

FUTURE JACKING LOADS					
	JACKING MK.	UNFACTORED PERMANENT LOAD (kN/JACKING LOCATION)	TOTAL UNFACTORED LOAD (kN/BEARING)	FACTORED PERMANENT LOAD (kN/BEARING)	TOTAL FACTORED LOAD (kN/BEARING)
		[kN]	[kN]	[kN]	[kN]
S-0 & S-5 (Exp)	1	815	1330	1000	2095
	2	490	795	605	1250
S-1 & S-4 (Exp)	1	1290	1960	1595	3015
	2	710	1090	880	1685
S-2 (Exp)	1	1290	1930	1580	2955
	2	710	1075	875	1660
S-3 (Fxd)	1	1290	1930	1580	2955
	2	710	1075	875	1660

NOTES:  
\* TABLE CONSIDERS SHORT TERM LOAD EFFECTS - NO LONG TERM CREEP AND SHRINKAGE ARE INCLUDED.  
\*\* LATERAL LOADS TO BE CALCULATED BASED ON TEMPORARY SUPPORT SYSTEM.

- REHABILITATION JACKING NOTES:
- JACKING MUST BE COMPLETED ON ALL GIRDERS ON A SUBSTRUCTURE UNIT CONCURRENTLY.
  - JACKING LOADS DURING CONSTRUCTION JACKING SHALL BE DETERMINED BY THE CONTRACTOR BASED ON THE PROPOSED SEQUENCE OF WORK AND ANTICIPATED CONSTRUCTION LOADS. JACKING LOADS AND METHODOLOGY SHALL BE PRESENTED TO THE CONTRACT ADMINISTRATOR FOR APPROVAL PRIOR TO JACKING.
  - JACKING IS PERMITTED FROM THE EXISTING GIRDERS ADJACENT TO THE EXISTING BEARINGS PROVIDED THE AREA OF THE JACKING PLATE IS NOT LESS THEN AREA OF THE EXISTING BEARINGS.
  - JACKING HEIGHT SHALL CONSIDER THE HEIGHT OF THE PERMANENT BEARINGS. JACKING HEIGHT SHALL BE LIMITED TO ONLY WHAT IS REQUIRED TO REPLACE BEARINGS.
  - FOR BEARING REPLACEMENT SEQUENCE OF WORK REFER TO 2115.

- FUTURE JACKING NOTES:
- DURING FUTURE JACKING, JACKING SHALL BE DONE FROM THE CENTER OF THE ABUTMENT AND PIER END DIAPHRAGMS, REFER TO SHEET 2120 FOR LOCATIONS.
  - JACKING MUST BE COMPLETED ON ALL GIRDERS ON A SUBSTRUCTURE UNIT CONCURRENTLY.
  - JACKING OF BRIDGE SHALL BE DONE WITH NO LOAD LOAD ON THE BRIDGE. ONCE BRIDGE IS IN BLOCKED CONDITION, LIVE LOAD IS PERMITTED WITH A SINGLE TRAFFIC LANE IN THE CENTER OF THE BRIDGE.

