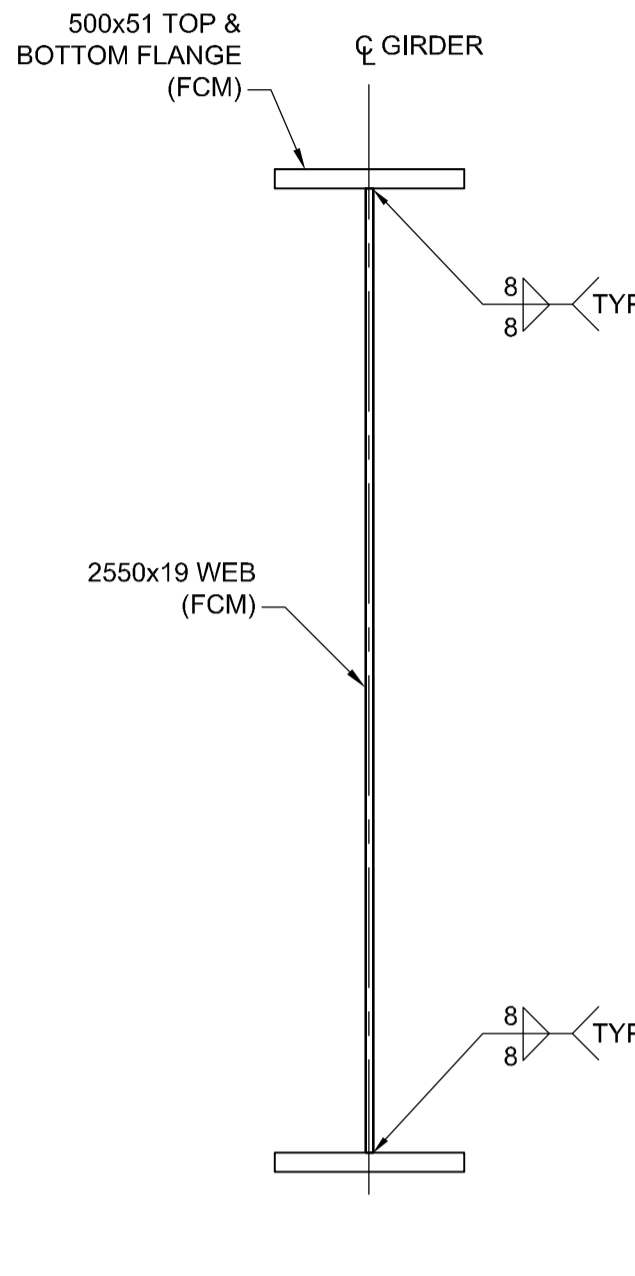
