


<div><div></div><div>JAYA CM</div></div>		DATA TEKNIS PROYEK				Nomor : Halaman : Tanggal :	
BIRO ENGINEERING		TRANSPORTASI					


NAMA PROYEK : BANDAR UDARA						
PEMILIK : Angkasa Pura						
JENIS PROYEK : Pematangan Lahan dan APRON BARAT NGURAH RAI AIRPORT						
LOKASI : Badung - Bali						
PERIODE						
PELAKSANAAN : 2018-2019						

NO	DESKRIPSI	VOLUME/ Qty	SATUAN	Biaya Konstruksi		KETERANGAN
1 UMUM						
	URAIAN					
	Luas area	: 479.000,00	m2			Luas sesuai kontrak
	Lahan GSE Parking Stand	: 2124,23	m2	Rp 921.018.172		
	Pematangan Lahan Pantai	: 357500	m2	Rp 983.048.813.683		Tahap pertama, sesuai izin yg keluar
	Apron (Rigid Pavement)	: 60299,027	m2	Rp 102.964.771.719		
	Apron Service Road (Rigid Pavement)	: 9139,86	m2	Rp 12.726.289.453		
	Jumlah Parking Stand					
	Narrow Body	: 6	Pesawat			terdapat 6 slot parking stand yang memuat pesawat tipe narrow dan wide body
	Wide Body	: 6	Pesawat			
	Rekonflik	: 0	Pesawat			
	Konstruksi GSE (Rigid Pavement)	: 2624.8801	m2	Rp 681.608.390		
	Saluran (drainase)	: 2466,704	m1	Rp 41.648.590.498		
	Apron Flood Light (AFL)	: 7	Unit	Rp 15.096.536.919		biaya total pekerjaan ME
	Spot Number Light (SNL)	: 6	Unit			
	Taxiway Edge Light	: 7	Unit			
	Apron Edge Lights (AEL)	: 26	Unit			
	Taxiway Guidance Sign (TGS)	: 4	Unit			
	CCTV	: 14	Unit			
	Lain-lain	: 479.000,00	m2	Rp 15.693.819.802		Item pekerjaan

2. Lahan GSE Parking Stand						
	Tebal urugan Limestone	: 424,847	m3			
	Tebal	: 25	cm			
	Type	: Non Plastis				
	Merek	: Pecatu				
	Tebal pemadatan	: 25	cm			
	Kepadatan material pemadatan (density)	: 40	%			
	Pemasangan Paving Block (tebal)	: 2124,235	m2			
	Tebal	: 8	cm			
	Type	: eksisting				
	Merek	: eksisting				
	Dimensi Cansteen	: 30x15	cm			
	Panjang	: 65	m'			
	Type	: Precast				
	Merek	: Sinar Bali				
	Marka parking	: 79,7665	m2			
	Type	: Roadline Paint				
	Merek	: Nippon Paint				


3. Pematangan Lahan Pantai						
	Silt Curtain (panjang)	: 1500	m'			
	Type	: Tube Type				
	Merek	: Geonia				
	Breakwater/ Revetment					
	a. Batu	: 139478,8512	m3			unit/m3
	Type	: Batu Core 15 - 75 Kg				104068,45 m3
	Quary	: Bumi Pasir Mandiri				
	Type	: Batu Armor 200-400 kg				29781,94 m3
	Quary	: Bumi Pasir Mandiri				
	Type	: Batu Armor 400-800 kg				5628,46 m3
	Quary	: Bumi Pasir Mandiri				
	b. Geotextile (tebal)	: 65354,22	m2			unit/m3
	Tebal	: 3.10	mm			
	Type	: Non Woven GTPP-350gr				
	Merek	: Geosistem				
	c. A-jack/ Tetrapod	: 1228	unit			unit/m3
	Type	: - 1,5 Ton				
		: - 2 Ton				
	Merek	: Sinar Bali				
	e. Crown Breakwater	: 2655,522515	m3			
	Dimensi	: 3x1.2	m			
	Type	: Precast				
	Merek	: Sinar Bali				
	Reklamasi					
	a. Material Reklamasi	: 2621368,416	m3			
	Type	: Pasir Laut				
	Quary	: Sawangan				
	b. Pemadatan/ tebal	: 500	cm			angka rata-rata
	Type Alat	: Vibroflotation rig				
	Metoda	: Vibroflotation				

