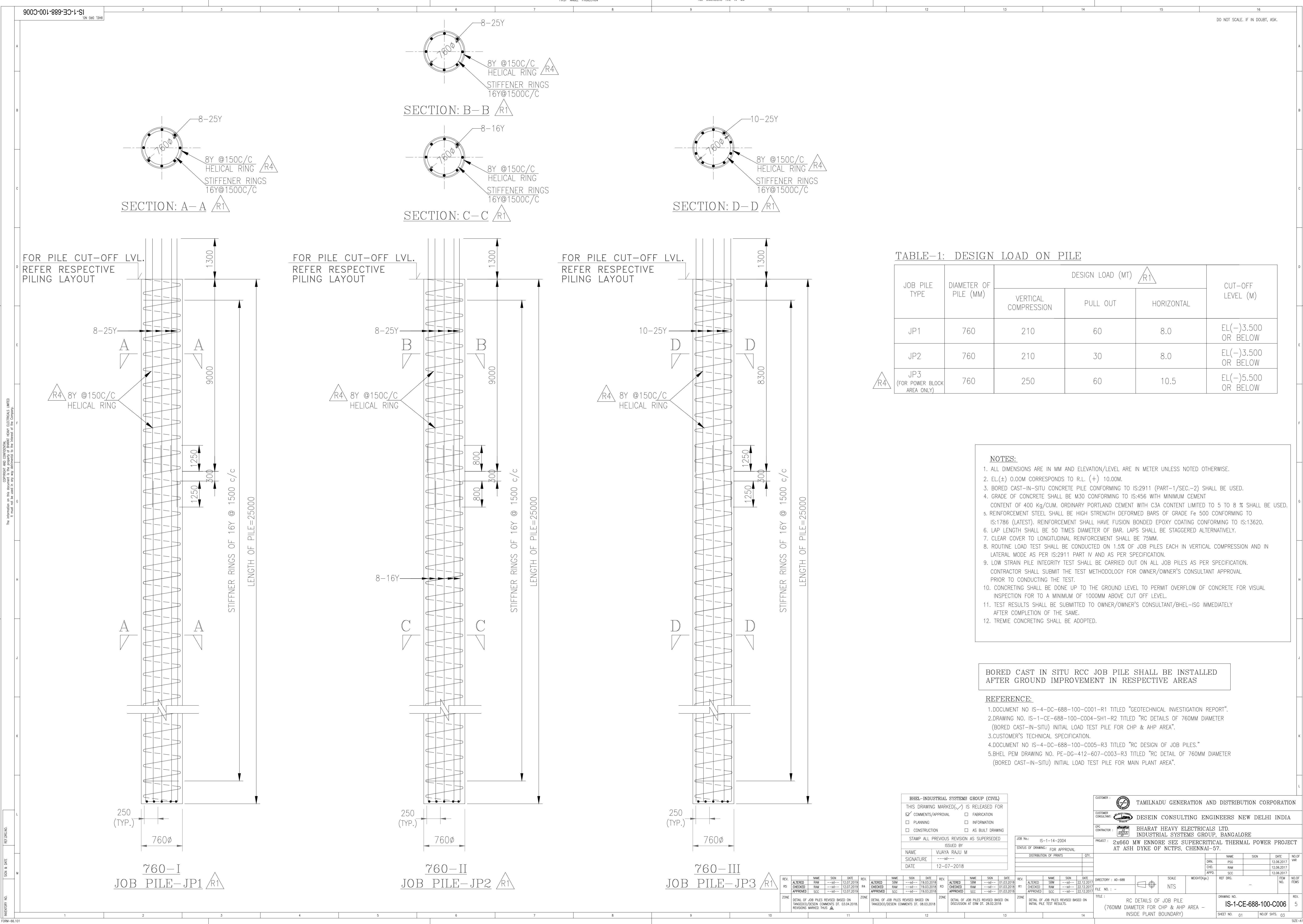
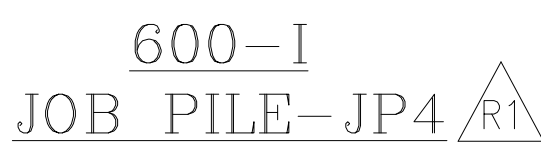






JOB PILE TYPE	DIAMETER OF PILE (MM)	DESIGN LOAD (MT) 			CUT-OFF LEVEL (M) 
		VERTICAL COMPRESSION	PULL OUT	HORIZONTAL	VERTICAL COMPRESSION
JP4	600	135	40	5.5	EL(-)3.500 OR BELOW
JP5	600	135	20	5.5	EL(-)3.500 OR BELOW

