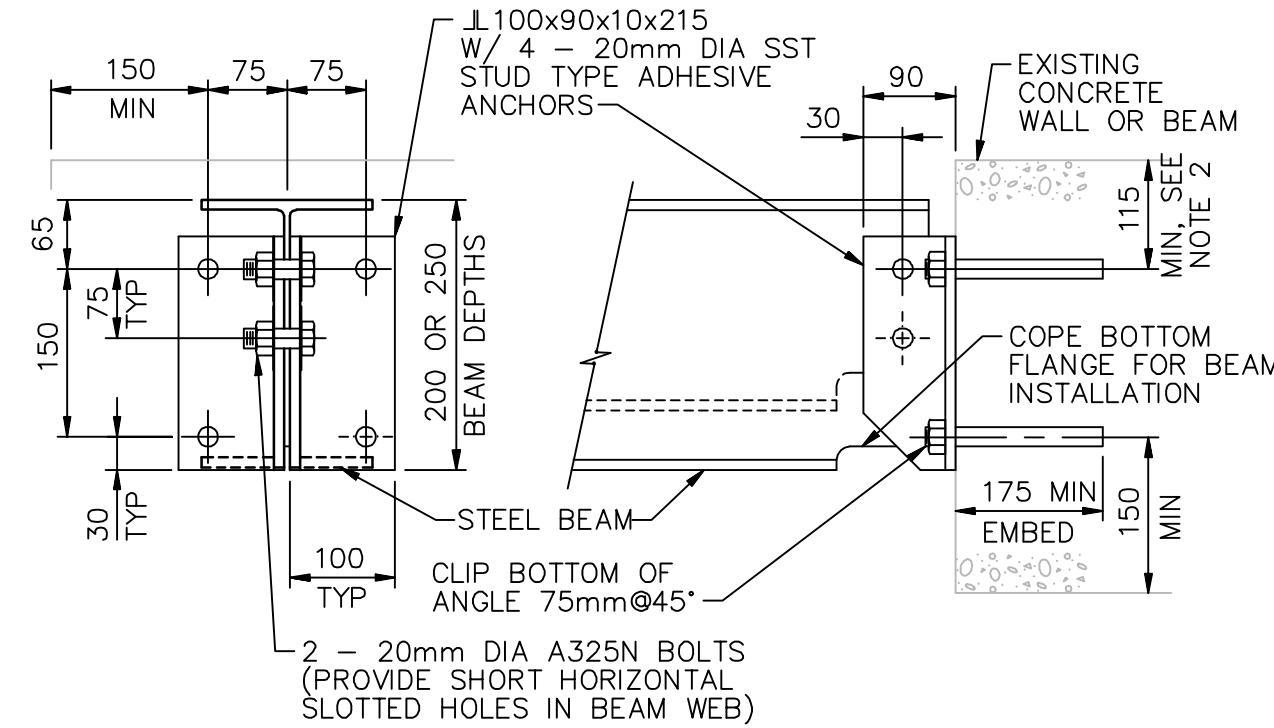
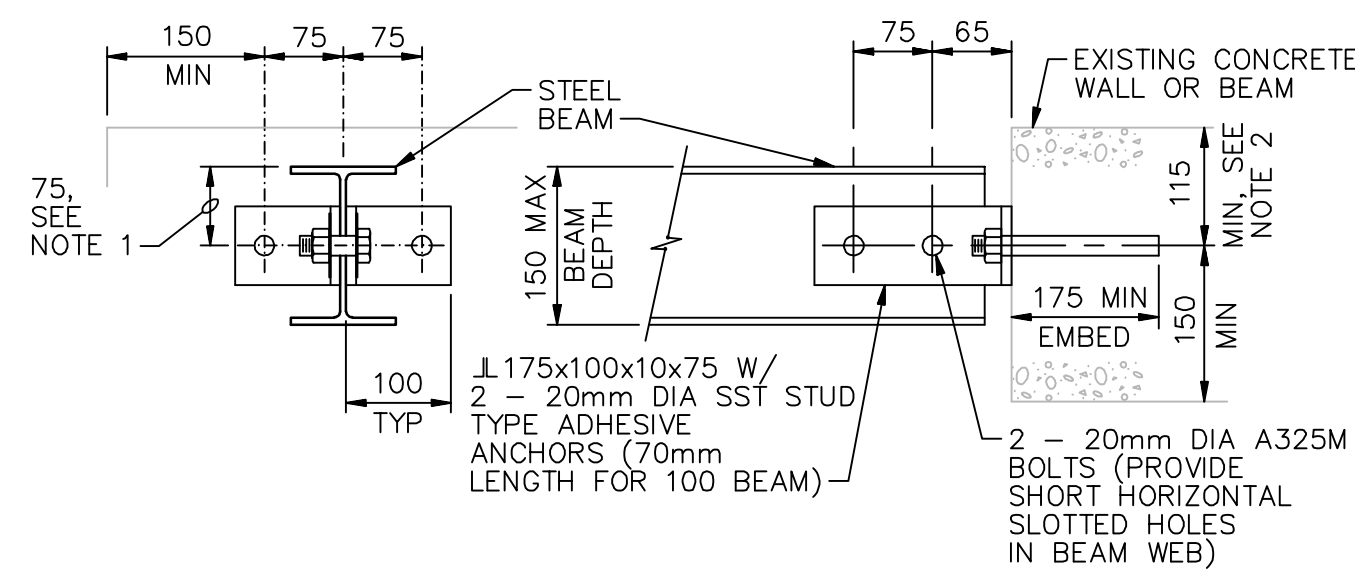


