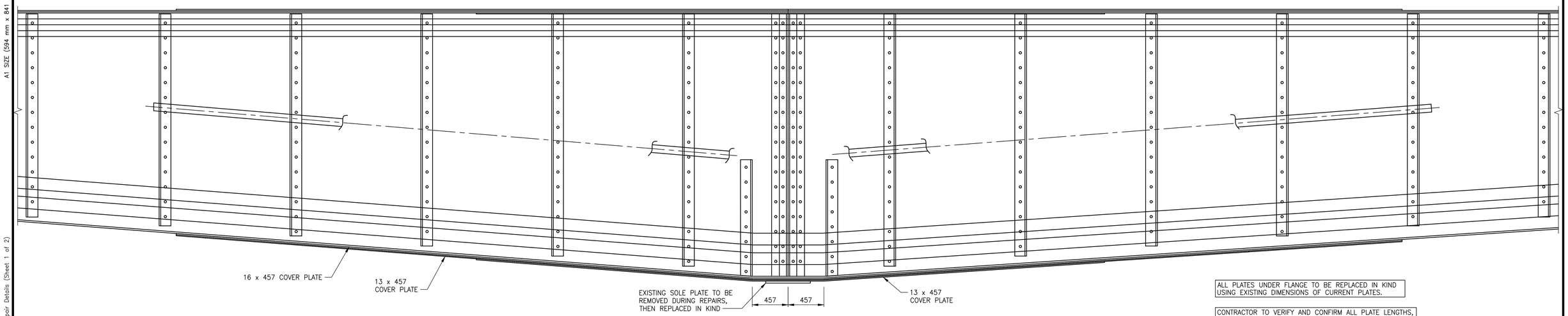
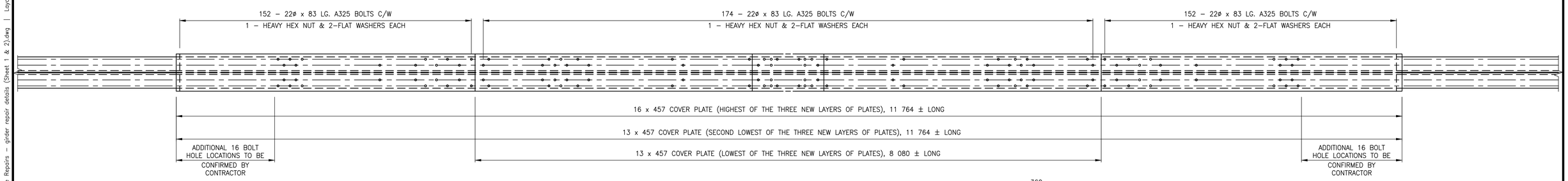


WEST EXTERIOR GIRDER DETAILS AT PIER 1 AND PIER 2

SCALE 1:25

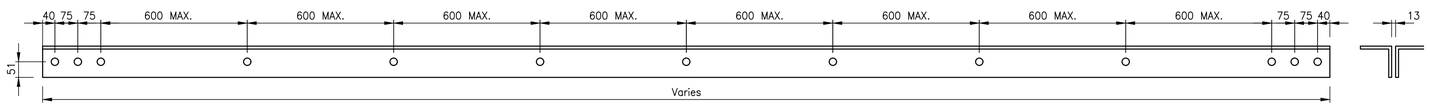
ALL PLATES UNDER FLANGE TO BE REPLACED IN KIND USING EXISTING DIMENSIONS OF CURRENT PLATES.

CONTRACTOR TO VERIFY AND CONFIRM ALL PLATE LENGTHS, AND LOCATIONS OF BOLT HOLES IN BOTTOM FLANGE PLATES PRIOR TO FABRICATION AND CONSTRUCTION. CONTRACTOR TO BE AWARE THAT BOTTOM OF GIRDERS AND FLANGE PLATES ARE CURVED.



BOTTOM FLANGE PLATE PLAN

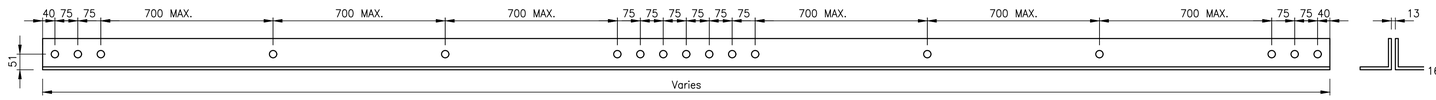
SCALE 1:25



HORIZONTAL ANGLES 'L1'

SCALE 1:10

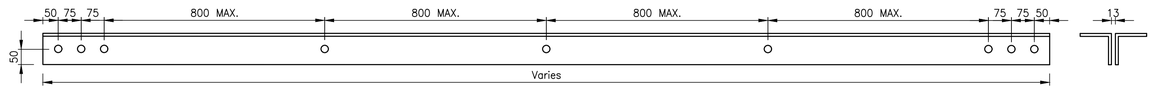
16 – 2 L 102 x 102 x 9.5 'L1' REQUIRED (TOTAL MASS OF 16 – 'L1' DOUBLE ANGLES: 1 953 KG)



HORIZONTAL ANGLES 'L2'

SCALE 1:10

16 – 2 L 102 x 102 x 9.5 'L2' REQUIRED (TOTAL MASS OF 16 – 'L2' DOUBLE ANGLES: 1 953 KG)

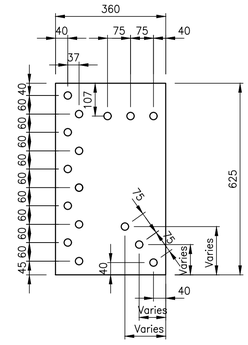


DIAGONAL ANGLES 'L3'