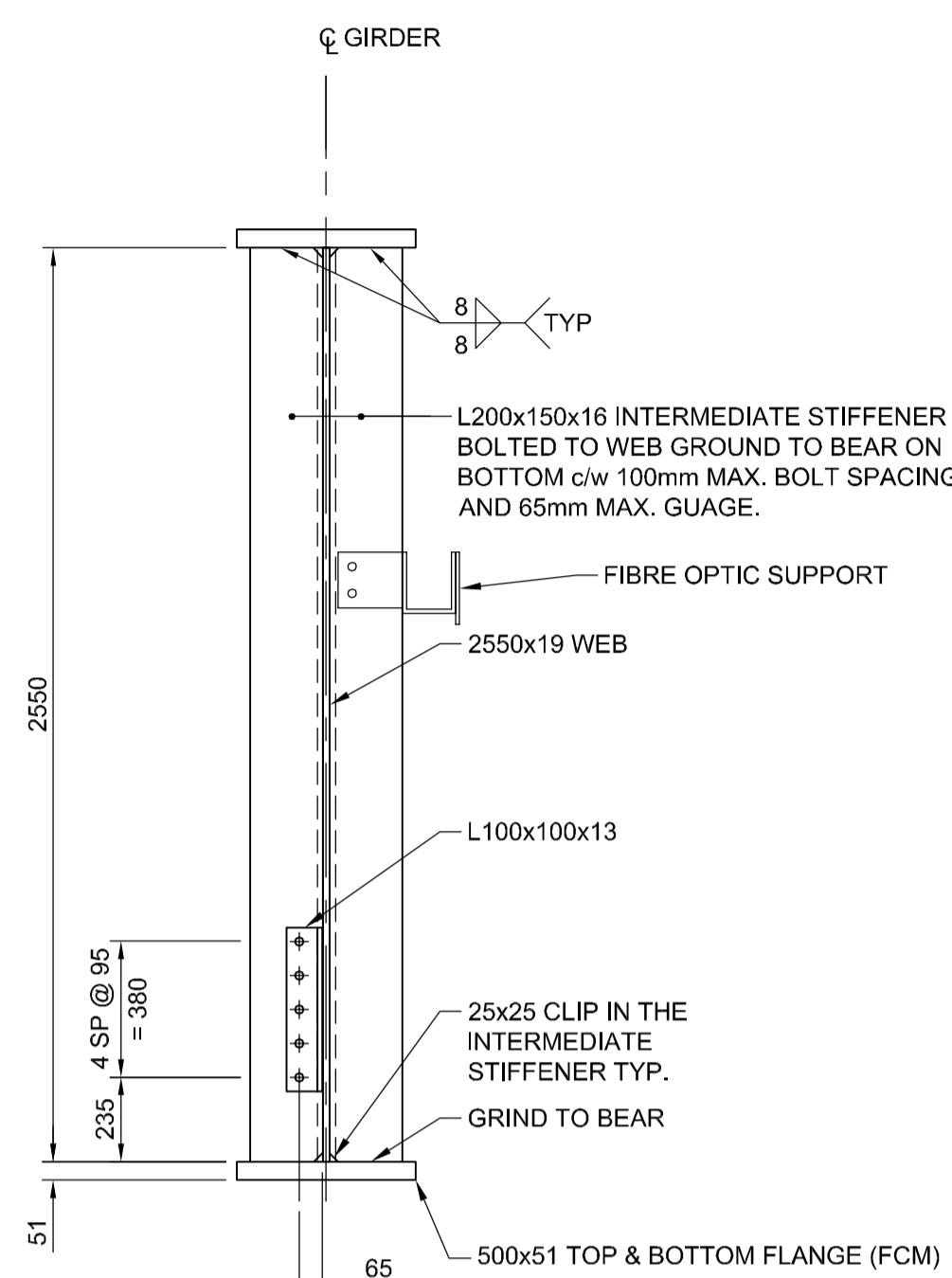


