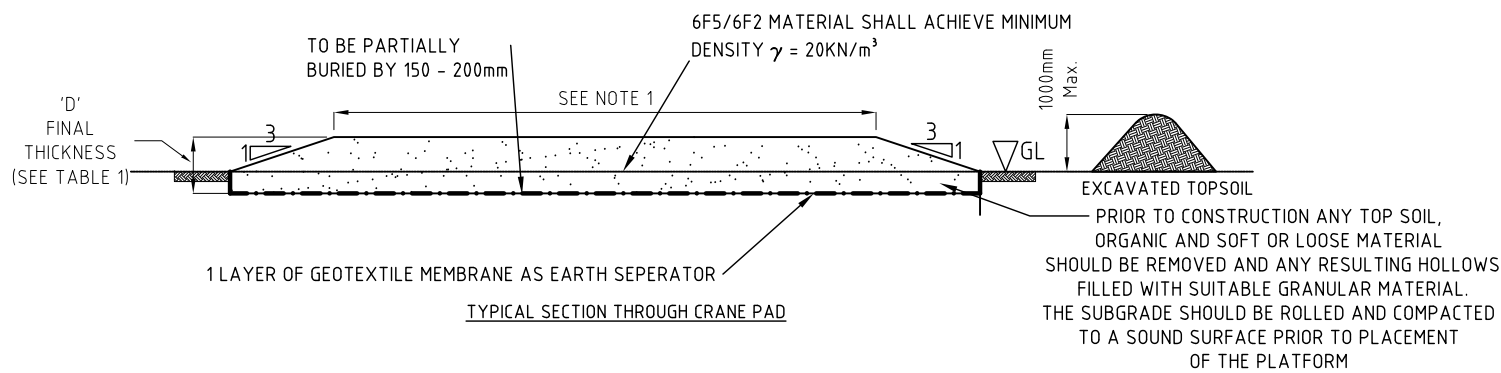
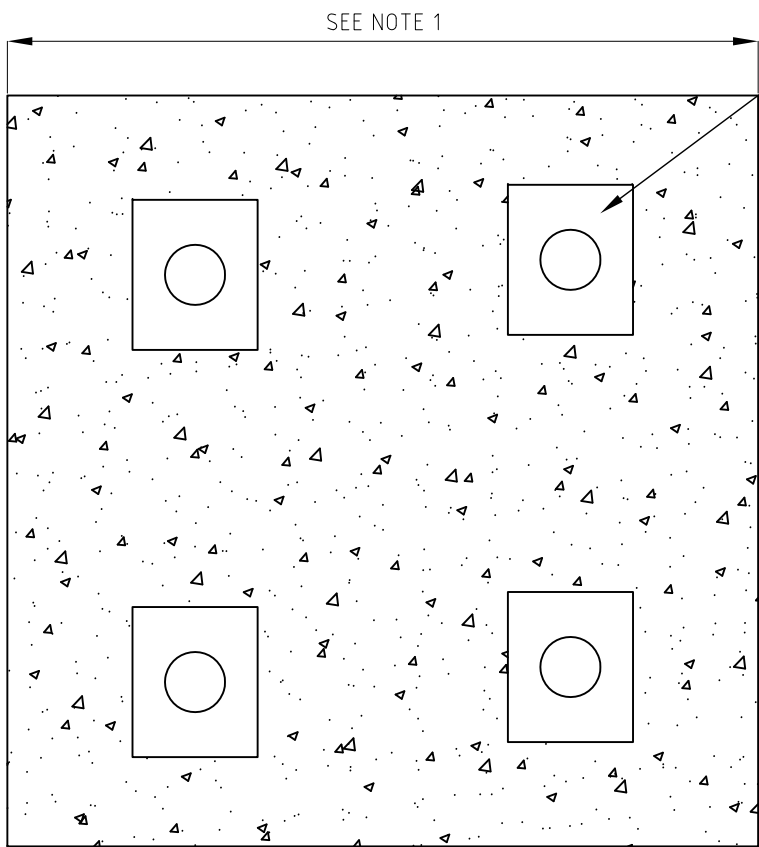


TYPICAL SECTION THROUGH SUNKEN ACCESS TRACK IF  
SUBGRADE CBR VALUE IS GREATER THAN 5%  
CONTACT DESIGN DEPARTMENT IF THE SUBGRADE CBR  
IS LESS THAN 5%

