

GENERAL NOTES

- 1. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE SPECIFICATIONS AS WELL AS THE ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS AND OTHER CONTRACT DOCUMENTS, INCLUDING REFERENCE DRAWINGS.
- 2. THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS, ELEVATIONS AND CONDITIONS AT THE STATION SITE AND REPORT TO THE TTC ANY DISCREPANCIES OR UNSATISFACTORY CONDITIONS WHICH MAY ADVERSELY AFFECT THE PROPER COMPLETION, COST OR SCHEDULE OF THE WORK PRIOR TO UNDERTAKING THE WORK. COMMENCEMENT OF THE WORK BY THE CONTRACTOR IMPLIES ACCEPTANCE OF EXISTING CONDITIONS.
- 3. PROTECT THE EXISTING STRUCTURE, UTILITIES, AND OTHER EXISTING CONDUITS, PIPING OR SERVICES DURING CONSTRUCTION. MAKE GOOD ANY DAMAGE RESULTING FROM WORK ON THIS PROJECT TO THE SATISFACTION AND FULL INDEMNIFICATION OF THE TTC.
- 4. THE TTC WILL PROVIDE UTILITY LOCATION INFORMATION TO THE CONTRACTOR. THE CONTRACTOR SHALL CHECK AND VERIFY THE UTILITY LOCATIONS WHICH MAY INTERFERE WITH WORK OF THIS PROJECT AND COORDINATE WITH THE TTC.
- 5. PREPARATION, DEMOLITION AND CONSTRUCTION WORK DURING THIS PROJECT INCLUDES THE PROVISION OF DUST PROTECTION AND SAFETY BARRIERS AS REQUIRED FOR THE TTC EXISTING OPERATIONS. ALL ASPECTS OF WORK SCHEDULING, ACCESSIBILITY AND LOGISTICS SHALL BE COORDINATED AND AGREED WITH THE TTC PRIOR TO COMMENCEMENT.
- 6. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE TTC FOR REVIEWING THE METHOD OF CONCRETE CORING AND DEMOLITION THROUGH THE CONCRETE SLABS AND WALLS. INDICATE THE METHOD FOR TRANSPORTING AND POURING NEW CONCRETE WHERE SHOWN.
- 7. DO NOT CUT REINFORCEMENT TO ACCOMMODATE DRILLED ANCHORS AND DOWELS. SCAN EXISTING CONCRETE STRUCTURE TO LOCATE REINFORCEMENT PRIOR TO FABRICATING STRUCTURAL STEEL FASTENED WITH DRILLED ANCHORS.

DESIGN

- 1. DESIGN IS IN ACCORDANCE WITH TTC DESIGN STANDARDS. OBC USED ONLY WHERE REFERRED TO IN THE TTC DESIGN STANDARDS.
- 2. CONCRETE MEMBERS ARE DESIGNED IN ACCORDANCE WITH CSA STANDARD CSA/CAN3-A23.3-14 STRUCTURAL STEEL IS DESIGNED IN ACCORDANCE WITH CSA STANDARD CSA/CAN3-S16.1-14.
- 3. MASONRY WALLS DESIGNED FOR 2.00 KPa LOAD.

DEMOLITION

- 1. THE EXTENT OF REMOVAL OF THE EXISTING STRUCTURE TO ACCOMMODATE THE WORK OF THIS PROJECT SHALL BE MADE NEATLY WITH SAW CUTS (e.g. WIRE SAW). REMOVE CONCRETE BY SAW CUTTING, CORE DRILLING AND HAND TOOLS TO ACHIEVE CLEAN NEAT SURFACES WITH PROJECTIONS AND INDENTATIONS NOT EXCEEDING 20mm. EXERCISE CARE NOT TO DAMAGE ADJACENT CONCRETE WHEN USING PERCUSSION TOOLS. ALL SCRAP MATERIAL TO BE DISPOSED OF OFF- SITE.
- 2. ASCERTAIN LOCATION OF PIPES, CONDUITS OR OTHER SERVICES ENCASED IN EXISTING CONCRETE TO BE DEMOLISHED/CORED PRIOR TO PROCEEDING. COORDINATE WITH THE TTC FOR THEIR RELOCATION.
- 3. AIR BLAST CLEAN ALL EXISTING REBAR TO BE RETAINED AND LAPPED WITH NEW REINFORCING, PROVIDE LAP LENGTHS EQUAL TO TOP BAR CLASS B TENSION LAP SPLICE U.O. NOTED. WHERE EXISTING REBARS ARE TO BE CUT, EACH BAR SHALL BE CUT BACK 20mm BEHIND THE FACE OF EXISTING CONCRETE AND SHALL BE PATCHED WITH EPOXY MORTAR.
- 4. PROVIDE TEMPORARY SHORES AND BRACINGS AS REQUIRED TO ENSURE THE STABILITY AND STRUCTURAL INTEGRITY OF EXISTING STRUCTURES.

CONCRETE

- 1. CONCRETE TO CONFORM TO THE REQUIREMENTS OF CAN/CSA A23.1/23.2 CONCRETE MATERIALS AND METHODS OF CONCRETE CONSTRUCTION/METHODS OF TESTS FOR CONCRETE.
- 2. REFER TO DRAWINGS AND SPECIFICATIONS FOR STRENGTH OF CONCRETE REQUIRED FOR VARIOUS LOCATIONS. BUT IN ALL CASES THE MINIMUM 28 DAY COMPRESSIVE STRENGTH SHALL NOT BE LESS THAN THE FOLLOWING:
  - 2.1 STRUCTURAL CONCRETE: 35MPa
  - 2.2 CONCRETE TOPPING: FLOOR TOPPING..... 32MPa
  - 2.3 UTILITY CONCRETE: MAINTENANCE HOLES..... 35MPa
  - 2.4 MISC. CONCRETE: LEAN CONCRETE..... 8MPa
- 3. REINFORCEMENT TO CONFORM TO CSA G30 SERIES Fy= 400MPa EXCEPT Fy= 440MPa FOR WELDED WIRE FABRIC. PROVIDE WELDED WIRE FABRIC IN FLAT SHEETS ONLY. ALL REINFORCEMENT TO BE "BLACK". NEW REINFORCEMENT INDICATED ON DRAWINGS ARE METRIC SIZES. EXISTING REINFORCEMENT INDICATED IN THE DRAWINGS ARE IMPERIAL SIZES.
- 4. USE MINIMUM COVER FOR REBAR AS INDICATED IN THE TTC STANDARD FIG. 5.1.A
  - CONCRETE NOT EXPOSED TO EARTH AND WEATHER..... 50mm ± 10mm
- 5. DETAIL, BEND, PLACE AND SUPPORT REINFORCING STEEL IN CONFORMANCE WITH THE RSIC MANUAL OF STANDARD PRACTICE, UNLESS NOTED OTHERWISE.
- 6. NO SLEEVES, PIPES, HOLES OR NOTCHES SHALL BE PLACED THROUGH WALLS OR SLABS EXCEPT AS DESIGNATED ON STRUCTURAL DRAWINGS OR APPROVED BY THE TTC.
- 7. ALL ANCHORS OR DOWELS INTO EXISTING CONCRETE SHALL BE INSTALLED USING HILTI HIT-RE 500 V3 INJECTION ADHESIVE SYSTEM.
- 8. EPOXY BONDING AGENT SHALL BE APPLIED TO ALL EXPOSED EXISTING CONCRETE SURFACES PRIOR TO PLACING OF NEW CONCRETE. CLEAN AND PREPARE EXISTING SURFACES TO RECEIVE BONDING AGENT ACCORDING TO MANUFACTURER'S INSTRUCTIONS.