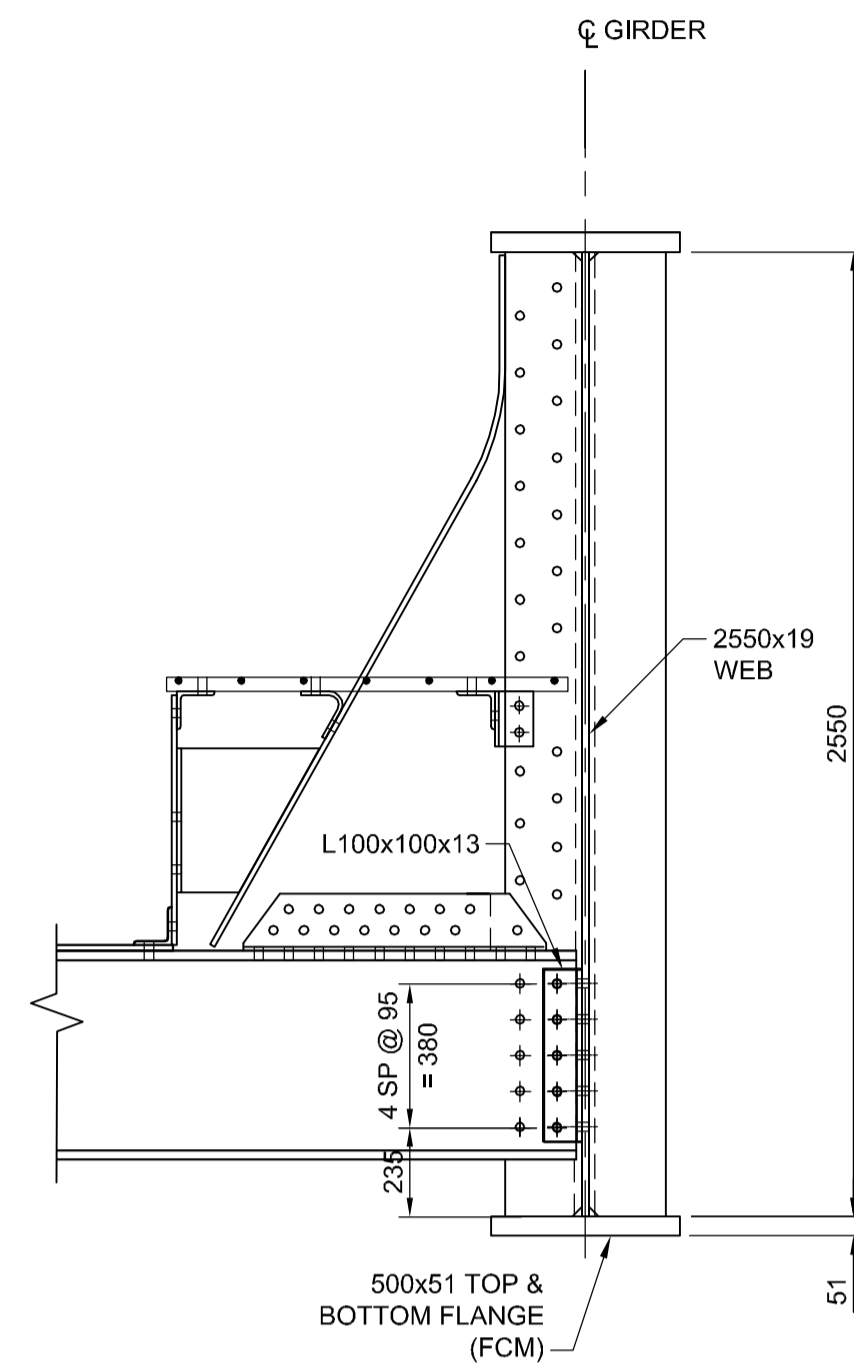
**1 TYPICAL BEARING STIFFENER**  
CS-0017 Scale 1:20



