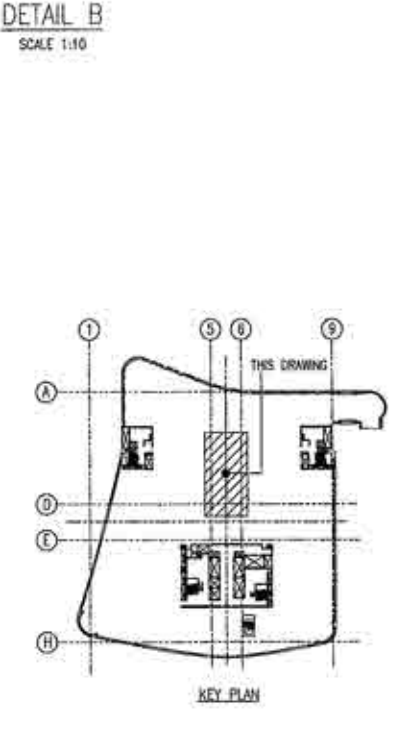
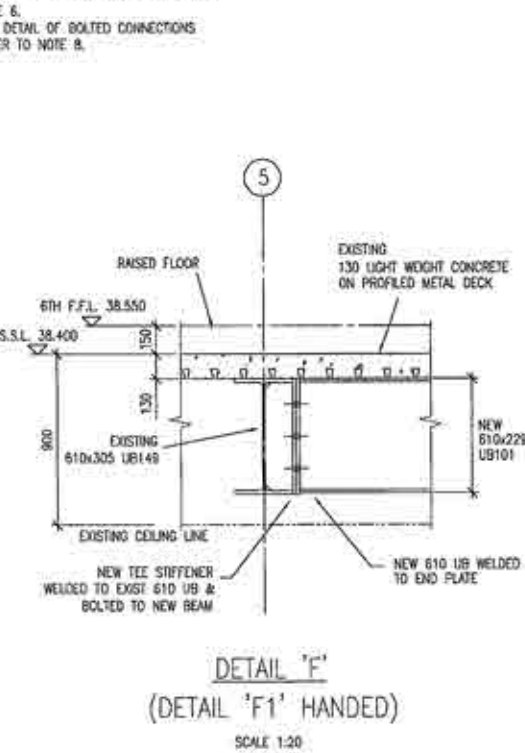
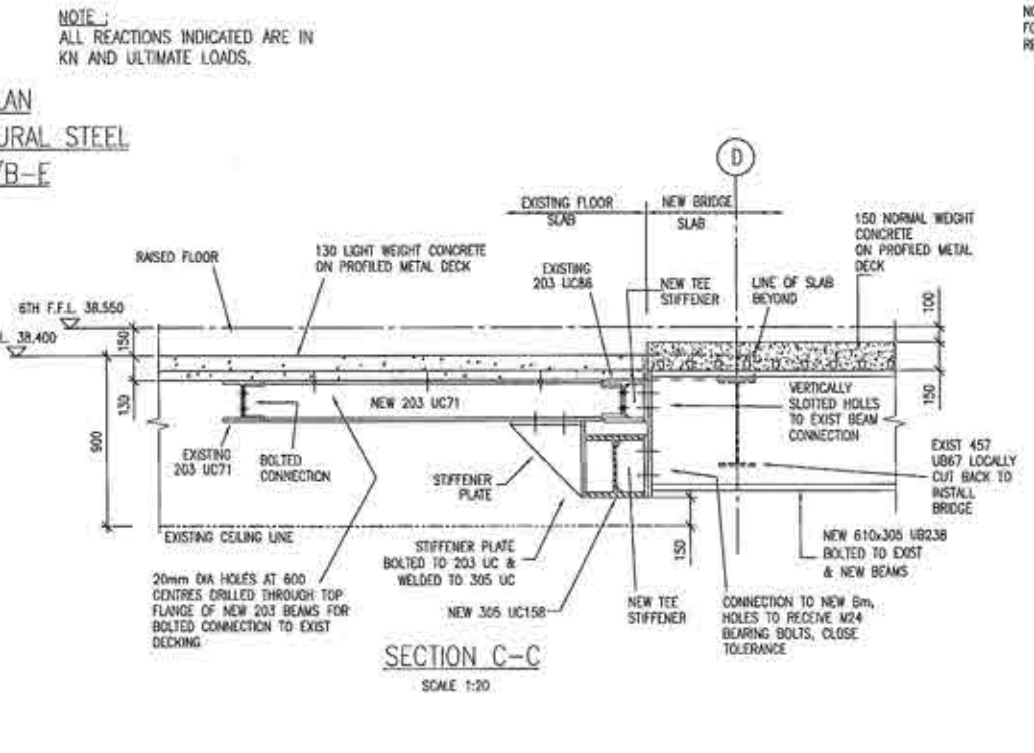
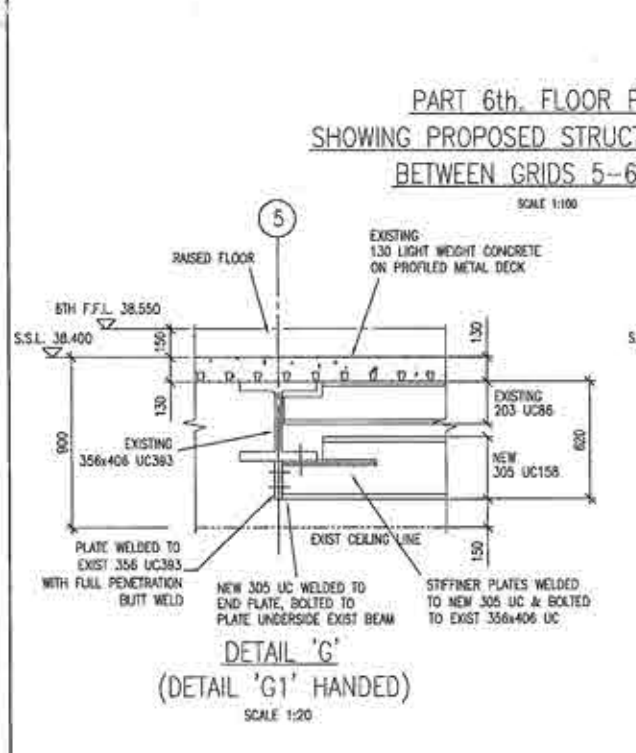
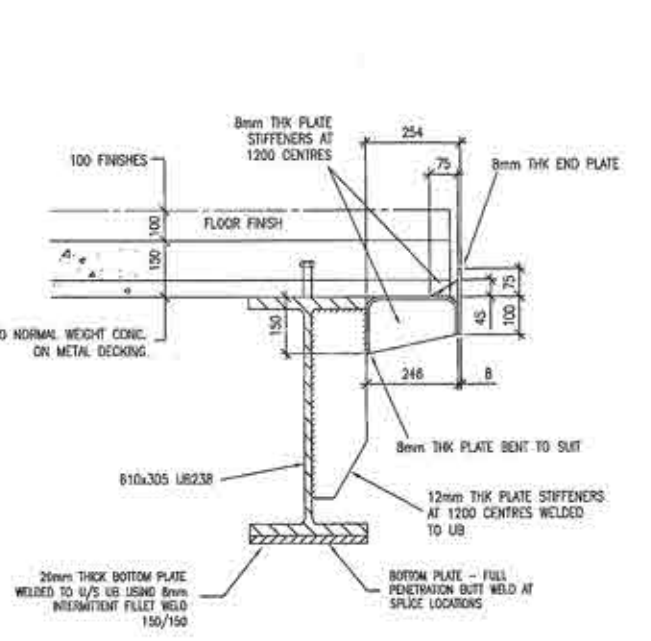
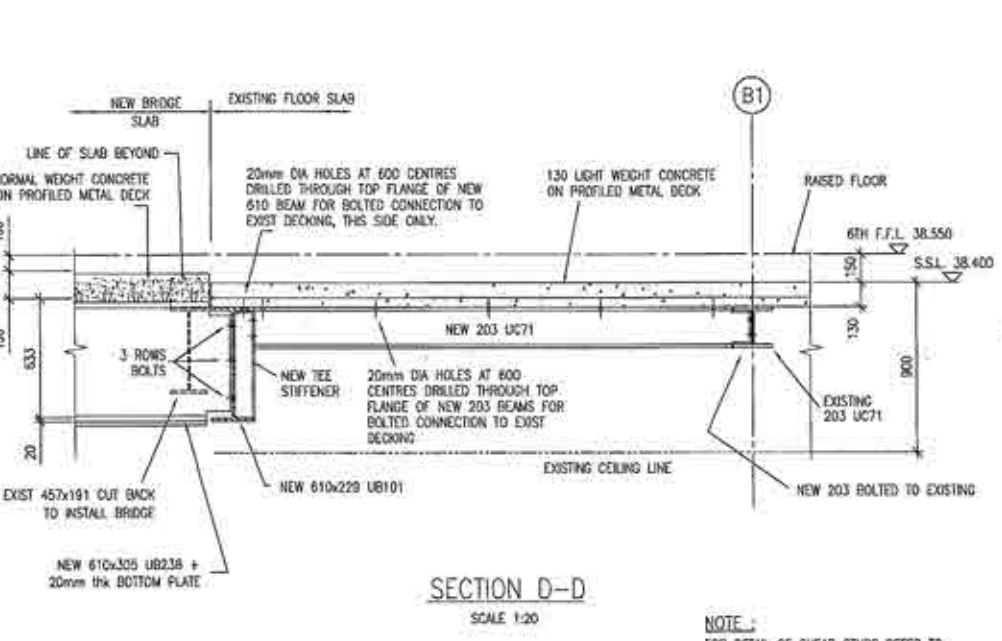
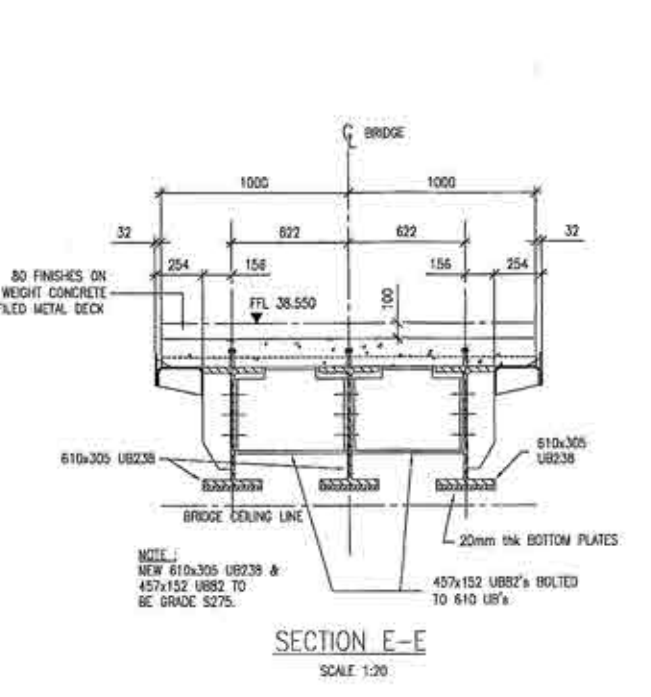
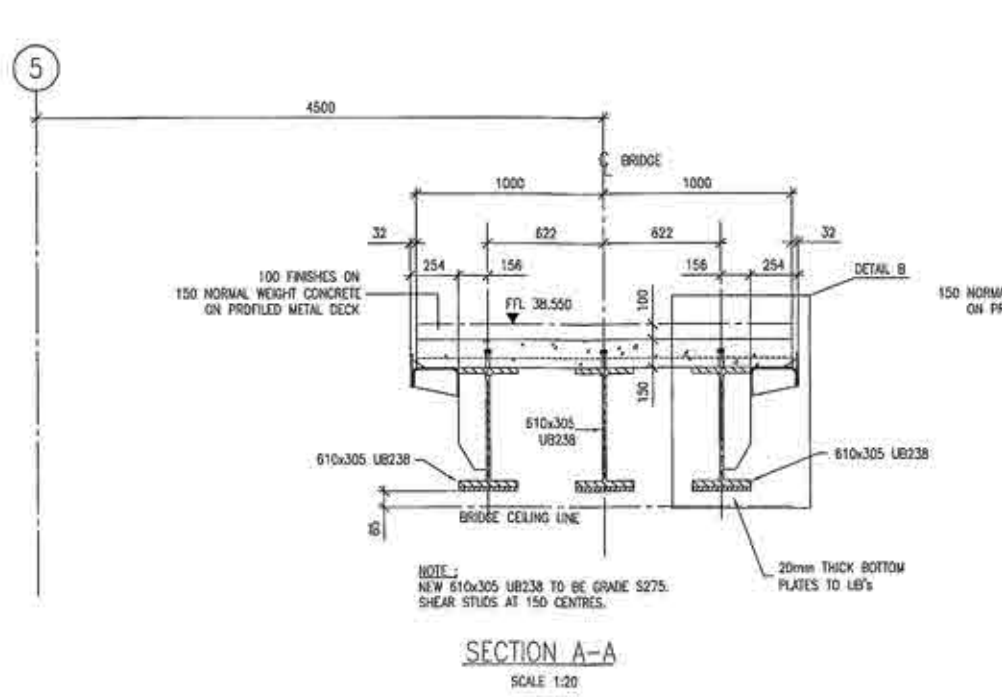