STRUCTURAL STEEL

- 1. STRUCTURAL STEEL FABRICATION AND ERECTION TO CONFORM TO CAN/CSA-S16 LIMIT STATES DESIGN OF STEEL STRUCTURES.
- 2. STRUCTURAL STEEL TO CONFORM TO CSA/CAN-640.20M/G40.21 GRADE 350W. GENERAL REQUIREMENTS FOR ROLLED OR WELDED STRUCTURAL QUALITY STEEL.
- 3. WELDING TO CONFORM TO CSA W59. WELDED STEEL CONSTRUCTION (METAL ARC WELDING).
- 4. WHERE FULL MOMENT CONNECTION IS CALLED FOR AND NO MOMENT IS INDICATED, DESIGN CONNECTION FOR FULL CAPACITY OF THE MEMBER.
- 5. FOR PRIME PAINTING AND FIRE PROOFING OF STRUCTURAL STEEL, SEE SPECIFICATIONS.

MASONRY

- 1. MASONRY WALLS, PIER AND COLUMNS ARE DESIGNED IN ACCORDANCE WITH CSA S304. "MASONRY DESIGN FOR BUILDINGS." LIMIT STATES DESIGN
- 2. MASONRY MATERIALS AND METHODS OF CONSTRUCTION SHALL CONFORM TO CSA CAN-A371.
- 3. REFER TO DRAWINGS AND THE SPECIFICATIONS FOR STRENGTH OF MASONRY UNITS REQUIRED, BUT IN ALL CASES THE STRENGTH SHALL NOT BE LESS THAN THE FOLLOWING, BASED ON NET AREA.
  - 1. HOLLOW CONCRETE BLOCK 15.0 MPa
  - 2. HOLLOW CONCRETE BLOCK GROUTED & SOLID 15.0 MPa
- 4. MORTAR - TYPE "S".
- 5. REINFORCING STEEL BARS SHALL CONFORM TO CSA G30 SERIES. GRADE 400.
- 6. UNLESS OTHERWISE NOTED. PROVIDE 1-15M VERTICAL FULL HEIGHT AT:
  - 1. UNSUPPORTED ENDS OF WALLS.
  - 2. EACH SIDE OF DOORS AND OTHER OPENINGS.
  - 3. IN EACH CELL OF ALL PIERS AND PILASTERS.

ALL VERTICAL REINFORCING SHALL BE CONTINUED TO WITHIN 50MM (2") OF THE TOP OF WALL.

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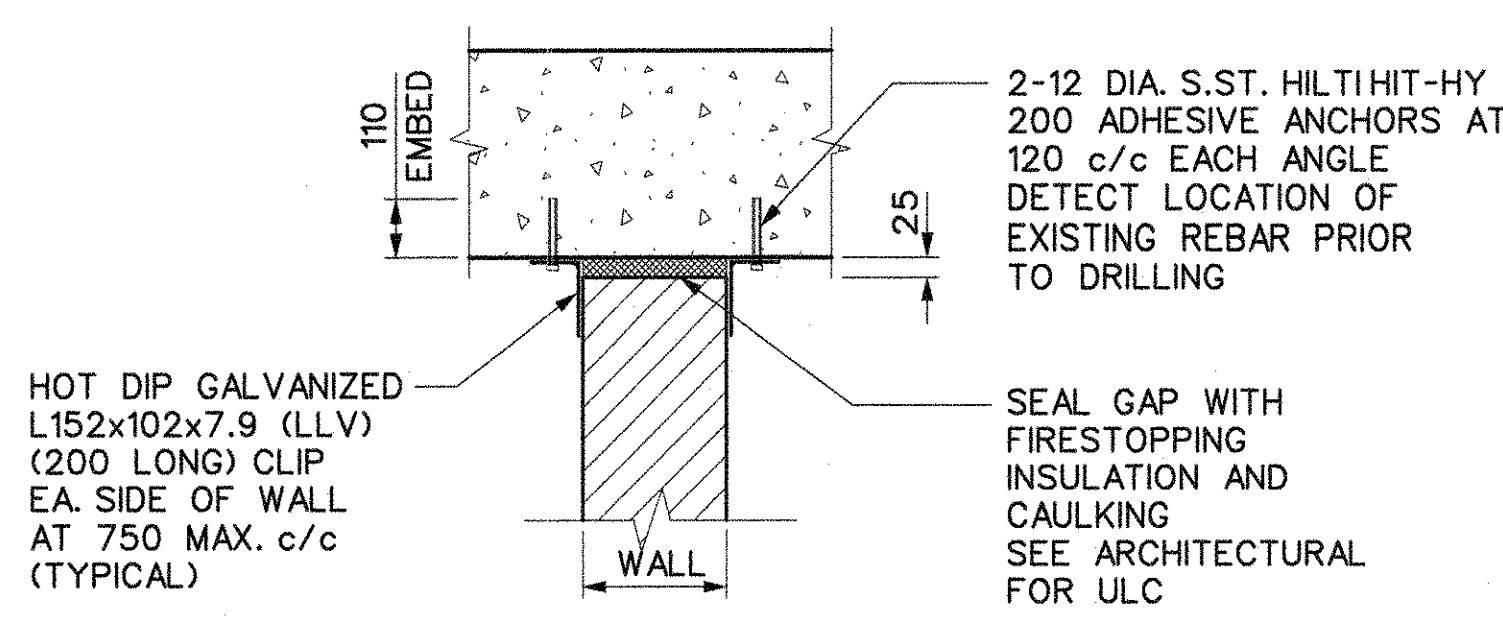


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CHECKED	G. ALEXANDER		2018/11/27
CORRECT	H. SAFFARINI		2018/11/28
SCALE	N.T.S.		