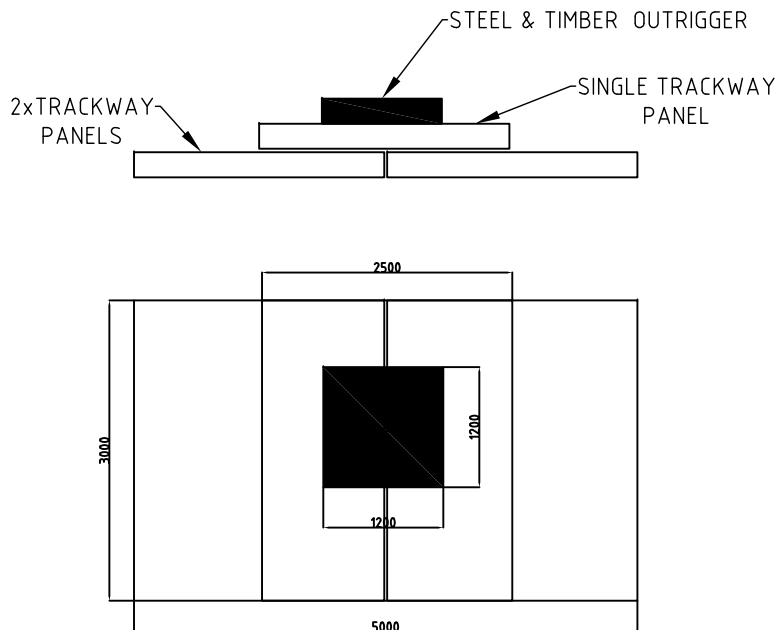
GENERIC ACCESS TRACK CONSTRUCTION DETAILS



TYPICAL SECTION THROUGH CRANE PAD



PLAN VIEW OF CRANE PAD



OUTRIGGER DETAIL  
(TRACKWAY PANELS MUST BE USED ON CRANE PADS FOR  
ALL TOWER LOCATIONS)

GENERIC CRANE PAD CONSTRUCTION DETAILS

TABLE 1: CRANE PAD DESIGN		
×	'D' CRANE PAD & ACCESS TRACK THICKNESS (mm)	OUTRIGGER PAD (SEE TABLE 2)
-	400	LAYOUT 1
-	300	LAYOUT 1
-	200	LAYOUT 1
-	100	LAYOUT 2
-	50	LAYOUT 2

TABLE 2: OUTRIGGER PAD ARRANGEMENT			
	BOTTOM PANEL	TOP PANEL	STEEL MAT
LAYOUT 1	N/A	1No - 2.45m X 3.0m	1.0m X 1.0m
LAYOUT 2	2Nos - 2.45m X 3.0m	1No - 2.45m X 3.0m	1.0m X 1.0m

RESIDUAL RISKS

1. GROUND CONDITIONS

GROUND INVESTIGATIONS ARE DONE PRIOR TO DESIGN OF ACCESS TRACKS/CRANE PADS; HOWEVER, WHEN INITIATING WORK IF THE GROUND CONDITIONS APPEAR UNSUITABLE OR DIFFERENT OR IN DOUBT DESIGN SHALL BE CONTACTED FOR ASSESSMENT/GUIDANCE.

2. DIFFERING CONSTRUCTION PLANT

ENGINEERING DEPARTMENT MUST BE INFORMED OF ANY CHANGE OF LOADINGS TO RE-ASSESS THE SUITABILITY OF THE STONE FILL TRACKS/PADS.

3. ECCENTRIC POSITIONING OF THE CRANE OUTRIGGER

CRANE MUST BE PLACED IN ACCORDANCE WITH SUPPLIERS TECHNICAL SPECIFICATION.

4. HIGH WIND CONDITIONS FOR DURATION OF WORKS

WEATHER MUST BE MONITORED THROUGH THE DURATION OF THE WORKS INVOLVING THE CRANE. THE WORKS MUST STOP IF A POTENTIALLY DANGEROUS SITUATION IS FORECAST UNTIL SUCH A TIME AS IT IS SAFE TO RESUME WORK.

5. OHL LIVE CLEARANCE INFRINGEMENT

CRANE SHALL BE PLACED IN A POSITION AWAY FROM THE EXISTING OHL TO ENSURE STATUTORY LIVE CLEARANCES ARE NOT INFRINGED AT ANY TIME ALLOWING SAFE WORKING CONDITIONS.

6. DAMAGE TO UNDERGROUND SERVICES

GROUND MUST BE CAT SCANNED TO VERIFY THERE ARE NO BURIED SERVICES OR DRAINAGE FACILITIES DIRECTLY UNDERNEATH THE PAD. STONE-FILL THICKNESS SHALL BE INCREASED AS REQUIRED BY UTILITIES TO PROTECT UNDERGROUND SERVICES AND PREVENT DAMAGE DURING CRANE OPERATIONS.

7. OPERATIONAL LIMITS OF THE CONSTRUCTION PLANT

MAXIMUM LOADING AND REQUISITE LOADING CONDITIONS OF THE CONSTRUCTION PLANT MUST NOT BE EXCEEDED. WIND SPEED LIMITATIONS OF THE CRANE WITH ITS MAST RAISED MUST NOT BE EXCEEDED.

