

APPENDIX U

EARTHWORK CALCULATIONS

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LEGOLAND

SITE EARTHWORK ANALYSIS

6/29/2017

Calculation to **Final Grade** Elevations

	Total Site Cut	-1,712,405	
	Total Site Fill	1,933,281	
	Current NET Site Volume	220,876	Fill needed to balance site

Total Site Earthworks 3,645,686 CY Earthworks movement

ESTIMATE OF CONSTRUCTION MATERIALS REQUIRED TO BUILD PROJECT

Location	Area of item (sf)	Depth of Area (ft.)	Volume of material for construction (CY)
Guest road from Harriman Dr Arcadia EM access	324,585	1.29	15,528
Guest parking lots	1,119,861	1.04	43,205
Service loop road & misc asphalt areas	145,565	1.29	6,964
BOH entrance road/service area asphalt	89,626	1.29	4,288
BOH Employee parking	237,209	1.04	9,152
Hotel Parking	91,502	1.04	3,530
Back of house buildings (floor depth 1')	51,320	1.00	1,901
Hotel Building / Pool deck	69,492	1.00	2,574
Factory Buildings	38,219	1.00	1,416
Sea Life	21,350	1.00	791
Bricktopia Buildings	46,253	1.00	1,713
Ninjago Buildings	21,458	1.00	795
Knights Buildings	17,740	1.00	657
Pirates Buildings	26,250	1.00	972
Friends Buildings	8,655	1.00	321
City Buildings	48,989	1.00	1,814
Miniland Buildings	9,563	1.00	354
Interior walkways, pedestrian areas, & parking sidewalk	662,333	0.75	18,398
Storm drainage underground systems	106,764	6.00	23,725
Storm pond bio-retention soils	88,410	3.67	12,006
Em. Access Gravel Roads	62,638	0.67	1,547
Est. retaining wall structural fill			44,294
Prelim Drain Pipes pipes and bedding			9,630
Dry Swales media			690
Onsite water main + initial backfill			3,430
Onsite sewer main + initial backfill			2,730
Miscellaneous materials (landbank parking topsoil, mulch, pond access drives, etc...)			8,200
Totals for construction materials			220,623

(Note - site volume analysis is based on bldg finish floor elevation. Materials for building slab construction are counted in the table above.)

	CY material	
Current NET Site volume calc to FG	220,876	Fill needed to balance site
Construction Materials to be installed (Haul-in)	-220,623	
<i>Sub-total</i>	253	Fill needed to balance site
<i>Total</i>	253	Fill needed to balance site