SHEPPARD STATION  
STATION MANAGERS OFFICE  
AND ZONE HUB  
GENERAL NOTES

Contract: SH35-8

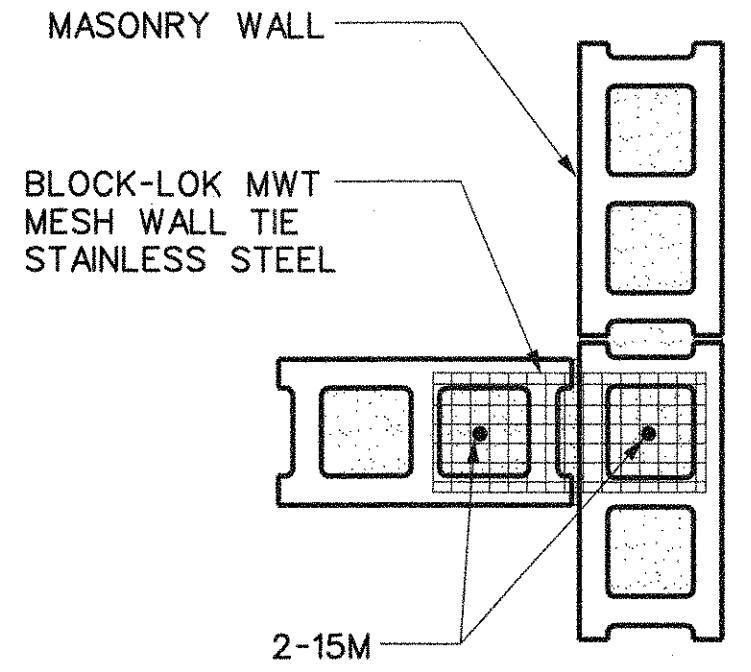
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TYPICAL DETAIL

LATERAL SUPPORT AT TOP OF CONCRETE OR BLOCK WALLS

1  
S500

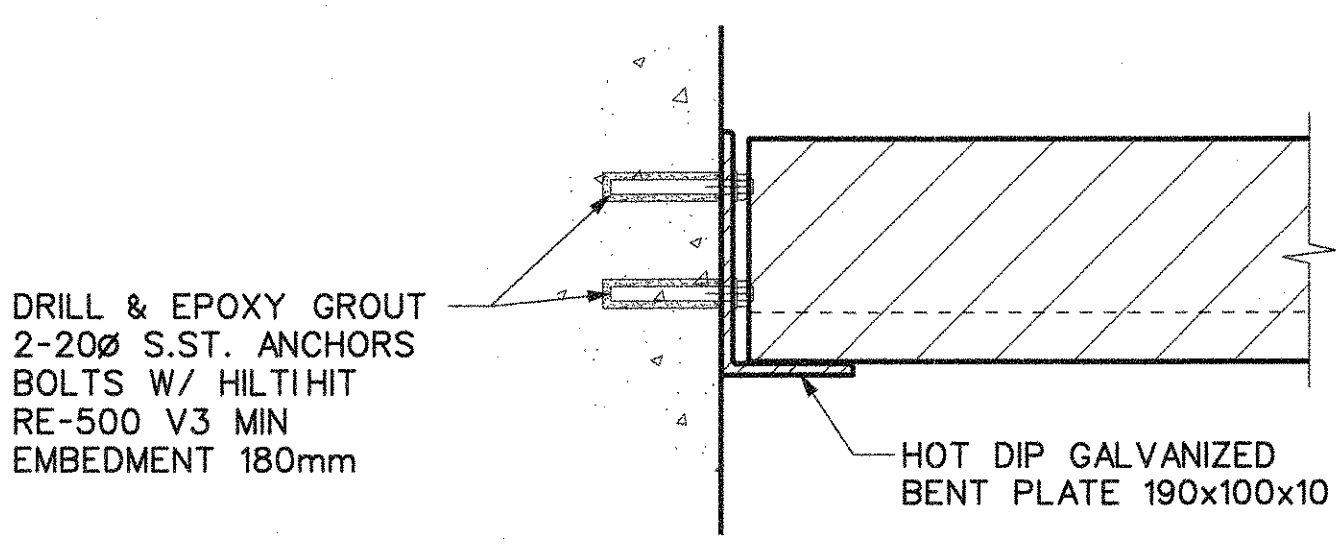


TYPICAL DETAIL

INTERSECTING MASONRY WALL

2  
S002

	CLEAR SPAN	LINTEL UNIT	90 WALL	140 WALL	190 WALL	240 WALL	290 WALL
190 DEEP LINTEL							
L1	UP TO 1200	190	1-10 B	1-10 B	2-10 B	2-10 B	3-10 B
L2	1200 TO 1800	190	1-15 B	2-10 B	2-15 B	2-15 B	3-15 B
L3	1800 TO 2400	190	1-15 T&B	2-15 T&B	2-15 T&B	2-15 T&B	3-15 T&B
390 DEEP LINTEL							
L4	UP TO 1200	390	1-15 B	1-15 B	2-15 B	2-15 B	3-15B

