements	Assembly Complete		Backfill at Midpoint of Rise		Backfill to Top of Culvert		Backfill 0.3 m Above Top of Culvert		Grade Complete	
	Rise (mm)	Span (mm)	Rise (mm)	Span (mm)	Rise (mm)	Span (mm)	Rise (mm)	Span (mm)	Rise (mm)	Span (mm)
Upstream End										
m from U/S End										
m from U/S End										
Centreline of Road										
m from D/S End										
m from D/S End										
Downstream End										
Date Measured										
Measured By										

NOTE: Measurements to be taken top of corrugation to top of corrugation.
 Location of measurements should be marked (eg. Spray paint) for future reference.
 Please return form to Project Sponsor.



CULVERT BARREL MEASUREMENTS

Project: Highway XX:xx Contract #: CON00123456 Bridge File #: BF 12345
 From: Required if bridge file is in limits of a combined road /bridge project TO: Required if bridge file is in limits of a combined road /bridge project
 Contractor: XYZ Contractor
 Project Sponsor: _____ Consultant's Inspector: _____


Design Dimensions & Allowable Limits		Design Dimension (mm)	Maximum Dimension (mm)	Minimum Dimension (mm)
	Rise	3990	4070	3910
	Span	3990	4070	3910

Actual Measurements	Assembly Complete		Backfill at Midpoint of Rise		Backfill to Top of Culvert		Backfill 0.3 m Above Top of Culvert		Grade Complete	
	Rise (mm)	Span (mm)	Rise (mm)	Span (mm)	Rise (mm)	Span (mm)	Rise (mm)	Span (mm)	Rise (mm)	Span (mm)
Upstream End			3994	4004	3999	4000	3977	3987	3977	3990
<u>10</u> m from U/S End	3998	3995	3984	4014	3994	4007	3988	4014	3990	4010
<u>20</u> m from U/S End	4015	3975	3992	4007	3998	4002	3976	4031	3980	4020
Centreline of Road	4000	4000	3987	4010	4001	3995	3961	4054	3960	4030
<u>10</u> m from D/S End	4005	3995	3985	3997	3992	3995	3967	4018	3970	4020
<u>20</u> m from D/S End	4020	3975	3989	4001	3998	3991	3975	4022	3970	4020
Downstream End			3998	3992	3998	3992	3956	4005	3960	4000
Date Measured	01-May-13		15-May-13		16-May-13		17-May-13		19-May-13	
Measured By	name		name		name		name		name	

NOTE: Measurements to be taken top of corrugation to top of corrugation.
 Location of measurements should be marked (eg. Spray paint) for future reference.
 Please return form to Project Sponsor.

Concrete Testing at Site

Suggested Concrete Test Cylinder Coding

<p><u>Abutments</u></p> <p>A1S Abutment #1 Seat A1BW Abutment #1 Backwall A1LW Abutment #1 Left Wingwall A1RW Abutment #1 Right Wingwall A1WZ Abutment #1 Both Wingwalls A1B&W Abutment #1 Backwall & Wingwall A1GB Abutment #1 Grade Beam A1RS Abutment #1 Roof Slab A1AS Abutment #1 Approach Slab A1MC Abutment #1 Median Curb A1RD Abutment #1 Right Drain A1LD Abutment #1 Left Drain A1SP Abutment #1 Slope Protection A1LS Abutment #1 Left Sidewalk A1RS Abutment #1 Right Sidewalk</p>	<p><u>Piers</u></p> <p>P1DP Pier #1 Drilled Pile P1PP Pier #1 Pipe Pile P1F Pier #1 Footing P1S Pier #1 Shaft P1LS Pier #1 Lower Shaft P1US Pier #1 Upper Shaft P1PC Pier #1 Pier Cap P1C Pier #1 Column</p>	<p><u>SPCSP Culverts</u></p> <p>SPF Corrugated Metal Pipe Floor Slab SPUC Corrugated Metal Pipe U/S Collar SPDC Corrugated Metal Pipe D/S Collar SPUA Corrugated Metal Pipe U/S Apron SPDA Corrugated Metal Pipe D/S Apron SPUCW Corrugated Metal Pipe U/S Cut-off Wall SPDCW Corrugated Metal Pipe D/S Cut-off Wall SPUW Corrugated Metal Pipe U/S Wingwall SPDW Corrugated Metal Pipe D/S Wingwall SPUF Corrugated Metal Pipe U/S Footing SPDF Corrugated Metal Pipe D/S Footing</p>										
<p><u>Decks</u></p> <p>DS1 Deck Section #1* DS1RC Deck Section #1 Right Curb DS1LC Deck Section #1 Left Curb DS1RP Deck Section #1 Right Parapet DS1LP Deck Section #1 Left Parapet DS1MC Deck Section #1 Median Curb DS1RS Deck Section #1 Right Sidewalk DS1LS Deck Section #1 Left Sidewalk</p>	<p><u>Precast Units</u></p> <p>S1GK Span #1 Girder Keyways A1BK Abutment #1 Blockout Pier #1 Pier #1 Diaphragm Beam S1IDB Span #1 Intermediate Diaphragm Beam</p>	<p><u>Arch Culvert</u></p> <p>ACLF Arch Culvert Left Footing ACRF Arch Culvert Right Footing ACB Arch Culvert Barrel ACFS Arch Culvert Floor Slab ACUC Arch Culvert U/S Collar ACDC Arch Culvert D/S Collar ACUA Arch Culvert U/S Apron ACDA Arch Culvert D/S Apron ACUCW Arch Culvert U/S Cut-off Wall ACDCW Arch Culvert D/S Cut-off Wall ACUW Arch Culvert U/S Wingwall ACDW Arch Culvert D/S Wingwall ACUF Arch Culvert U/S Footing ACDF Arch Culvert D/S Footing</p>										
<p><u>Box Culverts</u></p> <p>BCF Box Culvert Floor Slab BCW Box Culvert Walls BCRS Box Culvert Roof Slab BCUA Box Culvert U/S Apron BCDA Box Culvert D/S Apron BCUW Box Culvert U/S Wingwalls BCDW Box Culvert D/S Wingwalls BCUF Box Culvert U/S Wingwall Footing BCDF Box Culvert D/S Wingwall Footing</p> <p>*Deck Section #'s:</p> <table border="1" style="width: 100%; text-align: center;"> <tr> <td style="width: 20%;">1</td> <td style="width: 20%;">2</td> <td style="width: 20%;">3</td> <td style="width: 20%;">4</td> <td style="width: 20%;">5</td> </tr> <tr> <td style="height: 40px;"></td> <td></td> <td></td> <td></td> <td></td> </tr> </table> <p style="text-align: center;">Abut #1 Pier #1 Pier #2 Abut # 2</p>	1	2	3	4	5							
1	2	3	4	5								