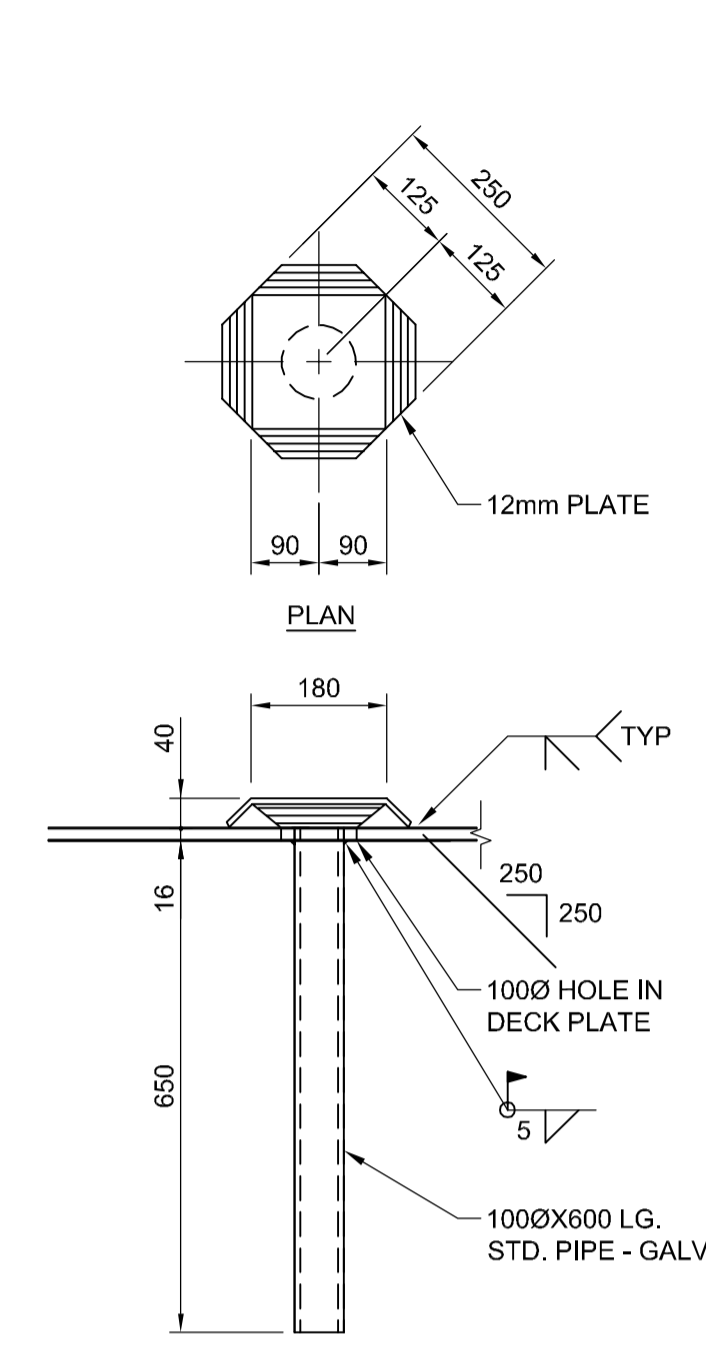
**2 TYPICAL MAIN GIRDER SECTION W/O STIFFENER**  
CS-0018 Scale 1:20