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Urugan material sirtu (tebal)	:	40	cm		angka rata - rata
Type :		Sirtu			
Quary :		Sinar Bali			
Pemasangan Geotextile (tebal)	:	3.10	mm		
Type :		Non Woven GTPP-350gr			
Merek :		Geosistem			
c. Spesifikasi Kapal					kapal ini memenuhi kebutuhan panjang belalai untuk melakukan pengerukan di quarry
Nama :		HAM 318			
Type :		TSHD			
Penyedia :		Van Oord			
Kapasitas :		30000	m3		
	:				
4. APRON (Rigid Pavement)					
Limestone	:	24328,1	m3		
Tebal :		40	cm		
Type :		Non plastis			Indeks plastisitas
Quary :		Pecatu			
Lean Concrete	:	9123,03	m3		
Tebal :		15	cm		
Type :		K-175			
Quary :		Sinar Bali			
Mutu Besi (rebar/stek dowel/wiremesh)	:	540	Mpa		
Besi dowel (ukuran / diameter)	:	32,22,10	mm		
Type :		-			
Merek :		Master Steel			
Besi wiremesh (ukuran / diameter)	:	6	mm		
Type :		M6			
Merek :		Master Steel			
Mutu Beton perkerasan	:	4,6	Mpa		
Dimensi/tebal perkerasan	:	500	mm		
Type :		Cast in Site			
Merek :		Sinar Bali			
Material marka (tipe/jenis)	:	3821,85	m2		
Type :		Roadline Paint			
Merek :		Nippon Paint			
Sealant (tipe/jenis)	:	1	cm		lebar
Type :		thioflex 600			
Merek :		Fosroc			
Kansteen (dimensi)	:	150x300	mm		
5. APRON SERVICE ROAD (Rigid Pavement)					
Limestone (tebal)	:	3834,53	m3		
Tebal :		40	cm		25 cm untuk area di luar apron
Type :		Non Plastis			
Quary :		Pecatu			
Lean Concrete (tebal)	:	1220,3	m3		
Tebal :		15	cm		
Type :		K-175			
Quary :		Sinar Bali			
Mutu Besi	:	540	Mpa		
Besi dowel (diameter)	:	10,22,32	mm		
Besi wiremesh (diameter)	:	6	mm		
Type :		M6			
Merek :		Master steel			
Mutu Beton Perkerasan	:	33,2	Mpa		
Merek :		Sinar Bali			
Dimensi/tebal perkerasan	:	50	mm		
Material marka (tipe/jenis)	:	251,0131	m2		
Type :		Roadline Paint			
Merek :		Nippon Paint			
Sealant (tipe/jenis)	:	1	cm		lebar
Type :		thioflex 600			
Merek :		Fosroc			
Kansteen (dimensi)	:	15x30	mm		
Type :		Precast			
Merek :		Sinar Bali			
Dinding Saluran (Abutment Jembatan Service Road)					
a. Lean Concrete (tebal)	:	6	m3		
b. Beton (dimensi/tebal)	:	16,68	m3		
c. Mutu Beton (K/ f'c)	:	400			
d. Besi tulangan (diameter)	:	22	mm		
e. Mutu Besi	:	540	Mpa		

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6. KONSTRUKSI GSE - GROUND SUPPORT EQUIPMENT (Rigid Pavement)						
Limestone (tebal)	:	656,22	m3			
Tebal	:	25	cm			
Type	:	Non plastis				
Quary	:	pecatu				
Pasir urug (tebal)	:	262,48801	m3			
Tebal	:	10	cm			
Type	:	pasir laut				
Quary	:	sawangan				
Paving Block (tebal)	:	2624,88	m2			
Tebal	:	8	cm			
Type	:	eksisting				
Merek	:	eksisting				
7. Saluran (Drainase)						
Box culvert (dimensi)	:	1600x1100	mm			
Type	:	SD1				
Box culvert (dimensi)	:	3400x2000	mm			
Type	:	SD2				
Box culvert (dimensi)	:	3800x2200	mm			
Type	:	SD3				
Box culvert (dimensi)	:	3900x2300	mm			
Type	:	SD4				
Box culvert (dimensi)	:	1000x800	mm			
Type	:	SD5				
Box culvert (dimensi)	:	4700x1100	mm			
Type	:	SD6				
Merek	:	Sinar Bali				
U-Ditch (dimensi)	:	1500x1000	mm			
Type	:	SD1				
U-Ditch (dimensi)	:	400x600	mm			
Type	:	SD3				
U-Ditch (dimensi)	:	1000x1200	mm			
Type	:	SD4				
U-Ditch (dimensi)	:	3000x1500	mm			
Type	:	SD5B				
U-Ditch (dimensi)	:	3000x1500	mm			
Type	:	SD6				
U-Ditch (dimensi)	:	3000x1500	mm			
Type	:	SD7				
U-Ditch (dimensi)	:	300x300	mm			
Type	:	SD9				
U-Ditch (dimensi)	:	400x600	mm			
Type	:	SD10				
Merek	:	Sinar Bali				
Kolam Olak (jumlah)	:	3	unit			
Type	:	Precast				
Merek	:	Sinar Bali				
Steel Grating Galvanized (dimensi)	:	900x900	mm			
Type	:	-				
Merek	:	local				
8. ELEKTRIKAL						
Outgoing Medium Voltage Panel, MCSG 24 kV Outgoing (VCB 630 A/CT/ES)	:	1	unit			
Merek	:	LS-VINA				
Tegangan	:	24	kV			
Frekuensi	:	50/60	Hz			
Peak Current	:	63	kA			
Kabel tegangan menengah	:	624,00	m'			
Merek	:	Kabel Metal				
Type	:	N2XSEBY 3cx50 mm2 12/20kV				
Apron Distribution Panel	:	1	unit			
Merek	:	LS-VINA				
Trafo	:	50	kVA			Trafo stepdown 3P 50 kVA, 20 kV/0,4 kV
Frekuensi	:	50	Hz			
Panel LP/PP, UPS dan Grounding dan Kabel Power	:	0	unit/ m'			
Apron Flood Light Panel (AFLP)	:	7	unit			
Apron Flood Light	:	7	unit			
Tiang Flood Light	:					
Height	:	20	m			
Type	:	High Mast Pole				
Merek	:	PT.Panca Karya Wijaya				
Lighting LED	:					
Type	:	EWO F- System 555 W				
Merek	:	ADB				
Lumen Output	:	60.232	lm			
Luminous Efficacy	:	108,5	lm/W			
Lumens	:	20	Lux			pada jarak 74 m
Origin	:	Belgium				
Obstruction Lamp	:					
Type	:	Obstivision LED XGP500				
Merek	:	Philips				
Light Color	:	Red				
Penangkal Petir	:					
Type	:	R.150				
Merek	:	KURN				