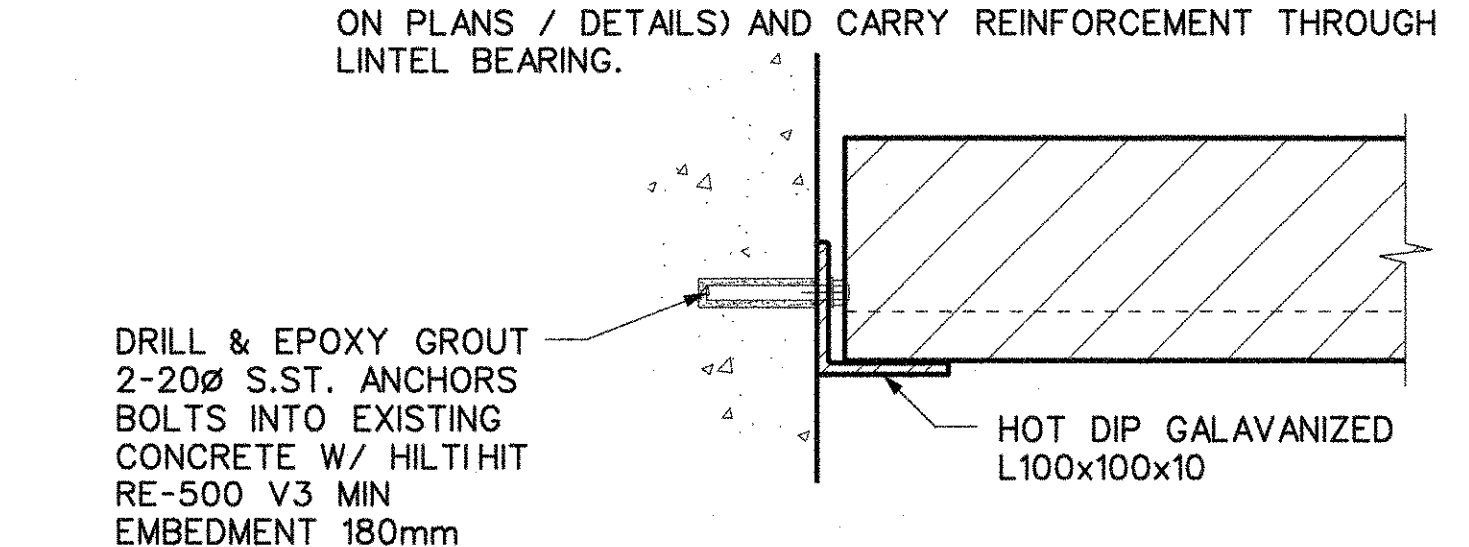


SEAT DETAIL FOR LINTELS UP TO 150 WIDE

TYPICAL DETAIL

CONCRETE BLOCK LINTEL

3  
S200



SEAT ANGLE DETAIL FOR LINTELS GREATER THAN 150 WIDE

- NOTE:
1. USE ONLY FOR NON-LOAD BEARING MASONRY WALLS.
  2. USE LINTELS ON THIS TYPICAL DETAIL ONLY IF THE HEIGHT OF THE MASONRY ABOVE THE OPENING IS EQUAL TO OR GREATER THAN HALF THE CLEAR SPAN OF THE OPENING AND IF THERE ARE NO CONCENTRATED LOAD DIRECTLY ABOVE THE LINTEL.
  3. CONCRETE FILL FOR LINTELS TO HAVE MINIMUM 20 MPa COMPRESSIVE STRENGTH AT 28 DAYS.
  4. WHERE LINTELS ABUT CONCRETE COLUMNS OR CONCRETE WALLS, PROVIDE SEAT ANGLE AS SHOWN BELOW. WHERE LINTELS ABUT STEEL COLUMNS, WELD SEAT ANGLE TO THE COLUMNS.
  5. MINIMUM BEARING 200mm AND FULLY GROUT BEARING BLOCK. REINFORCE AND GROUT SIDES OF OPENINGS (WHERE NOTED ON PLANS / DETAILS) AND CARRY REINFORCEMENT THROUGH LINTEL BEARING.

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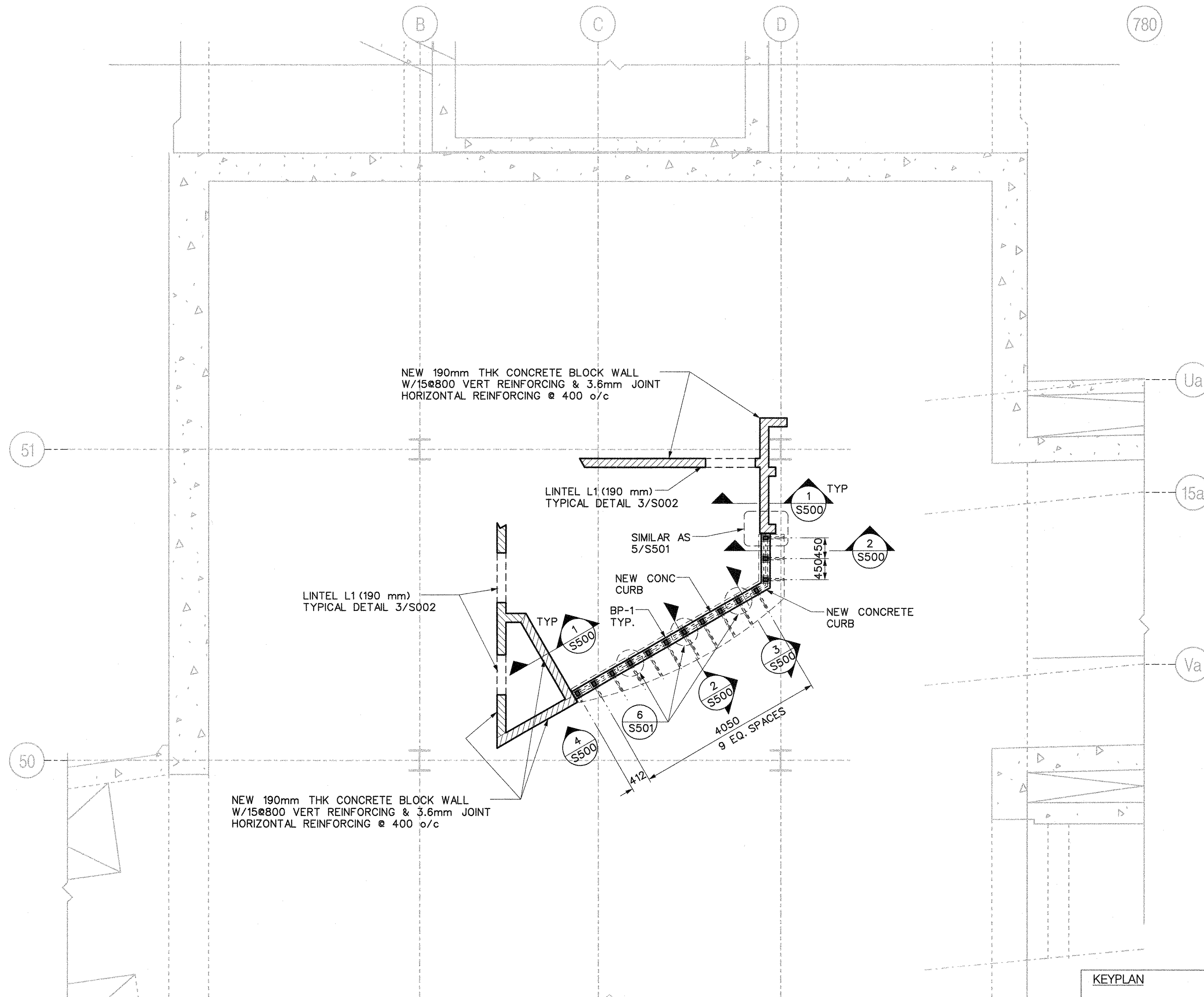