NOMINAL BEAM DEPTH, mm	ROWS OF BOLTS	BOLT DIA, mm	DOUBLE ANGLE, LENGTH, mm	COMMENTS
920	10	22	750	ANGLE THK = 10
840	9	22	675	ANGLE THK = 10
760	8	22	600	ANGLE THK = 10
690	7	20	520	-
610	6	20	445	-
530	5	20	365	-
410-460	4	20	290	-
310-380	3	20	215	-
200-250	2	20	140	-
150	1	20	75	SEE NOTE 3
100	1	20	65	SEE NOTE 3

**NOTES**

- UNLESS NOTED OTHERWISE, NUMBER OF ROWS IS EQUAL TO NUMBER OF BOLTS TO ENCLOSE BEAM WEB.
- ALL BEAM FRAMING CONNECTIONS SHALL CONFORM TO THIS DETAIL UNLESS SPECIFICALLY NOTED OTHERWISE OR APPROVED IN WRITING BY THE ENGINEER.
- FOR NOMINAL BEAM DEPTHS LESS THAN 200mm, EXTEND LONG LEG OF DOUBLE ANGLE ALONG BEAM WEB AND PROVIDE ADDITIONAL BOLT TO ENCLOSE BEAM WEB AS SHOWN.
- PROVIDE ADDITIONAL 40mm LENGTH TO DOUBLE ANGLE FOR STAGGERED BOLT CONNECTIONS WHEN REQUIRED OR USED.
- DIMENSION SHALL BE 75mm UNLESS OTHERWISE REQUIRED FOR PROPER FABRICATION.