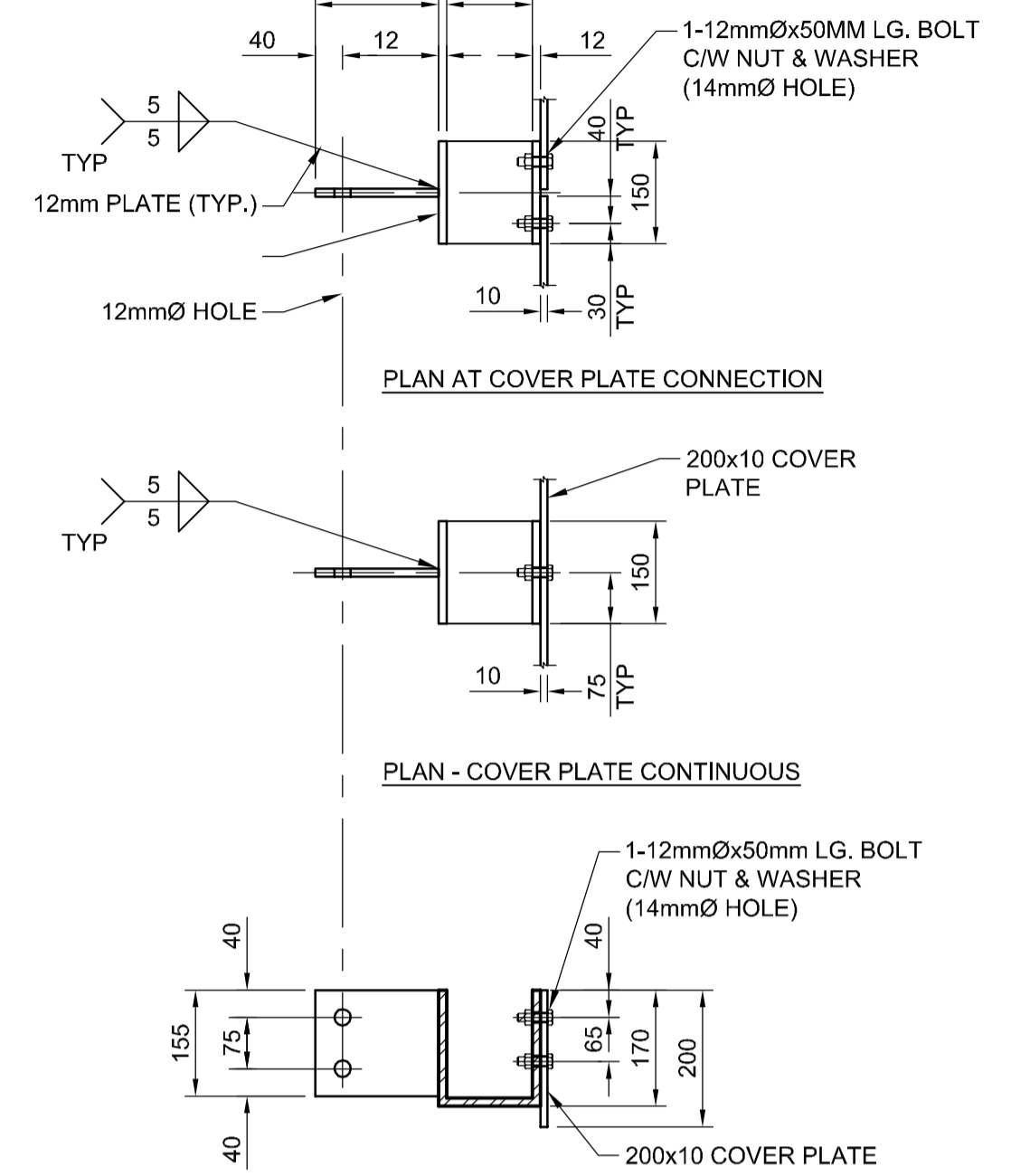
**3 TYPICAL INTERN. STIFFENER**  
CS-0018 Scale 1:20