1. ALL DIMENSIONS ARE IN MM AND ELEVATION/LEVEL ARE IN METER UNLESS NOTED OTHERWISE.
2. EL.(+/-) 0.00M CORRESPONDS TO R.L. (+) 10.00M.
3. BORED CAST-IN-SITU CONCRETE PIPE CONFORMING TO IS:2911 (PART-1/SEC.-2) SHALL BE USED.
4. GRADE OF CONCRETE SHALL BE M30 CONFORMING TO IS:4566 WITH MINIMUM CEMENT CONTENT OF 400 Kg/CUM. ORDINARY PORTLAND CEMENT WITH C3A CONTENT LIMITED TO 5 TO 8 % SHALL BE USED.
5. REINFORCEMENT STEEL SHALL BE HIGH STRENGTH DEFORMED BARS OF GRADE Fe 500 CONFORMING TO IS:1786 (LATEST). REINFORCEMENT SHALL HAVE FUSION BONDED EPOXY COATING CONFORMING TO IS:13620.
6. LAP LENGTH SHALL BE 50 TIMES DIAMETER OF BAR. LAPS SHALL BE STAGGERED ALTERNATIVELY.
7. CLEAR COVER TO LONGITUDINAL REINFORCEMENT SHALL BE 75MM.
8. ROUTINE LOAD TEST SHALL BE CONDUCTED ON 1.5% OF JOB PILES EACH IN VERTICAL COMPRESSION AND IN TENSION AS PER IS:2911 PART IV AND AS PER SPECIFICATION.
9. LOW STRAIN PILE INTEGRITY TEST SHALL BE CARRIED OUT ON ALL JOB PILES AS PER SPECIFICATION.
- CONTRACTOR SHALL SUBMIT THE TEST METHODOLOGY FOR OWNER/OWNER'S CONSULTANT APPROVAL PRIOR TO CONDUCTING THE TEST.
10. CONCRETING SHALL BE DONE UP TO THE GROUND LEVEL TO PERMIT OVERFLOW OF CONCRETE FOR VISUAL INSPECTION FOR TO A MINIMUM OF 1000MM ABOVE CUT OFF LEVEL.
11. TEST RESULTS SHALL BE SUBMITTED TO OWNER/OWNER'S CONSULTANT/BHEE-ISG IMMEDIATELY AFTER COMPLETION OF THE SAME.
12. TREMIC CONCRETING SHALL BE ADOPTED.

- 1.DOCUMENT NO IS-4-DC-688-100-C001-R1 TITLED "GEOTECHNICAL INVESTIGATION REPORT"
- 2.DRAWING NO. IS-1-CE-688-100-C004-SH2-R2 TITLED "RC DETAILS OF 600MM DIAMETER (BORED CAST-IN-SITU) INITIAL LOAD TEST PILE FOR CHP & AHP AREA".
- 3.CUSTOMER'S TECHNICAL SPECIFICATION.
- 4.DOCUMENT NO IS-4-DC-688-100-C005-R3 TITLED "RC DESIGN OF JOB PILES."

BHEL-INDUSTRIAL SYSTEMS GROUP (CIVIL)	
THIS DRAWING MARKED (✓) IS RELEASED FOR	
☒ COMMENTS/ APPROVAL	☐ FABRICATION
☐ PLANNING	☐ INFORMATION
☐ CONSTRUCTION	☐ AS BUILT DRAWING
STAMP ALL PREVIOUS REVISION AS SUPERSEDED	
ISSUED BY	
NAME	VIJAYA RAJU M
SIGNATURE	---sd---
DATE	12-07-2019

CUSTOMER :		TAMILNADU GENERATION AND DISTRIBUTION CORPORATION																			
CUSTOMER CONSULTANT :		DESEIN CONSULTING ENGINEERS NEW DELHI INDIA																			
EPC CONTRACTOR :		BHARAT HEAVY ELECTRICALS LTD. INDUSTRIAL SYSTEMS GROUP, BANGALORE																			
PROJECT :		2x660 MW ENMORE SET SUPERCRITICAL THERMAL POWER PROJECT AT ASH DYKE OF NCTPS, CHENNAI-17																			
		<table border="1"> <thead> <tr> <th>NAME</th> <th>SIGN</th> <th>DATE</th> <th>NO.</th> </tr> </thead> <tbody> <tr> <td>PSD</td> <td></td> <td>12.06.2017</td> <td>01</td> </tr> <tr> <td>CHD</td> <td></td> <td>12.06.2017</td> <td>02</td> </tr> <tr> <td>APPD</td> <td></td> <td>12.06.2017</td> <td>03</td> </tr> </tbody> </table>		NAME	SIGN	DATE	NO.	PSD		12.06.2017	01	CHD		12.06.2017	02	APPD		12.06.2017	03		
NAME	SIGN	DATE	NO.																		
PSD		12.06.2017	01																		
CHD		12.06.2017	02																		
APPD		12.06.2017	03																		
DIRECTORY : AD-688		SCALE : MCGHT(Pgs.)		REF DRG.																	
7. FILE NO. : -		 NTS		-																	
TITLE :		RC DETAILS OF JOB PILE (600MM DIAMETER FOR CHP & AHP AREA - INSIDE PLANT BOUNDARY)		DRAWING NO : IS-1-CE-688-100-C006																	
		SHEET NO. 02		NO. OF SHEETS 03																	

