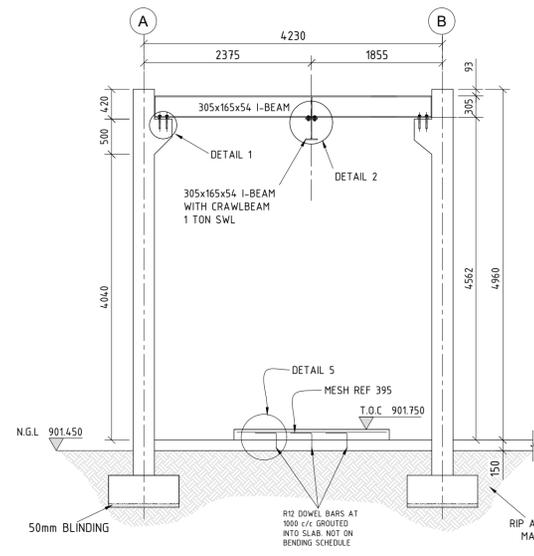


PLAN: COLUMN AND CRAWL BEAM LAYOUT
SCALE 1:50



SECTION A-A: ELEVATION OF CRAWL BEAM
SCALE 1:50

STEEL PAINT SPECIFICATION

- GENERAL:
 - PAINT TO BE DELIVERED IN ORIGINAL CONTAINERS
 - COATING SYSTEM SHALL BE FROM ONE MANUFACTURER ONLY
 - COATING TO BE APPLIED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS
- SURFACE PREPARATION AND PAINT:
 - REMOVE OIL, GREASE AND SOLUBLE SALTS BY WASHING WITH WATER EMULSIFIABLE SOLVENT DEGREASER AND RINSE WITH POTABLE WATER
 - DRY ABRASIVE BLAST MEMBERS TO SA 2 1/2 OF ISO8501-1:1988
 - APPLY 1 COAT CORBOLINE PHENOLINE 305 PRIMER TO 100 MICRON DFT
 - APPLY 2 COATS CARBOLINE PHENOLINE 305 FINISH TO 100 MICRON DFT EACH, COLOUR G08 EXTRA DARK SEA GREY (SABS 1091)
 - TIME BETWEEN COATS AT 25 deg C = 18 HOURS MIN, 36 HOURS MAX
 - ALL DEFECTS TO BE REPAIRED ON SITE

DESIGN NOTES:

- MAXIMUM SOIL BEARING CAPACITY (SLS) = 175KPA.
- CRANE DESIGN LOAD = 1 ton (9.81 kN)

GENERAL NOTES:

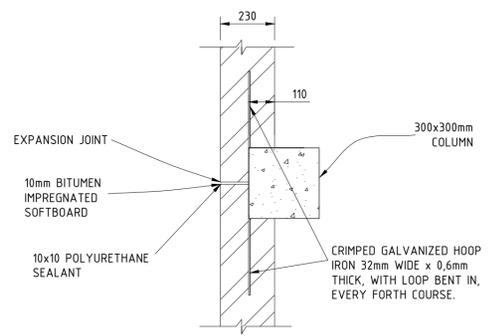
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE ARCHITECT'S DRAWINGS
- ALL CONCRETE MIXES TO BE APPROVED BY THE ENGINEER PRIOR TO COMMENCEMENT OF CONSTRUCTION
- FOUNDATION EXCAVATIONS TO BE APPROVED BY THE ENGINEER PRIOR TO CASTING OF THE BLINDING LAYER

CONCRETE NOTES:

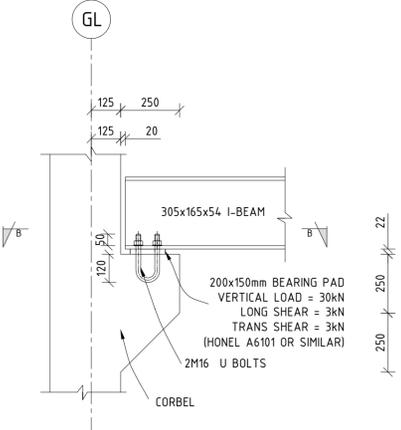
- CONCRETE CLASS: REINFORCED CONCRETE AND SURFACE BEDS CLASS 35/19
- ALL VISIBLE CONCRETE FACE FINISHES SHOULD BE SMOOTH OFF-SHUTTER AND ALL IMPERFECTIONS SHALL BE REPAIRED. FOR CONCEALED MEMBERS, DEFECTS SHALL BE REPAIRED BUT NO SPECIAL TREATMENT IS REQUIRED.
- ALL EXPOSED CONCRETE EDGES TO HAVE A 25 X 25mm CHAMFER
- ALL DIMENSIONS TO BE CONFIRMED ON SITE.
- CONCRETE TO COMPLY WITH SANS 1200G AND ESKOM CONCRETE SPECIFICATION NO 84CIVL053.
- CURING METHOD STATEMENT TO BE APPROVED BY THE ENGINEER