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SHEPPARD STATION  
STATION MANAGERS OFFICE  
AND ZONE HUB  
TYPICAL DETAILS

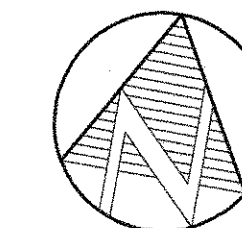
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SH35-8-S002		025
Plot Date: 25-JAN-2019		





NOTES:

1. SEE ARCHITECTURAL DRAWINGS FOR LOCATION OF EXPANSION JOINTS AND WALL ELEVATIONS.
2. ALL STRUCTURAL STEEL IS GALVANIZED.
3. ALL MASONRY CONNECTORS IS GALVANIZED STEEL.



PLAN	CONCOURSE/PLATFORM	LEVEL
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1  
S200

## KEYPLAN



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SCALE

0 1



SHEPPARD STATION

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STATION MANAGERS OFFICE  
AND ZONE HUB

FLOOR PLAN  
CONCOURSE /PLATFORM LEVEL

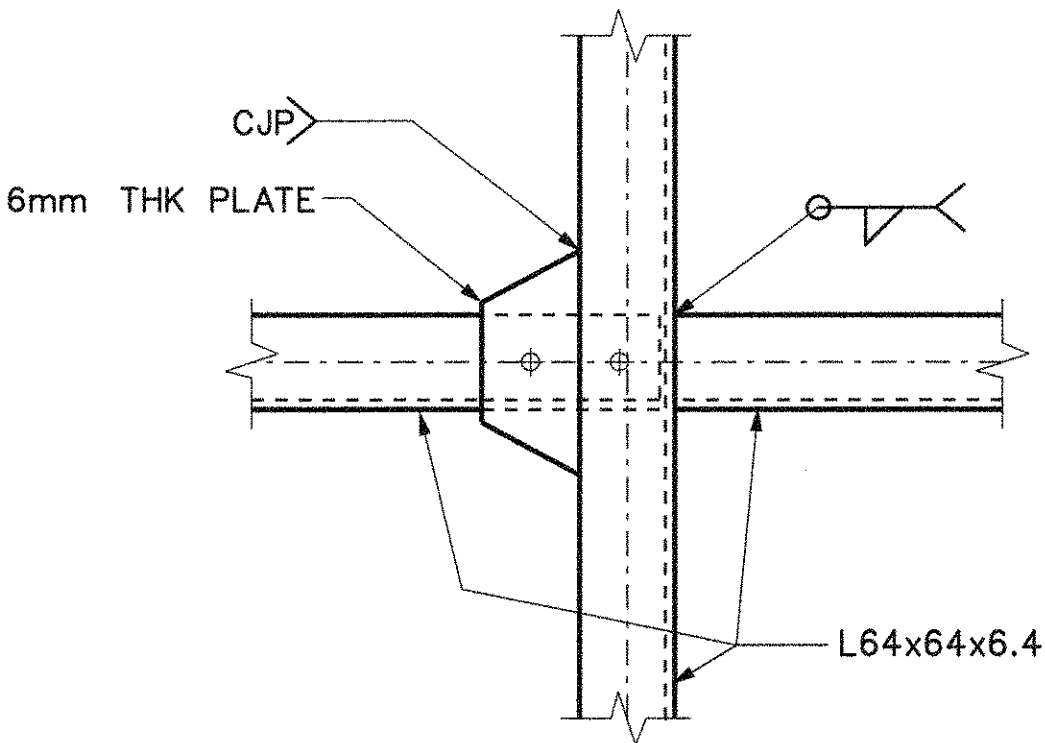
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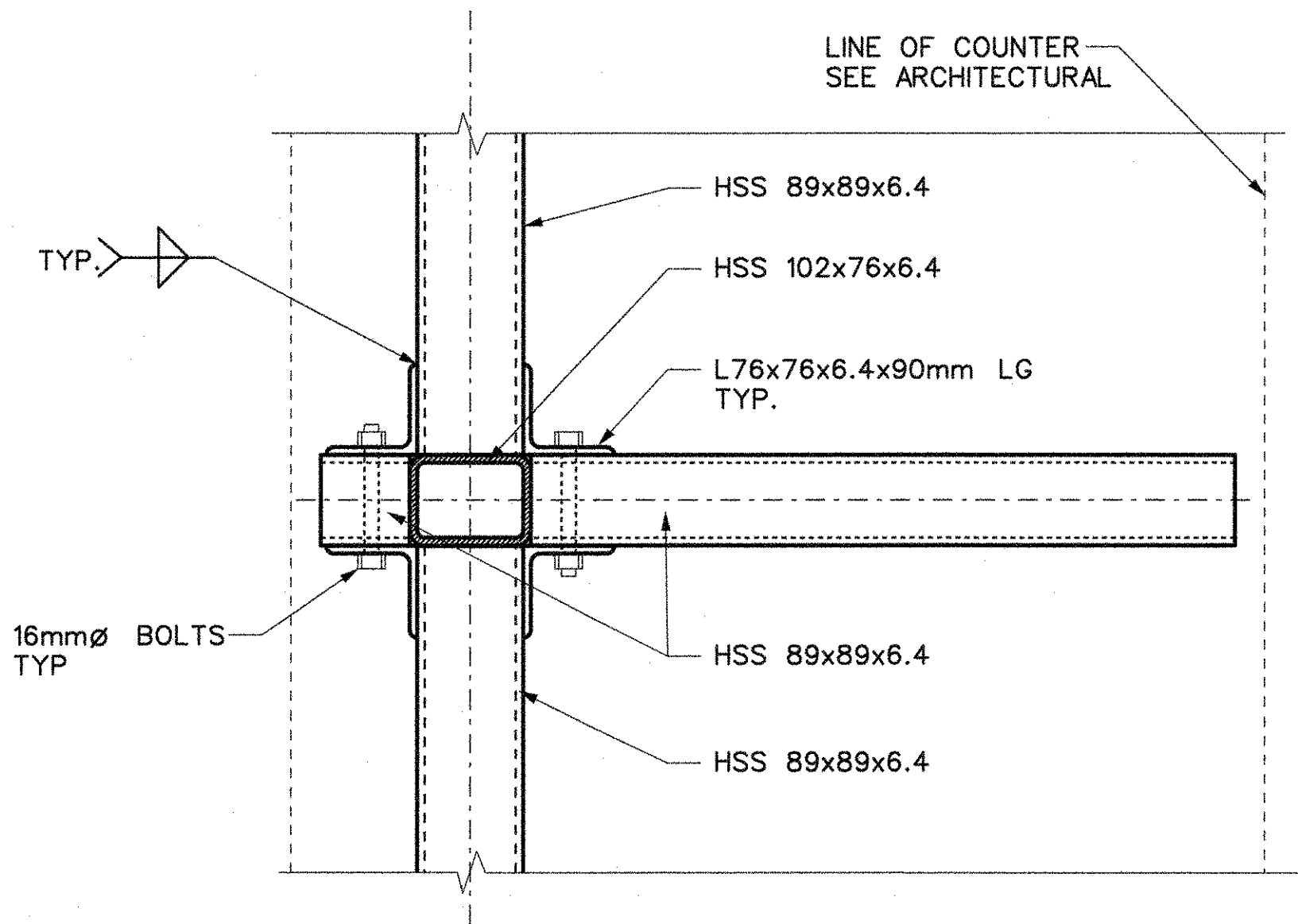
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SH35-8-S200		026