JOB No.:		IS-1-14-2004	
STATUS OF DRAWING: FOR APPROVAL			
DISTRIBUTION OF PRINTS			QTY.
REV.	NAME	SIGN	DATE
R1	ALTERED SBM	--sd--	22.12.2017
	CHECKED RAM	--sd--	22.12.2017
	APPROVED SCC	--sd--	22.12.2017
ZONE	DETAIL OF JOB FILES REVISED BASED ON INITIAL PILE TEST RESULTS.		
			14

REV.	NAME	SIGN	DATE	REV.	NAME	SIGN	DATE	REV.	NAME	SIGN	DATE			
R5	ALTERED	RAM	--sd--	12.07.2019	R4	ALTERED	SRM	--sd--	19.03.2018	R3	ALTERED	SRM	--sd--	01.03.2018
	CHECKED	RAM	--sd--	12.07.2019		CHECKED	SRM	--sd--	19.03.2018		CHECKED	SRM	--sd--	01.03.2018
	APPROVED	SAC	--sd--	12.07.2019		APPROVED	SAC	--sd--	19.03.2018		APPROVED	SAC	--sd--	01.03.2018
ZONE	DETAIL OF JOB PILES REVISIED BASED ON TANGKODI/DESEIN COMMENTS DT. 03.04.2018. REVISIONS MARKED THUS 			ZONE	DETAIL OF JOB PILES REVISIED BASED ON TANGKODI/DESEIN COMMENTS DT. 08.03.2018			ZONE	DETAIL OF JOB PILES REVISIED BASED ON TANGKODI/DESEIN COMMENTS DT. 28.02.2018					
	11				12				13					



JOB PILE TYPE	DIAMETER OF PILE (MM)	DESIGN LOAD (MT) 			CUT-OFF LEVEL (M) 
		VERTICAL COMPRESSION	PULL OUT	HORIZONTAL	VERTICAL COMPRESSION
JP6	450	65	25	3.5	EL(-)3.500 OR BELOW

1. ALL DIMENSIONS ARE IN MM AND ELEVATION/LEVEL ARE IN METER UNLESS NOTED OTHERWISE.
2. EL.(±) 0.00M CORRESPONDS TO R.L. (+) 10.00M.
3. BORED CAST-IN-SITU CONCRETE PILE CONFORMING TO IS:2911 (PART-1/SEC.-2) SHALL BE USED.
4. GRADE OF CONCRETE SHALL BE M30 CONFORMING TO IS:456 WITH MINIMUM CEMENT CONTENT OF 400 Kg/CUM. ORDINARY PORTLAND CEMENT WITH C3A CONTENT LIMITED TO 5 TO 8 % SHALL BE USED.
5. REINFORCEMENT STEEL SHALL BE HIGH STRENGTH DEFORMED BARS OF GRADE Fe 500 CONFORMING TO IS:1786 (LATEST). REINFORCEMENT SHALL HAVE FUSION BONDED EPOXY COATING CONFORMING TO IS:13620.
6. LAP LENGTH SHALL BE 50 TIMES DIAMETER OF BAR. LAPS SHALL BE STAGGERED ALTERNATIVELY.
7. CLEAR COVER TO LONGITUDINAL REINFORCEMENT SHALL BE 75MM.
8. ROUTINE LOAD TEST SHALL BE CONDUCTED ON 1.5% OF JOB PILES EACH IN VERTICAL COMPRESSION AND IN LATERAL MODE AS PER IS:2911 PART IV AND AS PER SPECIFICATION.
9. LOW STRAIN PILE INTEGRITY TEST SHALL BE CARRIED OUT ON ALL JOB PILES AS PER SPECIFICATION.
10. CONTRACTOR SHALL SUBMIT THE TEST METHODOLOGY FOR OWNER/OWNER'S CONSULTANT APPROVAL PRIOR TO CONDUCTING THE TEST.
11. CONCRETING SHALL BE DONE UP TO THE GROUND LEVEL TO PERMIT OVERTFLOW OF CONCRETE FOR VISUAL INSPECTION FOR A MINIMUM OF 100MM ABOVE CUT OFF LEVEL.
12. TEST RESULTS SHALL BE SUBMITTED TO OWNER/OWNER'S CONSULTANT/BHEL-ISG IMMEDIATELY AFTER COMPLETION OF THE SAME.
13. TREMIE CONCRETING SHALL BE ADOPTED.