Concrete Test Results

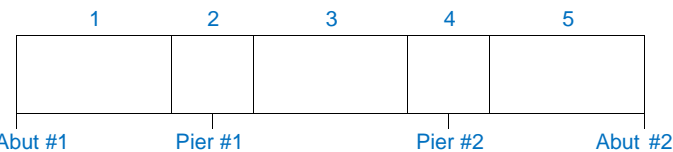
Date Tested: <u>6/12/2012</u>	Contract #: <u>222/08</u>	Bridge File #: <u>67890</u>
Weather: <u>Light Breeze, Cloudy</u>	Contractor: <u>ABC Contracting</u>	Hwy/Sec.: <u>555:02</u>
Temperature: High: <u>20°C</u> Low: <u>10°C</u>	Concrete Supplier: <u>XYZ Concrete</u>	Stream: <u>over Hwy 5 G/S</u>
	Plant Location: <u>Concrete Town</u>	Nearest Town: <u>Some Town</u>
		Consultant: <u>AAA Consulting</u>

Tested By	Name	Certification	Number	Certified	Expired	Test Cylinders Set	Mould Size (mm)	Placing Method /	Sampling At
<input type="checkbox"/> Contractor		<input checked="" type="checkbox"/> CSA	12345	1-Jul-11	1-Jul-14	<input checked="" type="checkbox"/> 7 & 3-28 day	<input checked="" type="checkbox"/> 100 x 200	Pump Truck	Hose End
<input checked="" type="checkbox"/> Indep. Lab.	Joe Tester	<input type="checkbox"/> ACI				<input type="checkbox"/> 3, 7 & 3-28 day	<input type="checkbox"/> 150 x 300	Curing Facilities /	Initial Temp.
<input type="checkbox"/> Consultant		<input type="checkbox"/>				<input type="checkbox"/> 1, 3, 7 & 3-28 day	<input type="checkbox"/>	Curing Box	17 - 23°C

Concrete Test	Class	Strength	1 Set of Strength Test Represent			Haul Time	Slump	Air Cont.	Unit Wt.	Air (°C)	Conc (°C)
Specification Requirements	HPC	45 MPa	2 Batches or 20 m ³	3 Batches or 30 m ³	<70 min.		120 ± 30	5 to 8	2400	5 to 25	10 to 20
Pour Location	Cylinder Identification Labels*	Delivery Ticket Number	Load Amount (m ³)	Time			Slump (mm)	Air Content (%)	Unit Weight (kg/m ³)	Temperature	
				Batched	Tested	Off-Load				Air (°C)	Concrete (°C)
Deck pour over Pier #1	DS2-1,2,3,4	1	10	20:00	20:45	20:50	120	6.5	2400	15	16
Deck pour over Pier #1	n/a	2	10	20:30	21:20	21:25	110	6.8	2395	15	16
Deck pour over Pier #1	DS2-1,6,7,8	3	10	21:00	21:40	21:50	125	7.2	2405	14	14
Deck pour over Pier #1	n/a	4	10	21:30	22:15	22:20	130	5.6	2395	14	15
Deck pour over Pier #2	DS4-9,10,11,12	5	10	22:00	22:35	22:45	140	5.8	2400	13	13
Deck pour over Pier #2	n/a	6	10	22:30	23:10	23:15	125	6.7	2400	13	17
Deck pour over Pier #2	DS4-11,12,13,14	7	10	23:00	23:40	23:45	130	7.0	2405	13	16
Deck pour over Pier #2	n/a	8	10	23:30	00:05	00:10	130	6.5	2402	12	15

