

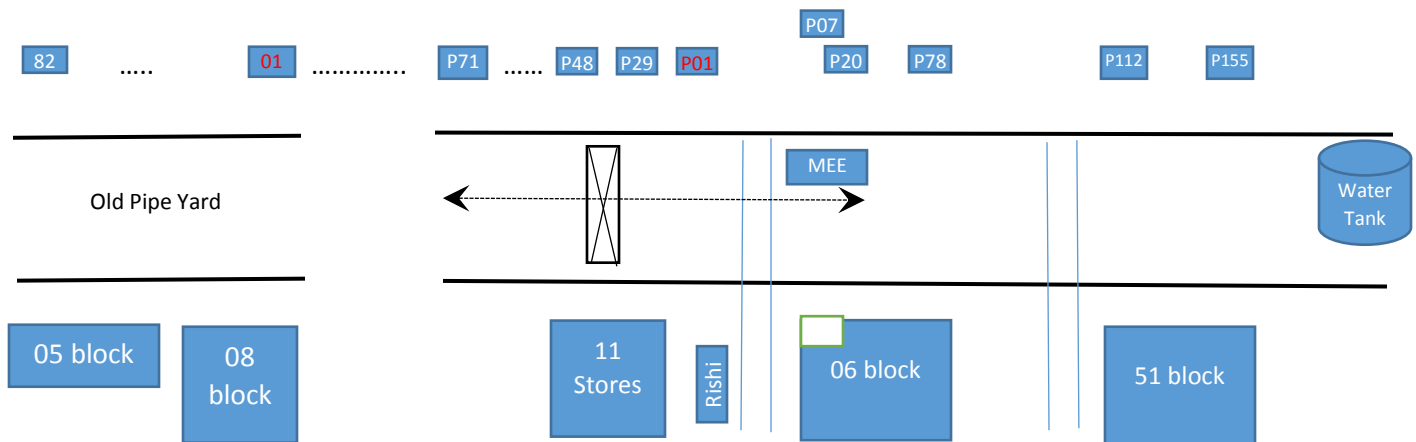
**BHEL::HYDERABAD**

**M&S-P&C-DEPARTMENT**

**TENDER REF.M&S/P&C/2019/99 DT.15/02/2020**

**NAME OF THE WORK:MAKING CONNECTION TO OLD PIPE YARD TO SUPPORT  
MATERIAL HANDLING ACTIVITIES FOR MAITHREE PROJECT**

**Scope of work**



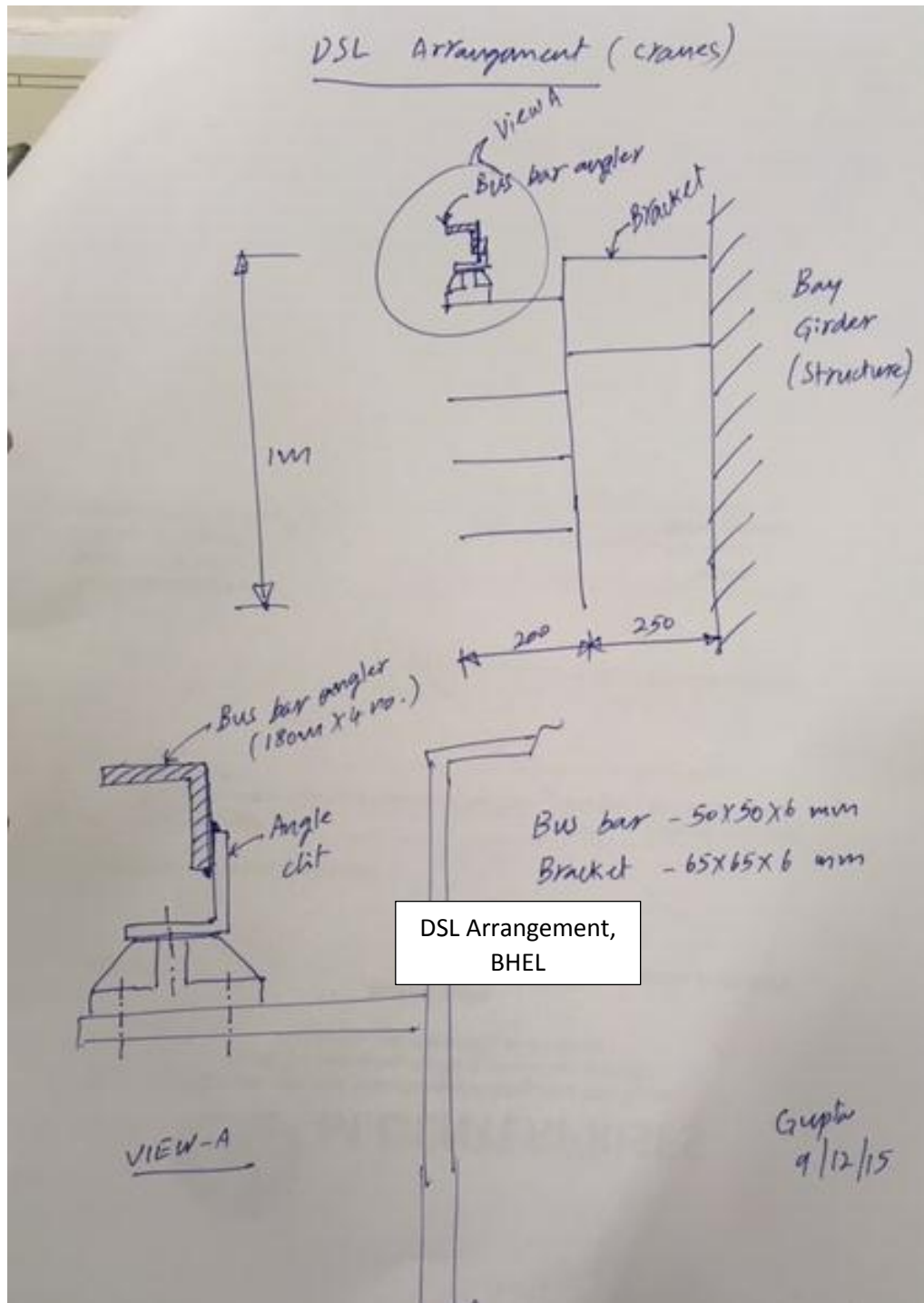
**Layout of cranes in 12 Yard**

**Objective:** Erection of DSL system (4C lines) for 24m over 8 pillars+ Repair of DSL system for 495m over 165 pillars near old pipe yard in 12 yard, for support of material handling of Maithree project

**Scope of work:**

S.No.	Description of work	Qty.	Remarks
1	Fabrication of brackets as per sketch enclosed with MS angles of 65x65x6mm and welding the same to structural girder on 300mm side brackets. Bracket should have provision for 4 insulators.	8 nos.	
2	Fabrication of L clamps out of MS angles 50x50x6mm	24 nos.	
3	Fixing of Bus bar insulators to MS brackets with bolts, nuts and washers, ..etc. including the sealing the bolt hole at the back of insulator with suitable heated bitumen compound to insulate the central bolt from supporting bracket.	24 nos.	
4	Removal of old brackets and old DSL line (which was bent and falling down)	24m	

5	Installation of MS angles 65x65x6mm in 4c rows including bracket assembly, L clamps and insulators.	24m	
6	Providing special bracket for DSL bus bar (4c) after pillar 71, as provision to be taken care for passage of vehicles (over a length of 6m without any pillar support)	1no.	
7	Expansion joint in MS angle at one location. Scope of work – consists of 2 brackets at 300mm apart leaving 20mm gap in DSL line and connecting the brackets with flexible copper cable. Cable need to be crimped with suitable lugs.	2 nos	