- 1.DOCUMENT NO IS-4-DC-688-100-C001-R1 TITLED "GEOTECHNICAL INVESTIGATION REPORT".
- 2.DRAWING NO. IS-1-CE-688-100-C004-SH3-R2 TITLED "RC DETAILS OF 450MM DIAMETER (BORED CAST-IN-SITU) INITIAL LOAD TEST PILE FOR CHP & AHP AREA".
- 3.CUSTOMER'S TECHNICAL SPECIFICATION.
- 4.DOCUMENT NO IS-4-DC-688-100-C005-R3 TITLED "RC DESIGN OF JOB PILES."

BHEL-INDUSTRIAL SYSTEMS GROUP (CIVIL)	
THIS DRAWING MARKED(✓) IS RELEASED FOR	
☒ COMMENTS/APPROVAL	☐ FABRICATION
☐ PLANNING	☐ INFORMATION
☐ CONSTRUCTION	☐ AS BUILT DRAWING
STAMP ALL PREVIOUS REVISION AS SUPERSEDED	
ISSUED BY	
NAME	VIJAYA RAJU M
SIGNATURE	---sd---
DATE	12-07-2019

OWNER :		TAMILNADU GENERATION AND DISTRIBUTION CORPORATION
CUSTOMER CONSULTANT :		DEESIN CONSULTING ENGINEERS NEW DELHI INDIA
EPC CONTRACTOR :		BHARAT HEAVY ELECTRICALS LTD. INDUSTRIAL SYSTEMS GROUP, BANGALORE
PROJECT :	2x660 MW ENNORE SEB SUPERCRITICAL THERMAL POWER PROJECT AT ASH DYKE OF NCTPS, CHENNAI-16	

DRW. NAME	SIGN	DATE	NO.
PSD		12.06.2017	001
CHD	RAM	12.06.2017	
APPD	SCC	12.06.2017	

PROJECT DIRECTORY : AD-688		SCALE	WEIGHT (Kgs.)	REF. DRWG.	ITEM NO.	NO. OF SHEETS
FILE NO. : -		N.T.S		-		

TITLE : RC DETAILS OF JOB PIPE (450MM DIAMETER FOR CHP & AHP AREA - INSIDE PLANT BOUNDARY)	DRAWING NO. IS-1-CE-688-100-C006
SHEET NO. 0.3	NO. OF SHEETS 0.3

REV	NAME	SIN	DATE	REV	NAME	SIN	DATE	REV	NAME	SIN	DATE	REV	NAME	SIN	DATE	REV	NAME	SIN	DATE
ALTERNED	SRM	--	--	12.07.2019	ALTERNED	SRM	--	--	19.03.2018	ALTERNED	SRM	--	--	01.03.2018	ALTERNED	SRM	--	--	22.12.
CHECKED	RAM	--	--	12.07.2019	CHECKED	RAM	--	--	19.03.2018	CHECKED	RAM	--	--	01.03.2018	CHECKED	RAM	--	--	22.12.
APPROVED	SGC	--	--	12.07.2019	APPROVED	SGC	--	--	19.03.2018	APPROVED	SGC	--	--	01.03.2018	APPROVED	SGC	--	--	22.12.
REVIEWED	SGC	--	--	12.07.2019	REVIEWED	SGC	--	--	19.03.2018	REVIEWED	SGC	--	--	01.03.2018	REVIEWED	SGC	--	--	22.12.
DETAILS OF JOBS FILED REVERSED BASED ON PARCELS/DEVELOPMENT COMMENTS BY 03.04.2019					DETAILS OF JOBS FILED REVERSED BASED ON PARCELS/DEVELOPMENT COMMENTS BY 08.01.2019					DETAILS OF JOBS FILED REVERSED BASED ON DECISION AT FOM BY 28.06.2019					DETAILS OF JOBS FILED REVERSED BASED ON INITIAL FILE TEST RESULTS				
REVISIONS MARKED THUS 																			