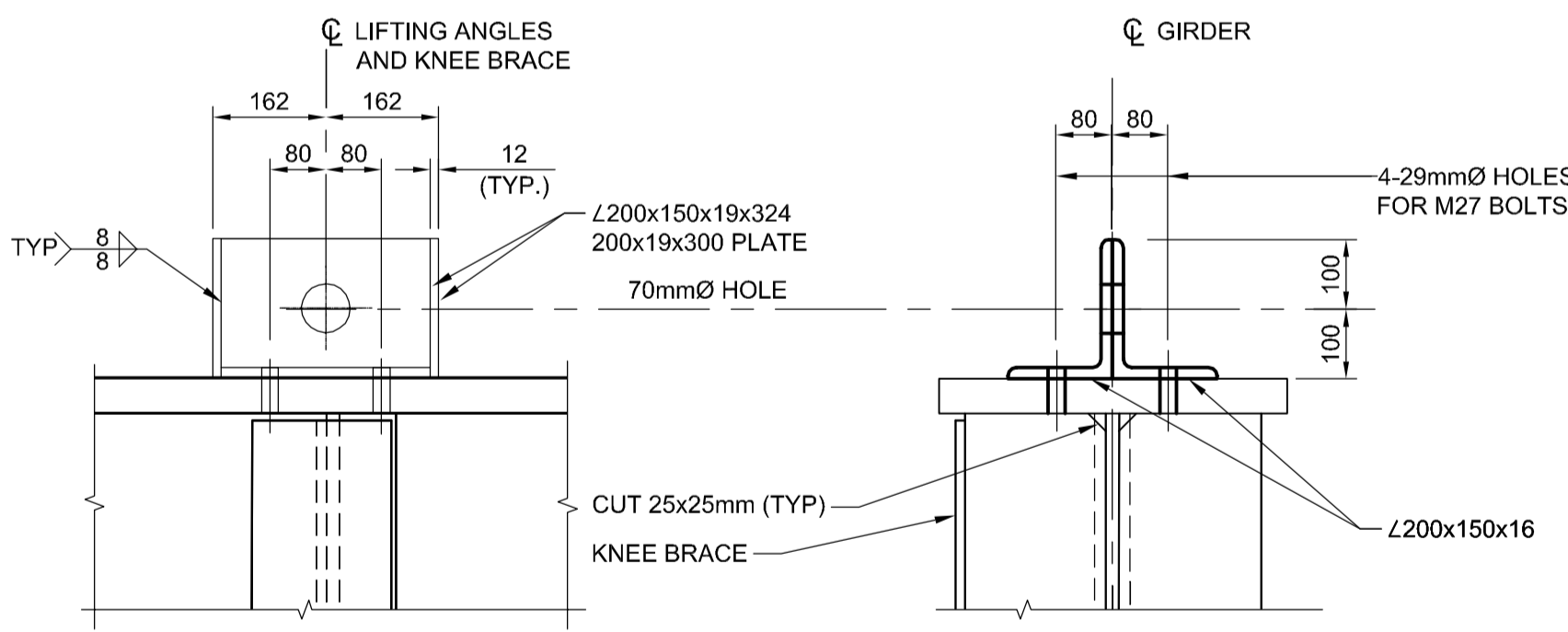
**4 TYPICAL MAIN GIRDER AT FLOOR BEAM WITH KNEE BRACING**  
CS-0018 Scale 1:20