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Spot Number Light (SNL)	:	6	set			
Type :						
Merek :		Lokal				
Apron Edge Light Inset	:	7	set			
Type :		ITEL-L LED 19.5 VA				
Merek :		ADB				
Isolating Transform : er		ADB Type 30/45W, 6.6 A				
Primary Connecto : r		ADB Type CKE 52				
Secondar y Connecto : r		ADB Type SCK				
Apron Edge Light (AEL)	:	26	unit			
Type :		VEE-3-030 With Blue Dome				
Merek :		ADB				
Isolating Transform : er		ADB Type 30/45W, 6.6 A				
Primary Connecto : r		ADB Type CKE 52				
Secondar y Connecto : r		ADB Type SCK				
Taxiway Guidance Sign (TGS)	:	4	unit			
Type :		PVL-RPV				
Merek :		ADB				
Isolating Transform : er		ADB Type 30/45W, 6.6 A				
Primary Connecto : r		ADB Type CKE 52				
Secondar y Connecto : r		ADB Type SCK				
Airfield Lighting Control & Monitoring	:	0	unit			
Type :		-				
Merek :		-				
Lampu Perimeter	:	75	unit			
Type :		BVP161 LED26/CW 30W 220-240V WB GREY				
Merek :		Philips				
Sistem CCTV (Apron Barat)	:	4	unit			
Type :		Sarix Pro IBP521-1R				
Merek :		Pelco				
- Kabel FO		1757,5	m'			
Type :		24 Core (NVL-DB-SM1-024)				
Merek :		Netviel				
- Panel CCTV						
Type :		Outdoor (c/w UPS 650 VA, Timer, Arester, Mini Fan)				
Merek :		Lokal				
- Media Converter						
Type :		EF24-1G-1SFP				
Merek :		Atop				
- Kabel						
Type :		NYRGBY 3C x 2,5mm2				
Merek :		Kabel Metal				
- Pathcord FO						
Type :		LC-SC Single Mode P.3M Simplek				
Merek :						
- FSFP						
Type :		BG5M15C 20				
Merek :						
Sistem CCTV (Perimeter)	:	10	unit			
Type :		IBP521-1R				4 unit
		IBP831-1R				6 unit
Merek :		Pelco				
- Kabel FO						
Type :		24 Core (NVL-DB-SM1-012)				
Merek :		Netviel				
-Tiang CCTV						
Type :		Angguk				
Merek :		Lokal				
- Panel CCTV						
Type :		Outdoor (c/w UPS 650 VA, Timer, Arester, Mini Fan)				
Merek :		Lokal				
- Kabel						
Type :		NYRGBY 3C x 2,5mm2				
Merek :		Kabel Metal				
- Obstruction Lamp						
Type :		Obstivision LED XGP500				
Merek :		Philips				

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Video Management System		1	set			
- Core Media Gateway						
Type :		CMG-SVRP				
Merek :		Pelco				
- WS Operation Centre						
Type :		U1-OPS-WK56P				
Merek :		Pelco				
- Enhance Decoder						
Type :		VX-A3-DEC				
Merek :		Pelco				
- Network Storage						
Type :		Ultimate 96 TB				
Merek :		Pelco				
- Outdoor Smartrack						
Type :		FRODC42UALG				
Merek :		Fortuna Rack				
- Din Rail						
Type :		AD1048-24FS				
Merek :		Atop				
- Industrial Media Converter						
Type :		EF24-1G-1SFP				
Merek :		Atop				
- SPF Transeiver Module						
Type :		SFP-10G-LR				
Merek :		Cisco				
- PoE + Injector Power Supply						
Type :		15.4 Watt				
Merek :		Cisco				
- Swicth Hub						
Type :		WS-C3850-24P-S				
Merek :		Cisco				
- OTB 48 port Rackmount						
Type :		NVL-OTB-RM-48				
Merek :		Netviel				
- OTB 12 port Rackmount						
Type :		NVL-OTB-RM-12				
Merek :		Netviel				
- Pathcord FO						
Type :		LC-SC Single Mode				
Merek :						
Penerangan Jalan Umum (PJU) service road	:	7	unit			
Type :		BPR 132 LED 140W/NW				
Merek :		Philips				