1

GIRDER LAYOUT

1 : 200

LEGEND

CRACK

SCALE

SCALE WITH EFFLORESCENCE

SPALL

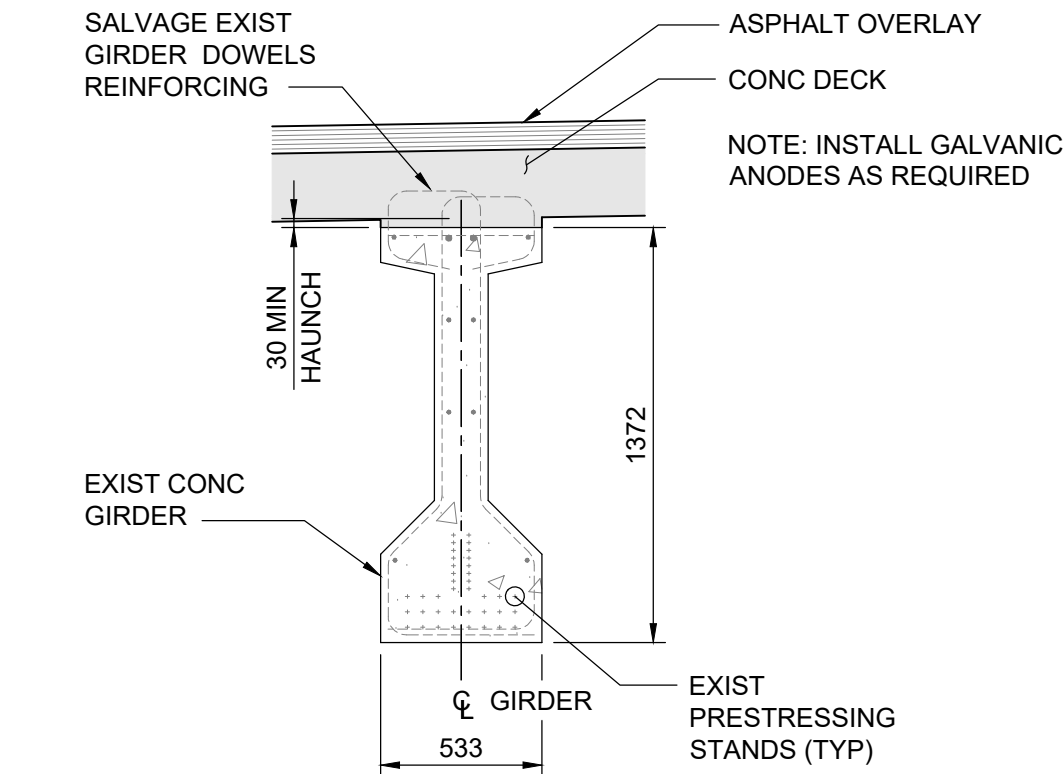
DELAMINATION

GIRDER STRENGTHENING

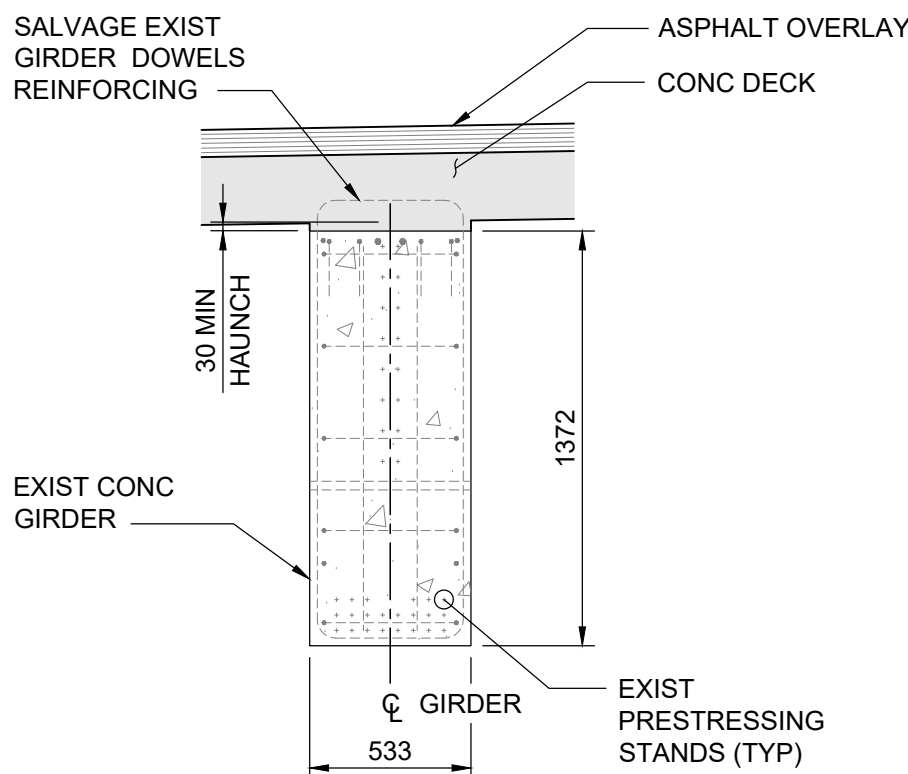
AREA OF EXISTING GIRDER PATCHING

- NOTES:
- CRACK LOCATIONS ARE APPROXIMATE. CRACK WIDTH VARIED
  - THIS DRAWING DEPICTS SELECT FINDINGS/AREAS OF CONCERN. ACTUAL REPAIR AREAS MAY BE DIFFERENT AND WILL BE IDENTIFIED ON SITE BY THE CONTRACT ADMINISTRATOR.
  - ASSUMED REPAIR AREAS ARE PROVIDED IN TABLE 1.
  - REFER TO SHEET 2109 FOR TYPICAL REPAIR DETAILS.