**5 DECK DRAIN DETAIL**  
Scale 1:10

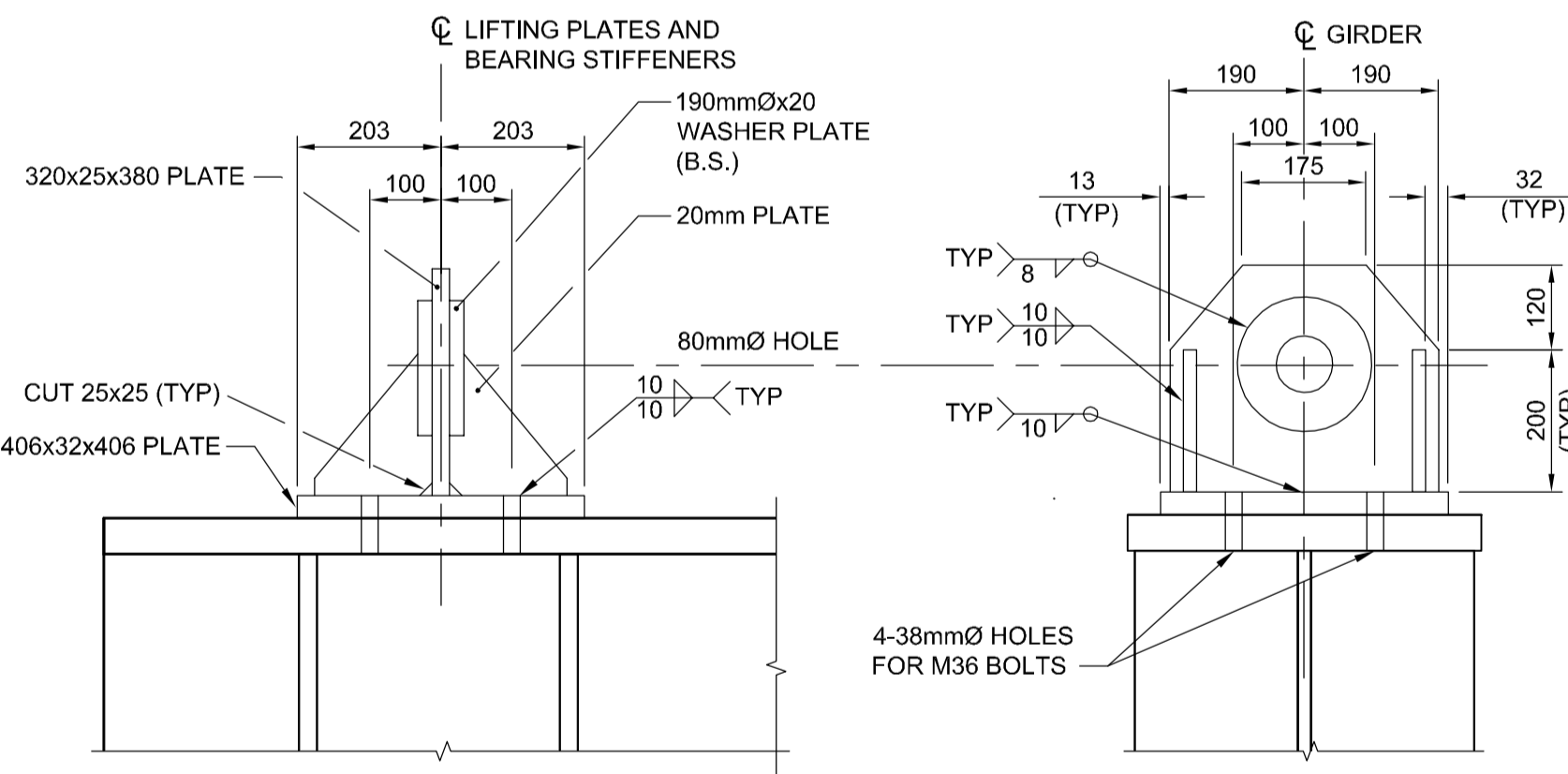


**6 FIBRE-OPTIC SUPPORT DETAIL**  
CS-0018 Scale 1:10



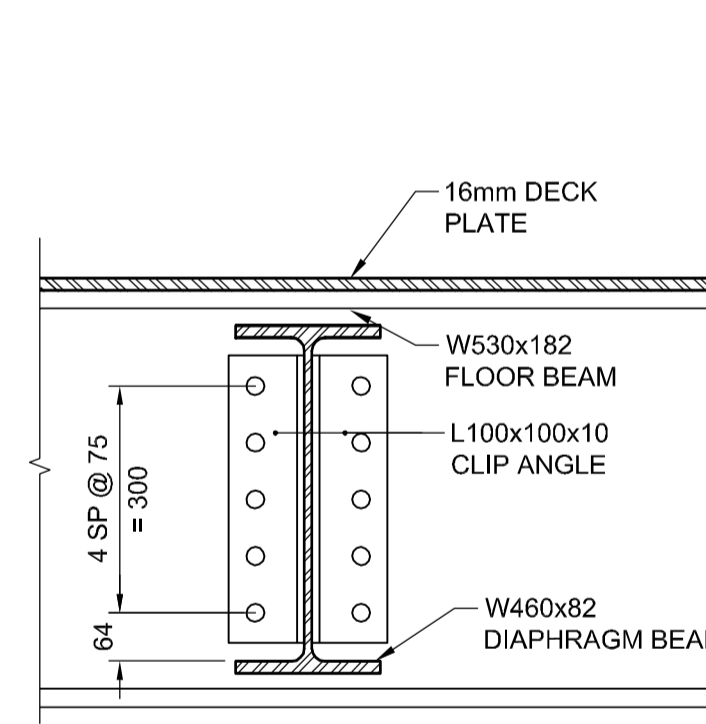
**GIRDER LIFTING DEVICE DETAILS**  
Scale 1:10

THESE LIFTING DEVICES ARE DESIGNED FOR LIFTING ONE GIRDER ONLY AND NOT FOR ASSEMBLED SPAN (VERTICAL LIFT ONLY WITH 2 CRANES) 2 SPANS-THUS