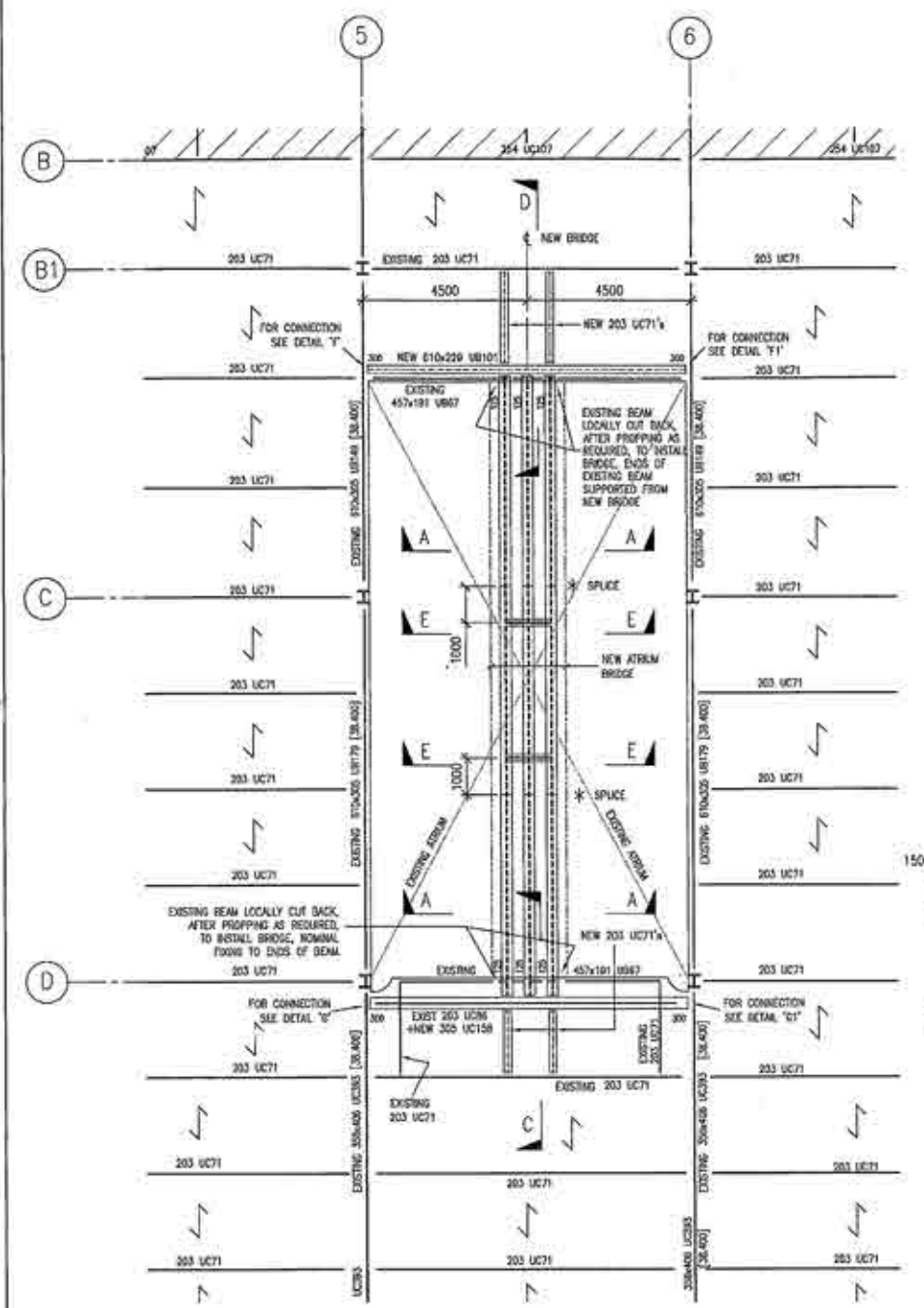


**GENERAL NOTES**

- GENERAL: THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH THE SPECIFICATION & ALL OTHER RELEVANT DOCUMENTS & INSTRUMENTS. ALL DIMENSIONS ARE IN MILLIMETRES & LEVELS IN METRES ABOVE G.S. DO NOT SCALE FROM THIS DRAWING OR THE COMPUTER DIGITAL DATA. ONLY FIGURED DIMENSIONS ARE TO BE USED.