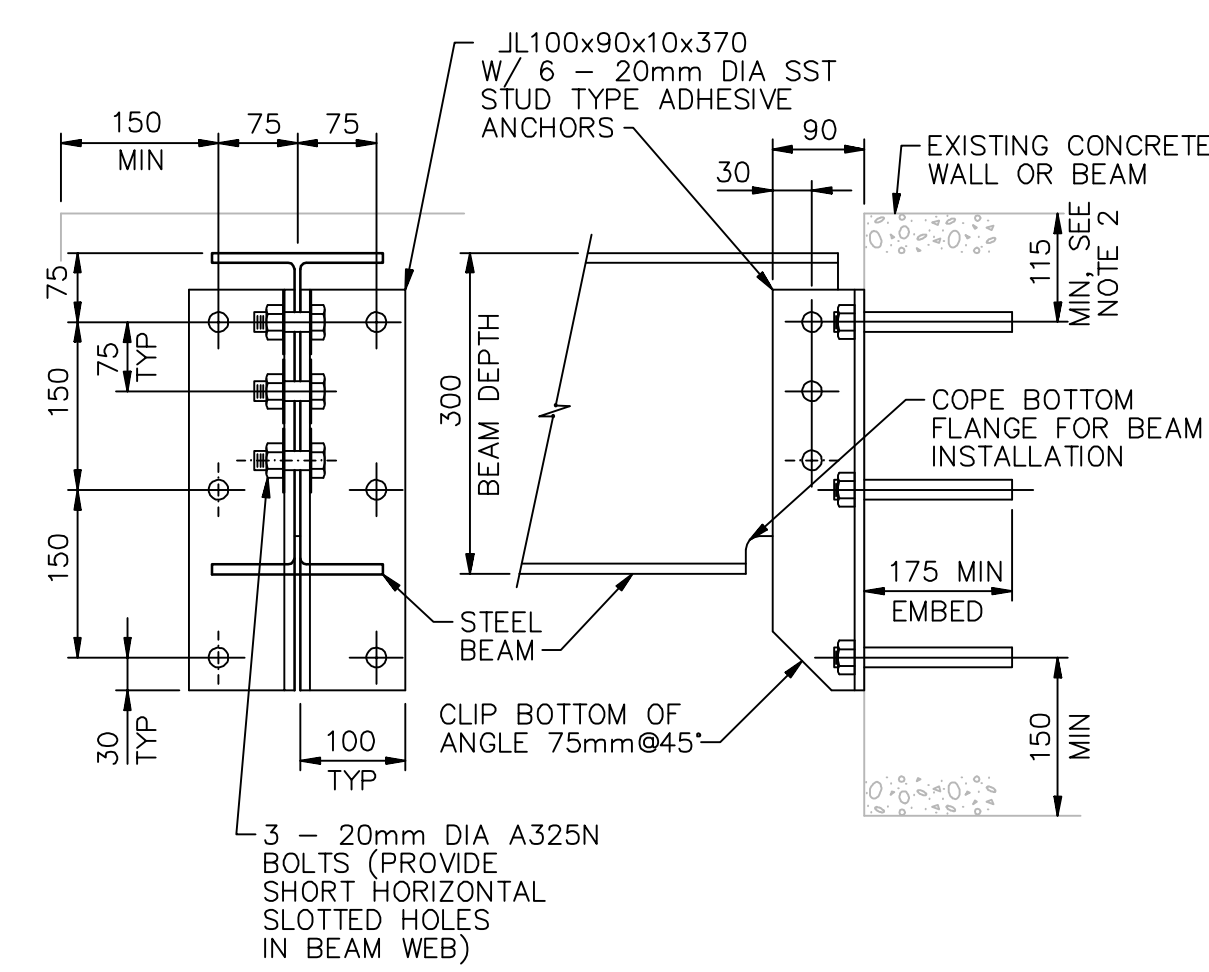
1 TYPICAL BEAM CONNECTION  
- N.T.S.



**NOTES:**

- 75mm DIMENSION TYPICAL EXCEPT 65mm FOR 125mm BEAMS AND 50mm FOR 100mm BEAMS.
- DO NOT CUT EXISTING CONCRETE BEAM TOP REINFORCING DURING DRILL-IN ANCHOR INSTALLATION. FIELD LOCATE BEAM REINFORCING PRIOR TO FABRICATION. ADD LENGTH TO CLIP ANGLES AS REQUIRED TO LOWER ANCHORS TO CLEAR REINFORCING WHILE MAINTAINING SPACING AND EDGE DISTANCE AS SHOWN.
- WHERE BOTH ENDS OF BEAM ARE ATTACHED TO A WALL, PROVIDE LONG HORIZONTALLY SLOTTED HOLES IN BEAM WEB AT ONE END. TIGHTEN NUTS SNUG TIGHT, BACK OFF 1/2 TURN, AND LOCK WITH DOUBLE NUT.

2 BEAM/WALL CONNECTION-STEEL  
- N.T.S.



B.M. ELEV.	CONSTRUCTION COMPLETION DATE: YYYY MM DD		
DESIGNED BY	KS	CHECKED BY	RP
DRAWN BY	JBC	APPROVED BY	BW
SCALE: HORIZONTAL VERTICAL	AS SHOWN -	RELEASED FOR CONSTRUCTION	
0 ISSUED FOR TENDER	14-01-21	JBC	
NO. REVISIONS	DATE	BY	DATE
			2014 01 21

**CH2MHILL**

ENGINEER'S SEAL: PROVINCE OF MANITOBA, PARIKH Member 30474, REGISTERED PROFESSIONAL ENGINEER

CONSULTANT DRAWING NUMBER: WX-S0401

THE CITY OF WINNIPEG  
WATER AND WASTE DEPARTMENT  
ENGINEERING DIVISION

MEZZANINE, WALKWAY AND EQUIPMENT SUPPORTS FOR A WATER TREATMENT RESEARCH AND PROCESS OPTIMIZATION FACILITY  
STRUCTURAL

STANDARD DETAILS  
SHEET 1 OF 4

SHEET 6 OF 9  
CITY DRAWING NUMBER  
1-0601X-S0004-001-00