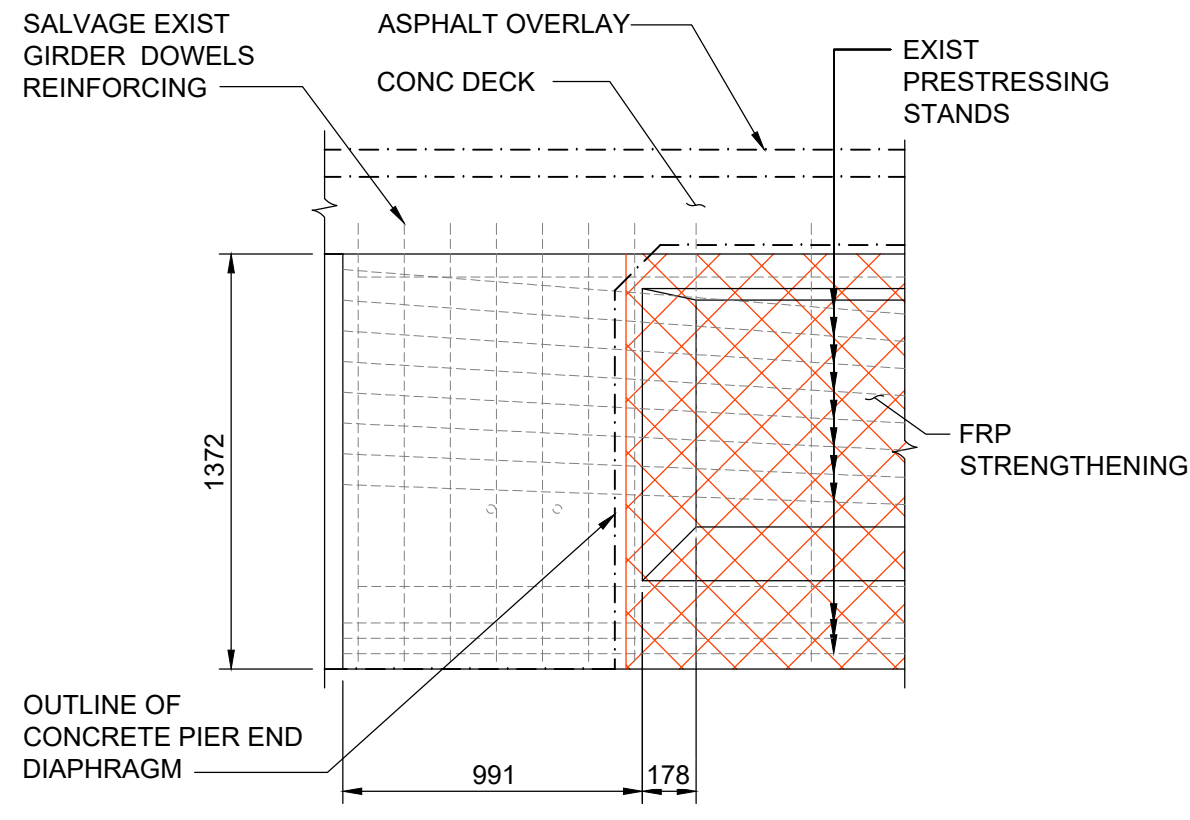
TABLE 1: REPAIR QUANTITIES	
	APPROX REPAIR UNITS
SOUTHBOUND	2.0 m <sup>2</sup>