- CONCREDE QUALITY: CONCREDE QUALITY: 100 MPa / 15000 PSI (28 DAYS)
- FIRE RESISTANCE PERIOD TO STRUCTURE: 2 HOUR GENERALLY.
- BRIDGE LANE LOADS:
  - OFFICE: 4.0 kN/m<sup>2</sup>
  - PLANT: 2.0 kN/m<sup>2</sup>
  - SCAF: 1.5 kN/m<sup>2</sup>
  - WIN BRIDGE: 4.0 kN/m<sup>2</sup>
  - WIND: 2.2 kN/m<sup>2</sup>
  - LOADING BY/TURNING BY: 100 kN/m<sup>2</sup> + 15000 KI LOAD (BY LOADING)
- STEELWORK: ALL STEELWORK TO BE IN ACCORDANCE WITH BS 4360 GRADE S275 UNLESS NOTED OTHERWISE. SURFACES TO BE IN ACCORDANCE WITH BS 449 PART 4 & 5. 1992 FACTOR R=1. MINOR OR SECONDARY STEEL, GRADE 43.
- FLOOR CONSTRUCTION:
  - CONCRETE WITH DECKING (WHERE USED): THE STEEL DECKING SHALL BE "DEEP HOLOM" GALVANIZED STEEL SHEETING DOMESTIC PROFILE 1.5mm GAUGE (2.3) MANUFACTURED AND SUPPLIED BY BROWN LEIS LTD. (OR SIMILAR). ALL STEELWORK TO BE IN ACCORDANCE WITH BS 4360 GRADE S275 UNLESS NOTED OTHERWISE. THE DECK SHALL BE DESIGNED TO ACT COMPOSITELY WITH SLAB AND TO BE IMPROVED DURING CONSTRUCTION UNLESS SHOWN OTHERWISE.