Plot Date: 25-JAN-2019



ELEVATION  
TYPICAL ANGLE CONNECTION DETAIL

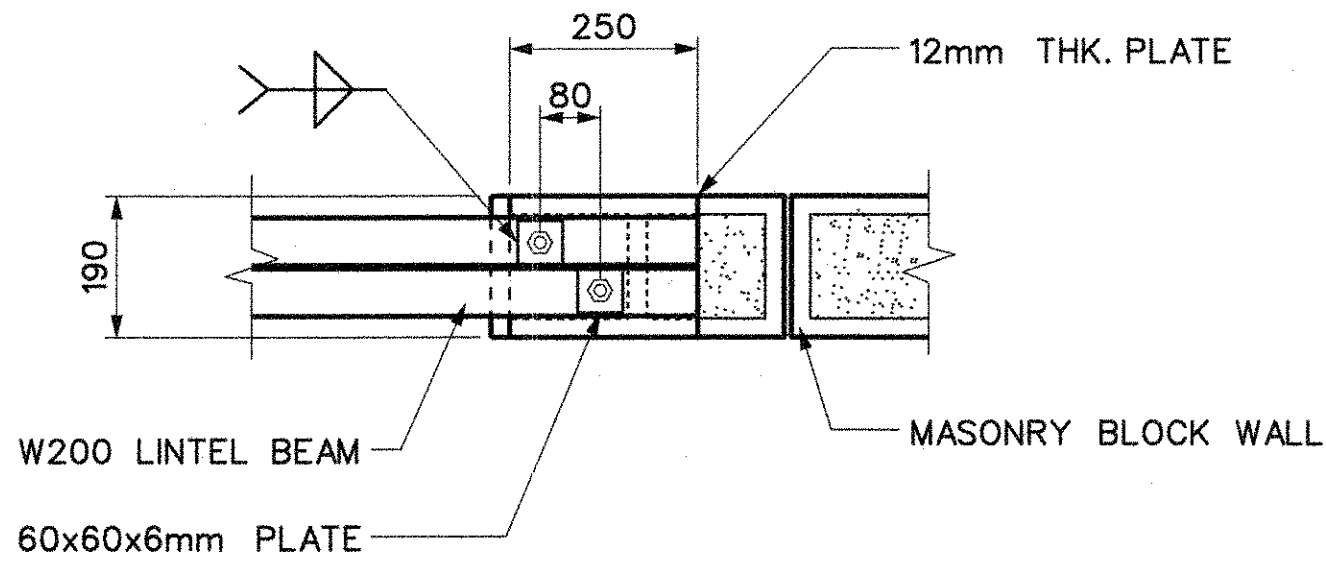
7  
S500



PLAN

CONNECTION DETAIL AFTER EVERY THIRD SPACING

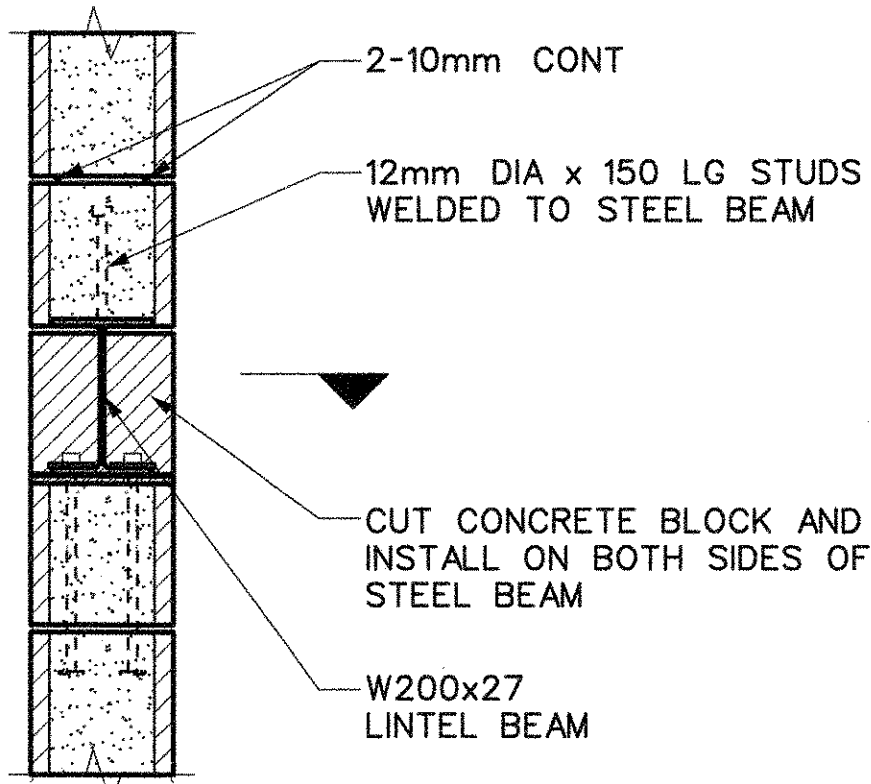
6  
S200, S500



PLAN