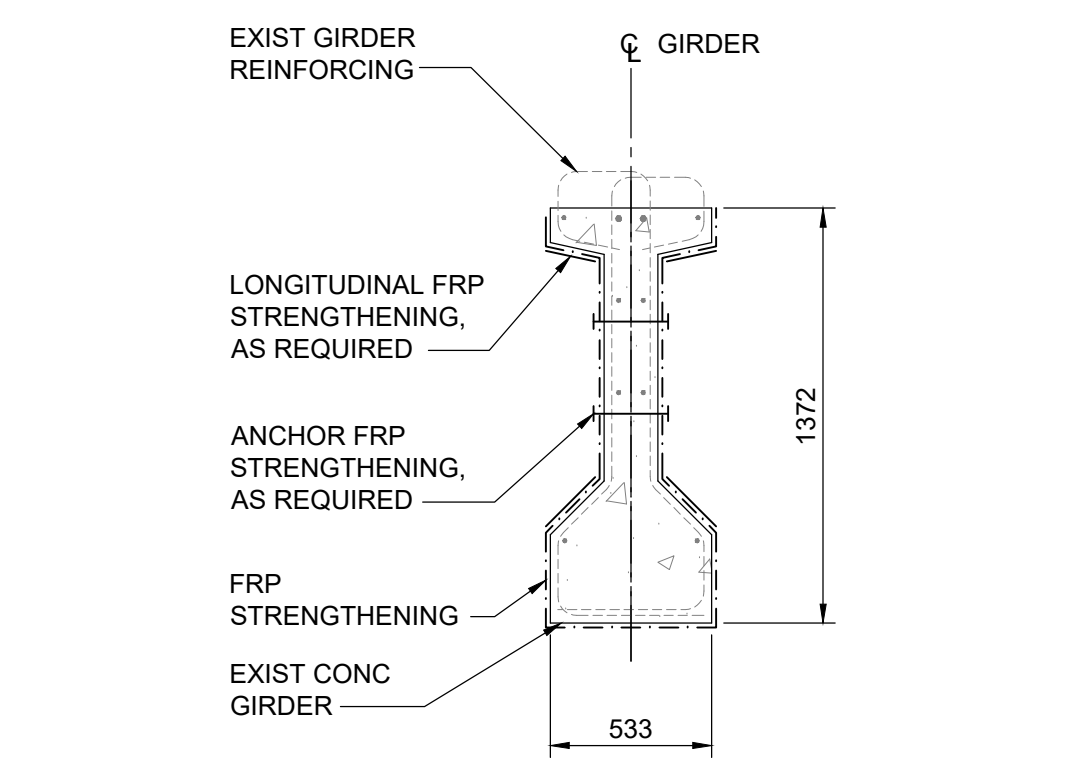
2 TYPICAL GIRDER SECTION  
1 : 25



3 TYPICAL GIRDER END  
1 : 25




4 GIRDER END ELEVATION AT PIER END  
1 : 25  
NOTE: EXISTING GIRDER ENDS HAVE BEEN PREVIOUSLY COATED WITH ACTIVATED ARC SPRAY ZINC.



5 GIRDER STRENGTHENING SECTION  
1 : 25  
FRP DETAILS SHOWN ARE FOR ILLUSTRATIVE PURPOSES ONLY

NOTE:  
REFER TO SHEET 1004 FOR FRP STRENGTHENING NOTES.



B.M. ELEV.				<div>TETRA TECH</div>				ORIGINAL DRAWING REVISION " 0 " SEALED BY S.Y.I. AWAD 25.08.07			
				DESIGNED BY RL		REVIEWED BY SA					
				DRAWN BY EV		APPROVED BY KA					
				SCALE: AS NOTED				ACCEPTED BY DATE			
1	ISSUED FOR ADDENDUM 5		25.09.22	RL	CAM WARD, P.ENG. 25.08.07						
0	ISSUED FOR TENDER		25.08.07	SA							
NO.	REVISIONS		DATE	BY	DATE 25.08.07						

CONSULTANT DRAWING NO.			
704-INF.MBI03007.01-DWG-S2118			

**THE CITY OF WINNIPEG**  
PUBLIC WORKS DEPARTMENT  
ENGINEERING DIVISION

LAGIMODIERE TWIN OVERPASSES  
OVER CPKC KEEWATIN  
REHABILITATION AND RELATED WORKS

SOUTHBOUND STRUCTURE  
GIRDER REPAIR AND STRENGTHENING LAYOUT

CITY DRAWING NUMBER  
B123-25-2118

SHEET 18 OF 47

2118