8. CONSTRUCTION ACTIVITIES

CONSTRUCTION ACTIVITIES THAT COULD AFFECT INTEGRITY OF THE PAD SHOULD ONLY BE PERMITTED IF IT IS SUPERVISED BY COMPETENT SITE STAFF. REGULAR MAINTENANCE SHOULD BE CARRIED OUT TO KEEP A LEVEL SURFACE, REPAIRS CARRIED OUT PROMPTLY WHEN PROBLEMS ARE IDENTIFIED AND THE PAD THICKNESS REINSTATED AFTER ANY EXCAVATION OR DAMAGE. ADEQUATE WATER DRAINAGE SYSTEM THROUGH THE TRACKS/PADS SHOULD BE PROVIDED.

9. RUTTING OR OTHER UNEVEN DEFORMATION DUE TO INADEQUATE LEVEL OF COMPACTION

GRANULAR FILL SHALL BE ADEQUATELY ROLLED, COMPACTED TO ACHIEVE PAD STIFFNESS, INCREASE DENSITY OF THE SUBBASE AND REDUCE VOIDS. CBR VALUES LESS THAN 5% SHALL BE REPORTED TO THE DESIGN ENGINEER FOR REVALUATION OF THE PAD/TRACK DESIGN.

REQUIREMENTS FOR SAFE OPERATIONS OF THE CRANE

- SITE WORKS INVOLVING CRANES MUST BE PLANNED SUCH THAT THE DESIGN WIND SPEED LIMITATIONS OF THE CRANE ARE NOT EXCEEDED. CRANE SUPPLIER'S RECOMMENDATIONS ON SAFE WORKING CONDITIONS MUST BE COMPLIED WITH AT ALL TIMES.
- WEATHER MUST BE MONITORED THROUGH THE DURATION OF THE WORKS. THE WORKS MUST STOP IF A POTENTIALLY DANGEROUS SITUATION IS FORECAST AND THE CRANE MUST BE REMOVED FROM THE SITE.
- THE CRANE OUTRIGGER MUST BE PLACED CENTRALLY ON TO THE SUPPORTING PADS. IT MUST BE ENSURED THAT THE LOAD IS NOT CONCENTRATED ON AN EDGE OF THE PAD WHICH COULD RESULT IN LOAD CONCENTRATION RESULTING IN GROUND FAILURE.
- THE CRANE PADS MUST BE INSTALLED IN ACCORDANCE WITH THE DESIGN AND INSPECTED REGULARLY TO HIGHLIGHT ANY AREAS OF CONCERN.
- THE MACHINE BOOM MUST NEVER BE LEFT STATIONARY DIRECTLY OVER AN INDIVIDUAL OUTRIGGER LEG WITH OR WITHOUT CAGE LOAD.
- THE MAXIMUM OUTREACH OF THE BOOM WITH ITS TELESCOPIC SECTIONS IN HORIZONTAL CONFIGURATION MUST NOT EXCEED THE DESIGN LIMIT AT ANY TIME DURING TEMPORARY WORKS.
- CRANE SUPPLIER'S DESIGN LIMITATIONS MUST BE FOLLOWED AT ALL TIMES DURING INSTALLATION AND OPERATIONS OF THE CRANE, INCLUDING BUT NOT LIMITED TO THE MAXIMUM WIND SPEED ALLOWED FOR OPERATION.
- IT MUST BE ENSURED THAT EACH OUTRIGGER LEG SUPPORTS A PROPORTION OF THE GROSS VEHICLE WEIGHT (GVW) BASED ON THE MANUFACTURER'S WORKING ENVELOPE AND FOLLOWING ALL LIMITATIONS AS RELEVANT PROVIDED BY THE CRANE SUPPLIER.
- THE GROUND SETTLEMENT SHALL BE MONITORED ON A DAILY BASIS AT LOCATIONS WITH SOFT GROUND CONDITIONS. IF DEFERENTIAL SETTLEMENT OCCURS ON ANY OF THE OUTRIGGER LEGS AND EXCEEDS THE RANGE OF 50-75mm THEN CRANE OPERATION MUST BE STOPPED IMMEDIATELY. SITE ENGINEER TO INFORM DESIGN OFFICE, TO ALLOW RE-ASSESSMENT OF THE ACTUAL GROUND CONDITION AT TIME OF CRANE OPERATION.