TYPICAL LINTEL ON BEARING PLATE

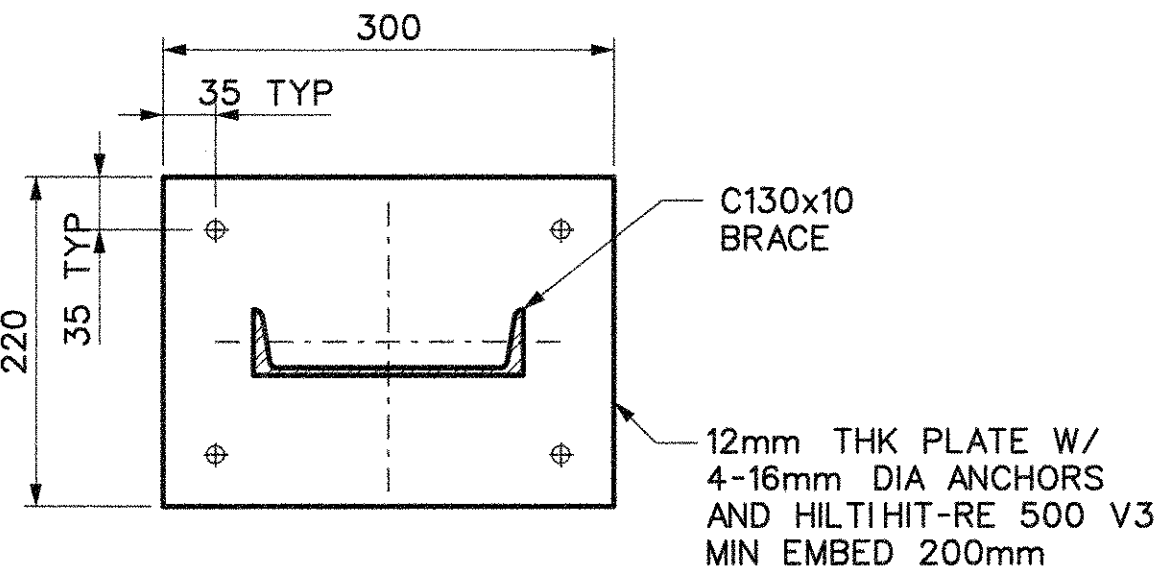
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S501



SECTION

LINTEL BEAM DETAIL

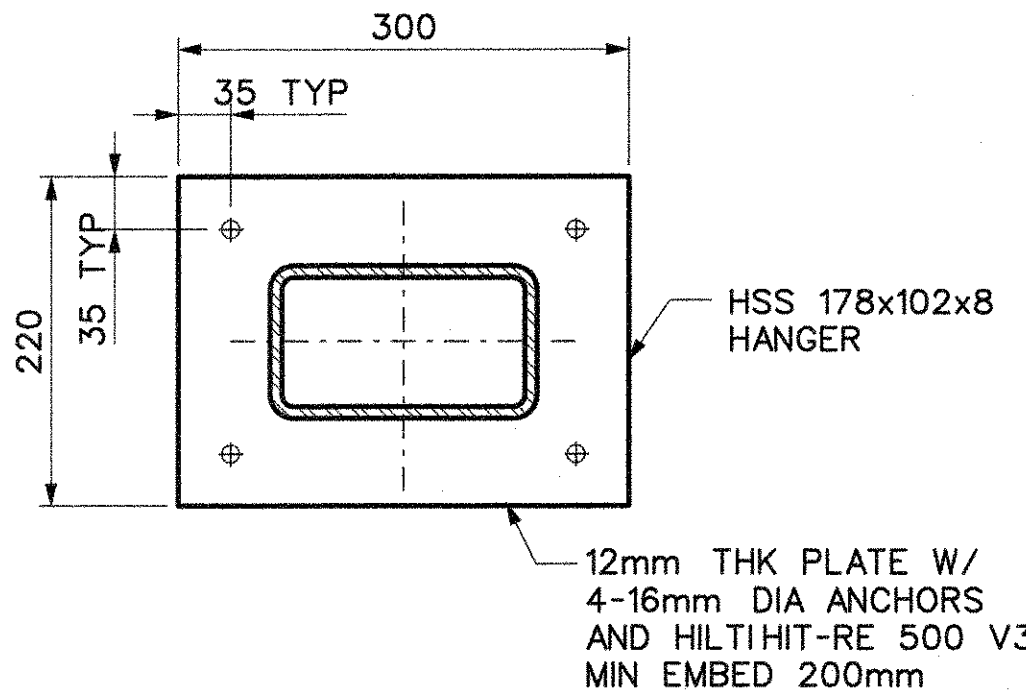
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S500