8	Checking and replacing of spoiled insulators over traverse of crane (10T Gantry) over a length of 495m and 165 pillars. Align DSL line to rail within $\pm 50$ mm	100 nos.	Final alignment need to be shown to M&S cranes section in-charge, and take approval.
9	Fixing of current collectors (size 200mm) to suitable channel with M20 x100mm bolts, nuts and washers	1 no	
10	Providing protective guard with MS angle at current collector location from DSL line	1 no.	
11	Cleaning of DSL line (4c) in old pipe yard with wire brush and ensure rust and debris is not there for better conductivity.	246m	
<b>Note</b>	<p>a) All raw materials- 65 angle, 50 angle, Insulators, Required nuts, bolts, washers are in the scope of BHEL.</p> <p>b) Tools, Tackles (Welding machine, .etc) and consumable like electrodes are in the scope of Contractor</p> <p>c) Contractor should shift materials from different locations inside factory to project site and return back the left over materials after completion of work to project stores as per instructions of section engineer</p> <p>d) DSL to Rail alignment (Pillar 20 near Mee crane to end of old pipe yard = <math>20+71+82 = 173-8 = 165</math> pillars) within <math>\pm 50</math>mm in X, Y direction need to be carried out and shown to Engineer/M&amp;S Cranes-BHEL</p> <p>e) DSL line erection and repair need to be carried out after rail connection (Because, DSL line checking needs crane movement) and necessary pole erection. New bus bars installed, brackets installed need to be applied with red oxide.</p> <p>f) DSL line erection need to be carried out after tree branches pruning (overhanging on DSL line need to be pruned) – is in BHEL's scope</p> <p>g) Bracket arrangement is as shown in attached picture / BHEL specification</p>		



DSL Arrangement,  
BHEL