PLANT/VEHICLE DETAILS		
TRUCK	VEHICLE SELF WEIGHT	15 TONNES
CRANE 1	CRANE AC130-5 130 TONNE CAPACITY	24.7 TONNES
CRANE 2	CRANE EXPLORER 5600 160 TONNE CAPACITY	31.8 TONNES

POST CONSTRUCTION PLATE BEARING TEST REQUIREMENTS

- PLATE BEARING TEST: PBT SHALL BE DONE AFTER THE COMPLETION OF CRANE PAD CONSTRUCTION TO CONFIRM ITS STRENGTH. ALLOW A PBT ONE AT EACH OUTRIGGER LOCATION. SCHEDULE OF LOADING TEST PRESSURE ARE LISTED BELOW.
  - 250 KPA (IN INCREMENTS OF 50KPA)

NOTES

- CRANE PAD SIZE TO BE DECIDED ON SITE BASED ON THE CRANE TYPE TO BE USED.
- ALL DIMENSIONS IN MM UNLESS STATED OTHERWISE.

SAFETY REQUIREMENTS REQUIRED FOR ACCESS TRACKS AND CRANE PADS

- THE STONE FILL TRACK/PAD SHOULD BE WELL DRAINED AND KEPT IN GOOD CONDITION FOR THE DURATION OF THE WORKS. DRAINAGE SHOULD BE PROVIDED BY DOWN SLOPE ROUTE FROM THE SUB-GRADE TO THE DRAIN TO KEEP WATER OUT OF THE CAPPING AND SUB-GRADE.
- THE TIME BETWEEN EXPOSING THE SUBGRADE (WHERE REQUIRED) AND INSTALLATION OF THE TRACKS/PADS SHOULD BE MINIMISED.
- ADEQUATE QUALITY CONTROL SHOULD BE UNDERTAKEN DURING PLACEMENT AND COMPACTION OF THE STONE FILL MATERIAL TO CONFIRM THAT IT MEETS THE DESIGN SPECIFICATION.
- HAZARDS SUCH AS OPEN EXCAVATIONS AND THE EDGES OF THE PAD AND ACCESS RAMPS SHOULD BE IDENTIFIED AND CLEARLY MARKED.
- THE SURFACE OF THE TRACK/PAD SHOULD BE WELL COMPACTED AND LEVEL. TRACKS/PADS SHOULD BE MONITORED REGULARLY FOR ASSESSMENT OF THE PERFORMANCE DURING PLANT OPERATIONS.
- REGULAR MAINTENANCE SHOULD BE CARRIED OUT TO KEEP A LEVEL SURFACE, REPAIRS CARRIED OUT PROMPTLY WHEN PROBLEMS ARE IDENTIFIED AND THE STONE FILL SHOULD BE REINSTATED AFTER ANY EXCAVATION OR DAMAGE.
- GEOGRID/GEOSYNTHETIC MATERIAL (IF REQUIRED) SHOULD BE INSTALLED WITH GREAT CARE TO AVOID DAMAGE RESULTING FROM POOR HANDLING OR INSTALLATION.
- ADEQUATE THICKNESS OF THE GRANULAR MATERIAL SHOULD BE PLACED OVER THE GEOGRID TO PREVENT IT FROM BEING DAMAGED DURING COMPACTION OF THE TRACK/PAD.
- THE BOUNDARIES OF THE PERMISSIBLE WORKING AREA FOR THE CRANE PADS SHOULD BE CLEARLY MARKED.
- THE INTEGRITY OF THE STONE FILL TRACKS/PADS INCLUDING RAMPS AND ACCESSES SHOULD BE PRESERVED AND THE ORIGINAL DESIGN SHOULD BE ADHERED TO THROUGH ITS WORKING LIFE.
- CONSTRUCTION ACTIVITIES THAT COULD AFFECT THE INTEGRITY OF THE STONE FILL CRANE PADS SUCH AS AN EXCAVATION THROUGH THE PAD SHOULD ONLY BE PERMITTED IF IT IS SUPERVISED BY COMPETENT SITE STAFF.
- CONTRACTOR MUST ENSURE DESIGN LOADING CONDITIONS INCLUDING WIND SPEED LIMITATIONS OF THE CRANE WITH ITS MAST RAISED ARE NOT EXCEEDED.
- PROVIDE A MINIMUM OF 2% SURFACE GRADIENT FOR SURFACE WATER RUN-OFF.

DATE		08/10/2024		REMARKS	
ISSUE	P01	CHECKED	RT	FIRST ISSUE	
DRAWN	KBI	APPROVED	DA		
SSE SCHEME No.		LT455			
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<div><div><div><b>MORRISON</b></div><div><b>Energy Services</b></div><div>A part of <b>MGroup</b>Services</div></div><div><a href="http://www.morrisones.com">www.morrisones.com</a></div></div>					
TITLE					
INDICATIVE CRANE PAD AND ACCESS TRACK CONSTRUCTION DETAILS					
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ORIGINATOR DRAWING NUMBER				SHEET No.	1
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