DETAIL

BRACE PLATE DETAIL

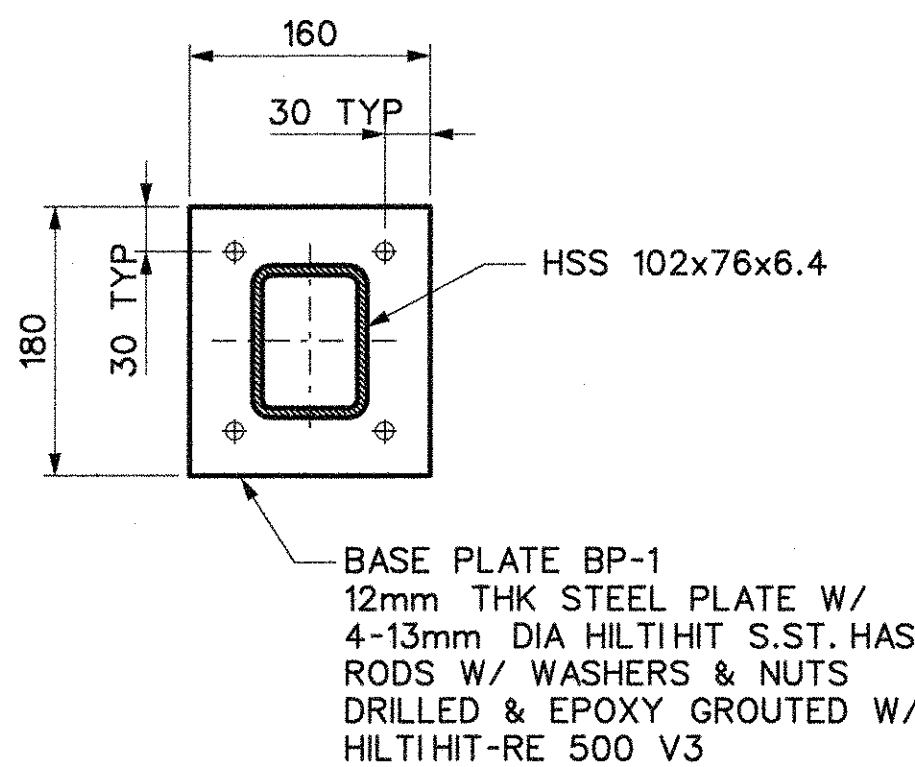
3  
S500



DETAIL

HANGER PLATE DETAIL

2  
S500



DETAIL

BP-1 - BASE PLATE DETAIL

1  
S500

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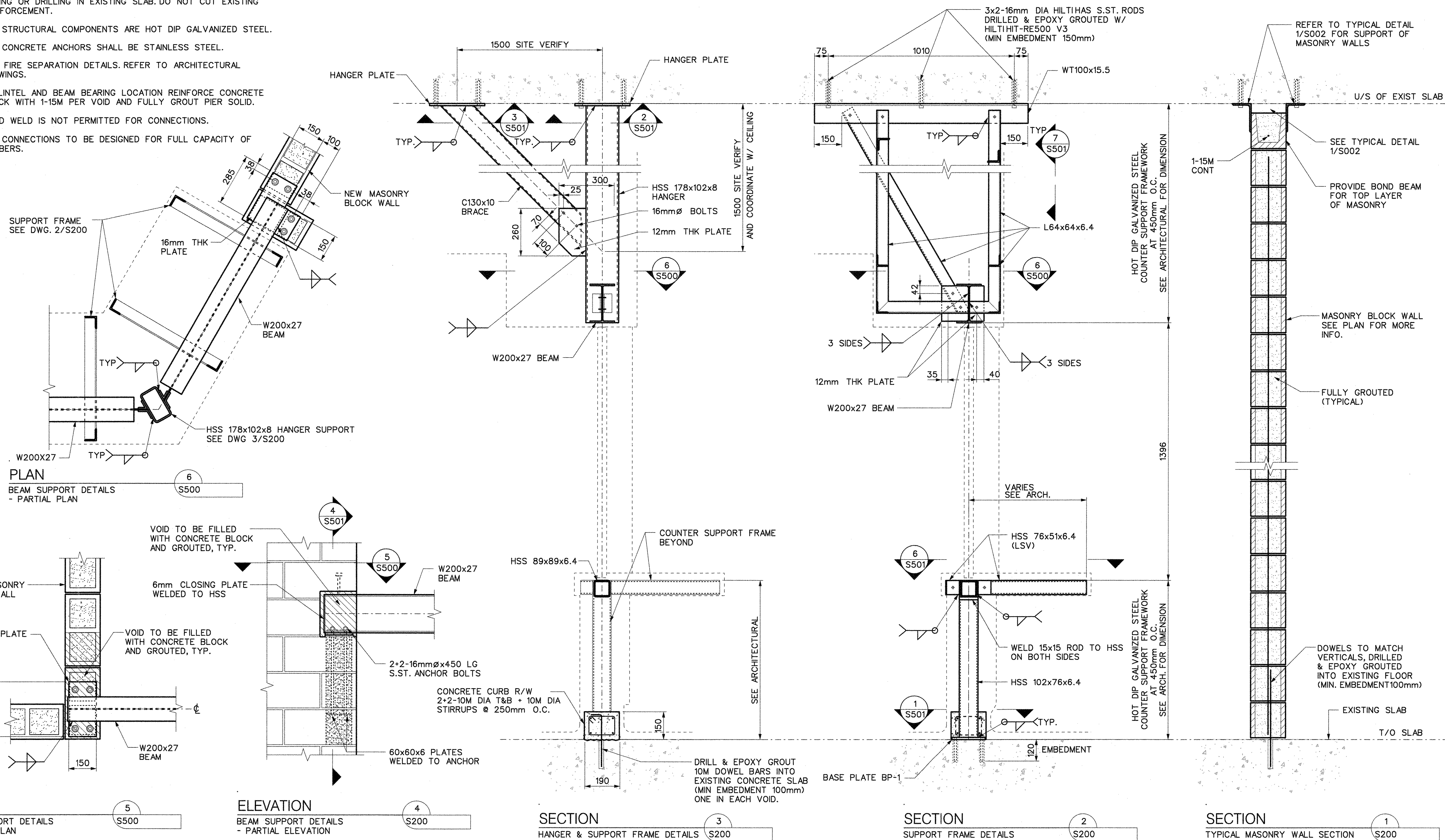
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SCALE	0 100 200 300 400mm	

SHEPPARD STATION  
STATION MANAGERS OFFICE  
AND ZONE HUB  
SECTIONS & DETAILS 02

Contract: SH35-8		
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SH35-8-S501		027A



1. SCAN EXISTING SLAB TO LOCATE REINFORCING LAYOUT BEFORE CORING OR DRILLING IN EXISTING SLAB. DO NOT CUT EXISTING REINFORCEMENT.
2. ALL STRUCTURAL COMPONENTS ARE HOT DIP GALVANIZED STEEL.
3. ALL CONCRETE ANCHORS SHALL BE STAINLESS STEEL.
4. FOR FIRE SEPARATION DETAILS. REFER TO ARCHITECTURAL DRAWINGS.
5. AT LINTEL AND BEAM BEARING LOCATION REINFORCE CONCRETE BLOCK WITH 1-15M PER VOID AND FULLY GROUT PIER SOLID.
6. FIELD WELD IS NOT PERMITTED FOR CONNECTIONS.
7. ALL CONNECTIONS TO BE DESIGNED FOR FULL CAPACITY OF MEMBERS.



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SCALE			
0      100      200      300      400mm			

SHEPPARD STATION

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STATION MANAGERS OFFICE  
AND ZONE HUB

SECTIONS & DETAILS 01

Contract: SH35-8		
		
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