STRUCTURAL STEEL NOTES:

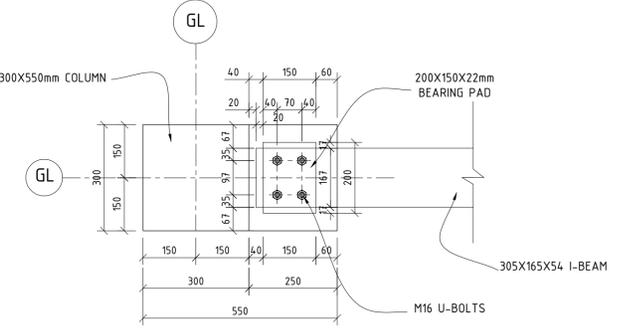
- ALL STRUCTURAL STEEL TO BE GRADE 350W UNLESS OTHERWISE SHOWN.
- ALL WELDS TO BE 6mm CONTINUOUS FILLET WELDS UNLESS SHOWN OTHERWISE AND TO CONFORM TO APPROVED STANDARDS (SABS 044 AND SANS 0167).
- ELECTRODES FOR ELECTRIC WELDING SHALL BE E7018. FOR OTHER WELDING TYPES, ELECTRODES TO BE APPROVED BY THE ENGINEER.
- BUTT WELDS AND SPLICES SHALL DEVELOP THE FULL STRENGTH OF THE JOINED ELEMENTS.
- WELDING SHALL BE PERFORMED BY CODED WELDERS. SUPPORTING DOCUMENTATION TO BE SUBMITTED TO THE ENGINEER.
- QUALITY CONTROL ON WELDS SHALL BE AS FOLLOWS:
 - ALL WELDS TO BE INSPECTED USING VISUAL AIDS
 - BUTT WELDS: 100% ULTRASONIC NDT
 - FILLET WELDS: 20% MPI
 - CRANE / CRAWL BEAMS: 100% ULTRASONIC NDT
- ALL BOLTS TO BE M16 (GRADE 8.8) UNLESS OTHERWISE SHOWN.
- WORKSHOP DRAWINGS OF STRUCTURAL STEEL WORK TO BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO FABRICATION. DRAWINGS SHALL BE CHECKED FOR DESIGN COMPLIANCE. NO DIMENSIONAL CHECKS WILL BE DONE. ALLOW 7 WORKING DAYS FOR APPROVAL.
- ALL DIMENSIONS AND LEVELS TO BE CHECKED ON SITE PRIOR TO FABRICATION OF STEEL.
- ERECTION METHOD STATEMENT TO BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
- CERTIFICATE FROM THE STEEL MANUFACTURER VERIFYING STEEL GRADE TO BE SUBMITTED TO THE ENGINEER.
- THE CONTRACTOR IS RESPONSIBLE FOR DESIGN, ERECTION, MAINTENANCE AND REMOVAL OF ALL TEMPORARY BRACING OR PROPPING.
- WHERE HSFG BOLTS ARE SPECIFIED, THE FOLLOWING SHALL APPLY:
 - CONTACT SURFACES SHALL BE FREE FROM GREASE, RUST, PAINT ETC. DURING FASTENING.
 - TIGHTNING TO BE DONE IN ACCORDANCE WITH SANS 094 CLAUSE 5.3.1 FOR FRICTION GRIP AND CORONET LOAD INDICATING WASHERS FOR HSFG BOLTS.
- EDGES OF FLAME CUT PLATES TO BE GROUND SMOOTH.
- GALVANISED STEEL MEMBERS AND BOLTS TO BE HOT DIPPED GALVANIZED TO A MEAN COATING THICKNESS OF 85µm
- ALL CIRCULAR HOLLOW SECTIONS TO BE PROVIDED WITH VENT AND DRAINAGE HOLES.
- ALL HOT DIPPED GALVANIZING TO BE CARRIED OUT IN STRICT ACCORDANCE WITH SANS 121:2000 / ISO 1461:1999 BY AN SABS ACCREDITED GALVANISER.
- STRUCTURAL STEEL TO COMPLY WITH SANS 1200H UNLESS OTHERWISE STATED



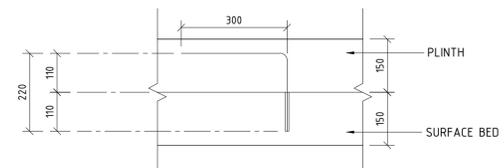
DETAIL 4: BRICK FIXING TO COLUMN
SCALE 1:15