SCALE 1:10

32 – 2 L 102 x 102 x 9.5 'L3' REQUIRED (TOTAL MASS OF 32 – 'L3' DOUBLE ANGLES: 2 670 KG)

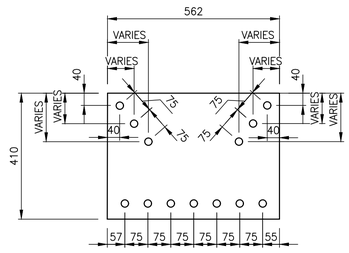
CONTRACTOR TO CONFIRM LENGTH OF 'L1, 'L2' AND 'L3' DOUBLE ANGLES PRIOR TO FABRICATION AND CONSTRUCTION BASED ON SITE MEASUREMENTS. EDGE DISTANCES AND BOLT SPACING AT 'L1', 'L2' AND 'L3' CONNECTIONS TO REMAIN CONSISTENT. LOCATIONS OF CLAMPED BOLTS WITHIN 'L1', 'L2' AND 'L3' DOUBLE ANGLES TO BE EQUAL BETWEEN CONNECTIONS.



GUSSET PLATE 'P1'

SCALE 1:10

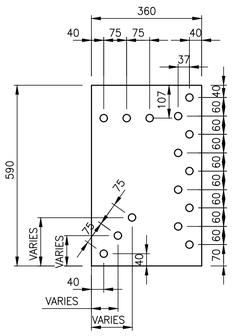
16 – PL 625 x 360 x 13 GUSSET PLATE 'P1' REQUIRED
(MASS PER PLATE: 22 kg)



GUSSET PLATE 'P3'

SCALE 1:10

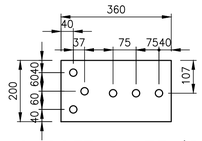
16 – PL 562 x 410 x 13 GUSSET PLATE 'P3' REQUIRED
(MASS PER PLATE: 23 kg)



GUSSET PLATE 'P4'

SCALE 1:10

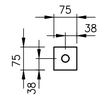
16 – PL 590 x 360 x 13 GUSSET PLATE 'P4' REQUIRED
(MASS PER PLATE: 21 kg)



GUSSET PLATE 'P2'

SCALE 1:10

32 – PL 360 x 200 x 13 GUSSET PLATE 'P2' REQUIRED
(MASS PER PLATE: 7.2 kg)



SPACER BETWEEN DOUBLE ANGLES

SCALE 1:10

272 – PL 75 x 75 x 10 SPACERS REQUIRED
7 SPACERS AT EACH 'L1'
4 SPACERS AT EACH 'L2'
3 SPACERS AT EACH 'L3'
(MASS PER PLATE: 0.4 kg)

ALL BOLT HOLES FOR 'P1', 'P2', 'P3', 'P4', 'L1', 'L2', 'L3' AND SPACERS ARE 24 DIA FOR 22 DIA A325 BOLTS.

METRIC
ALL MEASUREMENTS IN MILLIMETRES
UNLESS OTHERWISE STATED

NOTE:
These design documents are prepared solely for the use by the party with whom the design professional has entered into a contract and there are no representations of any kind made by the design professional to any party with whom the design professional has not entered into a contract.

ENGINEERS GEOSCIENTISTS MANITOBA
Certificate of Authorization
WSP Canada Inc.
No. 5750

LOCATIONS APPROVED
UNDERGROUND STRUCTURES

SIGNED BY: _____ DATE _____
SUPV U/G STRUCTURES

LOCATION OF UNDERGROUND STRUCTURES AS SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE BUT NO GUARANTEE IS GIVEN THAT ALL EXISTING UTILITIES ARE SHOWN OR THAT THE GIVEN LOCATIONS ARE EXACT CONFIRMATION OF EXISTANCE AND EXACT LOCATION OF ALL SERVICES MUST BE OBTAINED FROM THE INDIVIDUAL UTILITIES BEFORE PROCEEDING

G.B.M.
ELEV.

No.	REVISIONS	DATE	BY
0	ISSUED FOR TENDER	25.05.13	MLW

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www.wsp.com

DESIGNED BY	GN	CHECKED BY	EH
DRAWN BY	BK	APPROVED BY	MLW
HOR. SCALE	AS NOTED	RELEASED FOR CONSTRUCTION	M. MADY, Ph.D., P.ENG. CITY OF WINNIPEG
VERTICAL	AS NOTED		
DATE	25.05.13	DATE	

ENGINEER'S SEAL
PROVINCE OF MANITOBA
M. G. MADY
Member
36364
REGISTERED PROFESSIONAL ENGINEER
2025-05-14

CONSULTANT PROJECT No.
CA0047563.3090

Winnipeg
THE CITY OF WINNIPEG
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

MIDTOWN BRIDGE MAINTENANCE
REPAIRS AND RELATED WORKS

GIRDER REPAIR DETAILS
(SHEET 1 OF 2)

CITY DRAWING NUMBER
B114-25-05
BID OPPORTUNITY NUMBER
329-2025
SHEET 5 OF 9
REV 0

A1 SIZE (594 mm x 841 mm)

Plotted: May 12, 2025 at 5:22:33 PM | Last saved by: paterson
File: C:\Users\paterson\DC\ACCDocs\WSP Canada projects (AMER)\CA0047563.3090 – Midtown Bridge – C2A\Project Files\01–Bridges\03–Working Drawings\CA0047563–3090 Midtown Bridge Repairs – girder repair details (Sheet 1 & 2).dwg | Layout: 5 Girder Repair Details (Sheet 1 of 2)