  - FLOOR DECKING: GENERALLY DESIGNED TO ACT COMPOSITELY WITH THE SLAB AND SHALL HAVE THROUGH DECK WELDED SHEAR STUDS. ALL SURFACES OF STEELWORK TO RECEIVE SHEAR STUDS SHALL BE UNPAINTED (S2) AFTER BEAM SIZE INDICATES NON-COMPOSITE. BEAMS THAT ARE RECESSED INTO THE SLAB ARE NON-COMPOSITE AND ARE NOT TO RECEIVE SHEAR STUDS.
  - SHEAR STUDS: ALL BEAMS WITH TOP FLANGE WIDTHS OF 150mm OR MORE: 1. ROW FROM CENTERLINE + 80mm LONG STUDS AT 150mm CENTRES (UNLESS NOTED OTHERWISE). 2. ROW FROM CENTERLINE + 80mm LONG STUDS AT 150mm CENTRES (UNLESS NOTED OTHERWISE).
  - SCAFFOLDING: SCAFFOLDING CONCRETE WORK TO THE FLOOR LEVEL. CONNECTION DETAILS SHOWN AS DETAILS.
- CONNECTIONS: ALL END CONNECTIONS TO BEAM ACTING AS COLUMN TIES AND ALL COLUMN BRACES SHALL BE DESIGNED IN ACCORDANCE WITH BS 5400 PART 1: 1990 CLAUSE 2.4.3.3 & 2.4.3.3.
- CONNECTION DESIGN: ALL BEAM CONNECTIONS TO BE RIGID - ALL BEAMS TO HAVE A MINIMUM OF 4 No. M20 GRADE 8.8 BOLTS IF SECTION DESIGN NEEDS ARE SHOWN OR LESS. ALL OTHER SECTIONS TO HAVE A MINIMUM OF 6 No. 8.8 BOLTS. FACTORED STATIONS AND MOMENTS FOR CONNECTIONS REQUIRING MORE BOLTS THAN SHOWN ABOVE, WILL BE INDICATED ON THE GENERAL IN A5X OR K10X.
- ALL COLUMN TO PRIMARY BEAM CONNECTIONS TO BE DESIGNED TO DEVELOP 100% OF THE PLASTIC MOMENT CAPACITY OF THE PRIMARY BEAM. ALL SECONDARY BEAMS SHALL HAVE FULL END PLATE CONNECTIONS.
- STEELWORK ERECTION: THE BUILDING STABILITY IN THE PINK CONDITION IS PROVIDED BY THE RC BEAM WALLS VIA SUPERIMPOSED ACTION OF THE FLOORS. TEMPORARY BRACING IS TO BE PROVIDED BY THE STEELWORK. SUB-CONSTRUCTION AS NECESSARY BY STRUCTURE ENGINEER'S EXPERT.
- SETTING OUT: ALL LEVELS AND DIMENSIONS SHALL BE CHECKED ON SITE BY THE STEELWORK SUB-CONTRACTOR PRIOR TO FABRICATING. MAKE CONTRACTOR TO SURVEY EXISTING STEELWORK CONNECTIONS AND SURVEY OUTLINES TO THE ENGINEER FOR CHECK, WHERE REQUIRED EXISTING CONNECTIONS TO BE DIMENSIONED.
- ALL COLUMN SPICE PLATES TO BE PLACED BETWEEN THE COLUMN FLANGES WITH BOLT HEADS ON THE OUTSIDE UNLESS NOTED OTHERWISE.
- PAINTING OF STEELWORK (EXCEPT WHERE CONCRETE CASED):
  - ALL STEELWORK TO BE PAINTED TO BS 7-172.