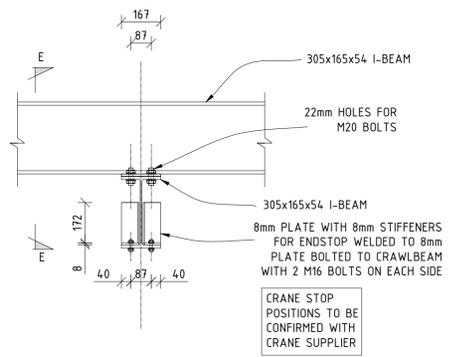
DETAIL 1: BEAM COLUMN CONNECTION (TYPICAL)
SCALE 1:15



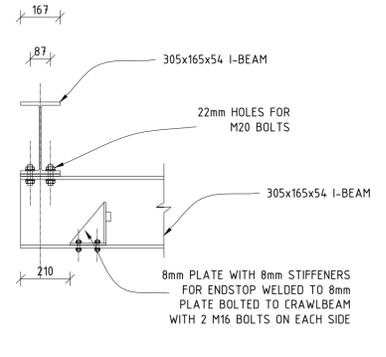
DETAIL 1: PLAN B-B (TYPICAL)
SCALE 1:10



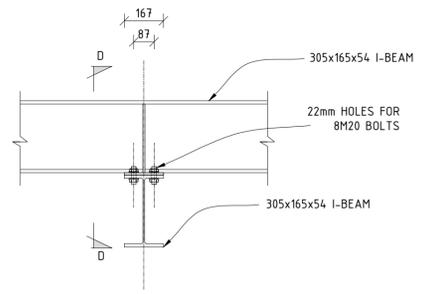
TYPICAL DOWEL DETAIL 5
SCALE 1:10



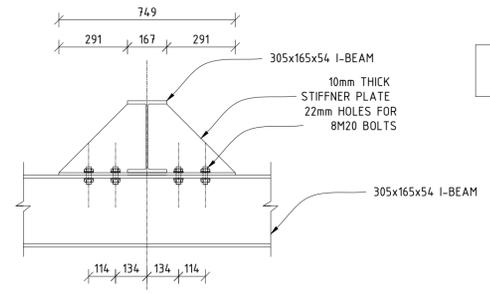
DETAIL 3: SECTION THROUGH I-BEAM CONNECTION
SCALE 1:15



DETAIL E-E: SECTION THROUGH I-BEAM CONNECTION
SCALE 1:15



DETAIL 2: SECTION THROUGH I-BEAM CONNECTION
SCALE 1:25



SECTION D-D: SECTION THROUGH I-BEAM CONNECTION
SCALE 1:25

AS BUILT

STATION DATUM = 902.25

NO	REV	DATE	DESCRIPTION	BY	CHECKED BY	AUTH BY	APP	REFERENCE DRAWINGS
6	26 05 23		AS BUILT per EEN P45-ECN-ASB-144	MSM	MM	MM		
5	12 06 18		AS BUILT per EEN P45-ECN-ASB-019	WP	MM	MM		
4	13 01 13		KKS CODE ADDED, DOWEL DIMENSION	MRM	MM	WGB		
3	22 10 12		CRAWL BEAM DETAIL REVISED	MRM	MM	WGB		
2	03 11 11		MARKUP OF REDLINE DRAWING	SDP	MM	WGB	0.84/13027-3	LAYOUT PLAN
1	06 05 10		CORBEL SIZE AND DETAIL 1 CHANGED	SM	MM	WGB	0.84/13027-3	REINFORCEMENT
0	28 11 08		FOR REVIEW	SM	MM	WGB	0.84/929	ARCHITECT'S DRAWING
			** REVISION **	REV BY	CHKD BY	AUTH BY	KKS APP	REFERENCE DRAWINGS
DO	REGISTER	13 05 10	AUTHORIZED FOR ESKOM BY	DATE				
DESIGN APPROVED	13 05 10	MM	WG BEETGE	13-05-10				
KKS APP	13 05 10	MM	2 Lywood Gables 354 Rosemary Road Lywood, Tshwane Tel: (012) 361 9029 Fax: (012) 361 9025					Nyeleti Engineering & Design
DO AUTH	13 05 10	MM						
CHKD BY	13 05 10	MM						
DRAWN BY	13 05 10	DM						
SCALE	AS SHOWN							

MEDUPI POWER STATION
WATER TREATMENT PLANT AREA
CHLORINATION BUILDING
TYPICAL DETAILS

14133 - T - 301

Issued by Nyeleti Consulting
Marilize Mostert
PrEng no: 2001 0150
IKKS CODE: 0 0UGG

Eskom

0.84 / 13027

SHEET 2 REV 6