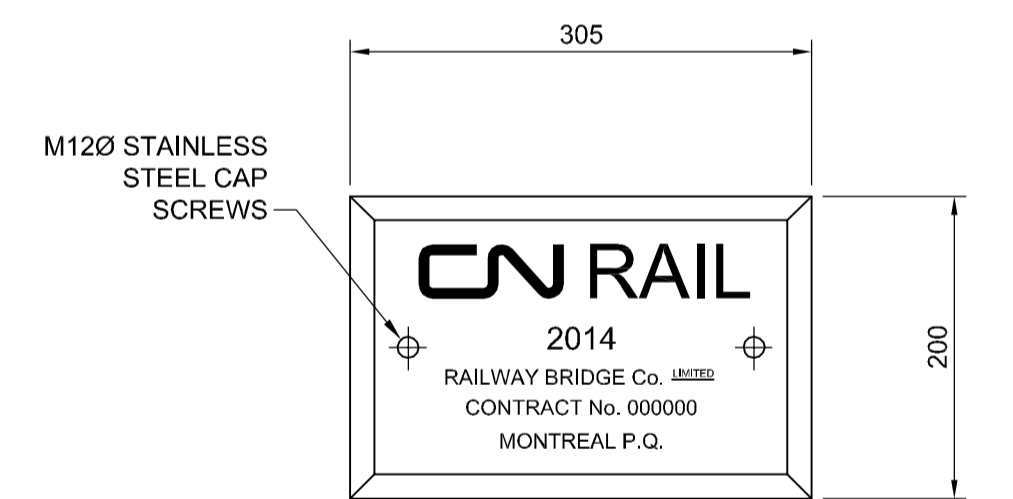


**SPAN LIFTING BRACKET**  
Scale 1:10

- NOTE:
- COMPLETE ULTRASONIC TESTING OF WELDS IS REQUIRED FOR EACH BRACKET
  - SPANS SHALL BE LIFTED USING SPREADER BEAMS AT EACH END. ALL NECESSARY MEASURES MUST BE TAKEN TO ENSURE THAT SLINGS INSTALLED ON LIFTING DEVICES ARE COMPLETELY VERTICAL AT ALL TIMES. BOTH ENDS OF SPAN MUST BE LIFTED SIMULTANEOUSLY.
  - LIFTING BRACKETS TO BE REMOVED AFTER GIRDER INSTALLATION. EXISTING BOLTS TO BE KEPT IN GOOD CONDITION AND REINSTALLED AFTER REMOVAL OF LIFTING BRACKETS.



**7 BEAM CONNECTION DETAIL**  
CS-0018 Scale 1:10



- NOTE:
- ONE NAME PLATE (SUPPLIED BY THE RAILWAY) IS TO BE LOCATED ON EACH SPAN ON THE INSIDE OF THE WEB AT THE NEAR END OF THE RIGHT HAND GIRDER (LOOKING IN THE DIRECTION OF INCREASING MILEAGE) ABOVE TRAINMAN'S WALKWAY.

**LOCATION FOR BRIDGE NAME PLATE**  
Scale 1:5



LOCATION APPROVED UNDERGROUND STRUCTURES		B.M. ELEV.
SUPV. U/G STRUCTURES COMMITTEE	DATE	
NOTE: 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 EXISTENCE AND EXACT LOCATION OF ALL SERVICES MUST BE OBTAINED FROM THE INDIVIDUAL UTILITIES BEFORE PROCEEDING WITH CONSTRUCTION.		
NO.	ISSUED FOR TENDER	DATE
0	ISSUED FOR TENDER	2013/11/21
NO.	REVISIONS	DATE

DESIGNED BY	FT	CHECKED BY	CD
DRAWN BY	KC	APPROVED BY	EBL
HOR. SCALE:	AS NOTED	RELEASED FOR CONSTRUCTION BY:	
VERTICAL:	AS NOTED	DATE	2013-06-04

**AECOM**

ENGINEER'S SEAL  
PROVINCE OF MANITOBA  
F. TABEL  
Member 39659  
Nov. 21, 2013  
REGISTERED PROFESSIONAL ENGINEER

CONSULTANT DRAWING NO. 60273041-01-CS-207

**THE CITY OF WINNIPEG PUBLIC WORKS DEPARTMENT**

PLESSIS ROAD TWINNING AND GRADE SEPARATION AT CN REDDITT SUBDIVISION CONTRACT 3

CITY DRAWING NUMBER U238-2014-2020  
SHEET 20 OF 37

MISCELLANEOUS SECTION & DETAILS

**CS-0020**