  - ALL STEELWORK TO BE PRIMED AT WORK WITH 1 THICK ZINC PHOSPHATE (70 MICRONS) (SHEAR STUDS SURFACES UNPAINTED).
  - ALL STEELWORK SHALL BE KNOWLEDGE CHECKED TO BE CORRECT AT WORKS & ADDITION TO PARAGRAPH (a) AT WORKS WHEN BUILT (POINT NO TO 120 MPa).
- STEEL BEAMS AND DIMENSIONS INDICATED SHALL BE CONCRETE ENCASED TO DETAILS SHOWN FOR COLUMNS REFER TO SCHEDULE ON DRAWING No. S 11297/A/07/20 - 29 & DETAIL DRAWING 11297/A/07/20.
- LEVELS SHOWN SHALL BE (UNLESS NOTED OTHERWISE) TOP OF STEEL (SEE 3.0.3.3) STRUCTURAL SLAB LEVEL.
- HOLES THROUGH THE FLOOR SLAB OF 150mm OR LESS ARE GENERALLY NOT SHOWN. THE POSITION AND SIZE OF ALL HOLES NOT SHOWN ON THE STRUCTURE DRAWINGS ARE TO BE CHECKED BY THE CONTRACTOR PRIOR TO BEING FORMED OR CUT.
- 2 HOUR FIRE RESISTANCE TO STEELWORK ACHIEVED FROM THE USE OF FIRE BOARDS UNLESS NOTED OTHERWISE.
- LAGGERS: ALL CONCRETE FINISHES TO BE STEEL FLOOR IN ACCORDANCE WITH BS 449 PART 4. CONCRETE SPECIFICATION CLAUSE 4.4/3.20. JOINED EDGES: NON-EXPANDED WALLS - TYPE C CLASSIC 120/200. EXPANDED WALLS - TYPE C CLASSIC 120/200.
- SPICE LOCATION TO BE DESIGNED FOR FULL TENSILE AND SHEAR CAPACITY OF STEEL, BOLTS TO TOP FLANGE TO BE COUNTERSINK.
- CONTRACTOR TO SUBMIT DETAILS METHOD STATEMENT FOR THE INSTALLATION OF THE BEAM CONTRACTOR TO CONFIRM SITE ACCESS ROUTES. CHANGE OF METHOD OF INSTALLATION AND TEMPORARY WORKS HAVE BEEN THOROUGHLY CONSIDERED IN THE TENDER.



| REV | DESCRIPTION   | BY | CHKD | APP | DATE     |
|-----|---|----|------|-----|----------|
| 5   | GENERALLY REV'D AFTER FINAL SITE INSPECTION   | NK | JH   | JH  | 16/10/05 |
| 4   | REVERTED BACK TO ORIGINAL DETAIL AS THE PROPOSED ALTERNATIVE DID NOT ACHIEVE SATISFACTORY CONNECTION TO EXISTING BEAMS. | NK | JH   | JH  | 20/09/05 |
| 3   | PLATE EDGES REV'D TO U/S  | NK | PW   | PW  | 18/09/05 |
| 2   | DRAWING REVISED TO LATEST INFORMATION.  | NK | PW   | PW  | 7/7/05   |
| 1   |   |    |      |     |          |

| Drawn    | Name | Date    | Scale                       |
|----------|------|---------|-----------------------------|
| NK       | NK   | JULY 05 | 1:20 @ 50 @ A1              |
| Designed | PW   | JULY 05 | File No. A11291/A/ST/SK 49  |
| Checked  | PW   | 07/05   | Drawing Status CONSTRUCTION |
| Approved | PW   | 07/05   |                             |

| File naming Convention                | Digitizing | System | Area | Building | Sequential | Revision |
|---------------------------------------|------------|--------|------|----------|------------|----------|
| P E L O I G I O N W O R K S K 4 9 - 5 |            |        |      |          |            |          |