Sketch of Test Cylinder Location:

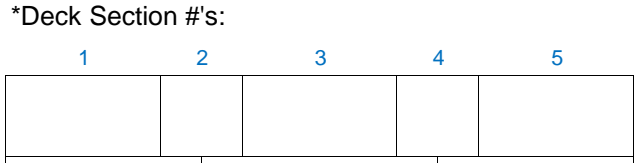
Deck Section #'s:



Comments: Ticket # 4 & 5 had 200 mL of superplasticizer added
superplasticizer used was EZY 123

Concrete Testing at Site

Suggested Concrete Test Cylinder Coding

<p>Abutments</p> <p>A1S Abutment #1 Seat A1BW Abutment #1 Backwall A1LW Abutment #1 Left Wingwall A1RW Abutment #1 Right Wingwall A1WZ Abutment #1 Both Wingwalls A1B&W Abutment #1 Backwall & Wingwall A1GB Abutment #1 Grade Beam A1RS Abutment #1 Roof Slab A1AS Abutment #1 Approach Slab A1MC Abutment #1 Median Curb A1RD Abutment #1 Right Drain A1LD Abutment #1 Left Drain A1SP Abutment #1 Slope Protection A1LS Abutment #1 Left Sidewalk A1RS Abutment #1 Right Sidewalk</p>	<p>Piers</p> <p>P1DP Pier #1 Drilled Pile P1PP Pier #1 Pipe Pile P1F Pier #1 Footing P1S Pier #1 Shaft P1LS Pier #1 Lower Shaft P1US Pier #1 Upper Shaft P1PC Pier #1 Pier Cap P1C Pier #1 Column</p> <p>Precast Units</p> <p>S1GK Span #1 Girder Keyways A1BK Abutment #1 Blockout Pier #1 Pier #1 Diaphragm Beam S1IDB Span #1 Intermediate Diaphragm Beam</p>	<p>SPCSP Culverts</p> <p>SPF Corrugated Metal Pipe Floor Slab SPUC Corrugated Metal Pipe U/S Collar SPDC Corrugated Metal Pipe D/S Collar SPUA Corrugated Metal Pipe U/S Apron SPDA Corrugated Metal Pipe D/S Apron SPUCW Corrugated Metal Pipe U/S Cut-off Wall SPDCW Corrugated Metal Pipe D/S Cut-off Wall SPUW Corrugated Metal Pipe U/S Wingwall SPDW Corrugated Metal Pipe D/S Wingwall SPUF Corrugated Metal Pipe U/S Footing SPDF Corrugated Metal Pipe D/S Footing</p>
<p>Decks</p> <p>DS1 Deck Section #1* DS1RC Deck Section #1 Right Curb DS1LC Deck Section #1 Left Curb DS1RP Deck Section #1 Right Parapet DS1LP Deck Section #1 Left Parapet DS1MC Deck Section #1 Median Curb DS1RS Deck Section #1 Right Sidewalk DS1LS Deck Section #1 Left Sidewalk</p> <p>*Deck Section #'s:</p> <div style="display: flex; align-items: center; margin-top: 10px;"> <div style="display: flex; justify-content: space-around; width: 200px;"> 12345 </div>  </div>	<p>Box Culverts</p> <p>BCF Box Culvert Floor Slab BCW Box Culvert Walls BCRS Box Culvert Roof Slab BCUA Box Culvert U/S Apron BCDA Box Culvert D/S Apron BCUW Box Culvert U/S Wingwalls BCDW Box Culvert D/S Wingwalls BCUF Box Culvert U/S Wingwall Footing BCDF Box Culvert D/S Wingwall Footing</p>	<p>Arch Culvert</p> <p>ACLF Arch Culvert Left Footing ACRF Arch Culvert Right Footing ACB Arch Culvert Barrel ACFS Arch Culvert Floor Slab ACUC Arch Culvert U/S Collar ACDC Arch Culvert D/S Collar ACUA Arch Culvert U/S Apron ACDA Arch Culvert D/S Apron ACUCW Arch Culvert U/S Cut-off Wall ACDCW Arch Culvert D/S Cut-off Wall ACUW Arch Culvert U/S Wingwall ACDW Arch Culvert D/S Wingwall ACUF Arch Culvert U/S Footing ACDF Arch Culvert D/S Footing</p>