KIF Gy	psum Stack Peninsula PHASE 1 CONSTRUCTION			
ITEM	DESCRIPTION	UNITS	Quantity	Comments
	Clear and Grub	UNITS	Quality	Comments
	Clear and grub	ac	70	
	Strip 1 ft vegetation and topsoil - spoil at stockpile	bcy	113,000	
2.00	Erosion Controls			
2.01	Erect silt fence	lf	3,300	6 ft post spacing, trench bottom of fence, 10% hay bales
2.02	cut for stormwater runoff pond	bcy	2000	2 ponds, assume 2.5 ac ft and 4.5 ac- ft; 0.5 ac and 0.9 ac respectively
	fill for stormwater runoff pond	bcy	12,000	
	riprap for stormwater runoff pond	ton	4,300	Combined - 1 ft deep
	72 in dia cmp for outlet structure	If	6	
	48 in dia cmp for riser for outlet structure	lf	7	
	cut holes in riser	ea	3	
2.08	48 in dia cmp outlet pipe (principle spillway)	lf	150	
	Concrete for riser base (assume 7ft x 7 ft x 2 ft)	су	4	
	Anti-seep collars (assume concrete)	ea	7	
	pipe bedding	ton	20	Assumed # doop @ 1 4 as
2.12	clean out stormwater runoff pond	bcy	2,300	Assume 1 ft deep @ 1.4 ac
3.00	Roads			
				Assume 1.5 miles of roadway (8000
3.01	South Access Road (gravel)			If); road is 16 ft wide
3.02	Bottom Ash	bcy	2,400	Assume 6 in bottom ash
	crushed stone base	ton	2,900	Assume 4 inch stone (1032)
			_,000	
3.04	Permanent Parking Lot (paved stone)			
3.05	crushed stone base	ton	340	Assume 100 x 100 ft w/ 6 in crushed stone
7.00	Fencing			
7.00	CHOING			
7.01	New fencing (including grounding)	lf	200	Assume fence to block road only - no perimeter fence
7.02	Gates, swinging	ea	1	personnel
7.03	Gates, sliding, w/ motorized operator	ea	1	20 ft wide
	Seed/Mulch			
11.01	Seed/Mulch disturbed areas	ac	17.4	Areas outside dike
$\vdash \vdash \vdash$				
20.00	Gypsum Disposal Facility			
00.04	Disposal facility construction	L	054 400	
	Earthwork cut Earthwork fill	bcy	251,406	
20.02	Earnwork IIII	bcy	83,113	

ITEM	DESCRIPTION	UNITS	Quantity	Comments
				Spoil at nearby location - assume
20.03	Spoil select cut for future 1 ft clay layer in final	bcy	84,539	clearing and grubbing, and seeding
	cover		.,	for an additional 7 ac area.
				Spoil separately; assume clearing
20.04	Additional spoil material to be used for final cover	bcy	83,755	and grubbing, and seeding for an
		20,		additional 7 ac area
20.05	Ditch riprap	ton	23,500	assume 2 ft deep riprap, 7300 lf ditch
20.06	geotextile (if riprap is used)	sy	19,500	assume ditch has 24 ft top width
	Perimeter road surfacing - bottom ash	су	1,900	
20.08	Perimeter road surfacing - crushed stone	ton	2,300	6 in bottom ash topped w/ 4 in stone -
	G		ĺ	1.5 mi of roadway 16 ft wide
20.09	Compacted clay liner	Not req'd		Not req'd
	Drainage layer (1 ft thick) for liner (No 57 stone)	ton	125,600	Unit wt = 110 pcf
20.11	Geotextile for underdrain	sy	3,800	Wrapped around pipe
20 12	Perimeter underdrain pipe	If	4,300	
	• •	11		8 in dia HDPE, SDR = 17, perforated
	Fittings for underdrain piping	ea	35	
	Concrete anchors for underdrain piping	ea	60	Assume 75 ft spacing
	Proofroll subgrade	ac	52	
20.16				
20.17				
	Stack Closure		0.4.700	
30.01	Place 1 ft low permeable clay	bcy	84,539	Use previously stockpiled material
				Use previously stockpiled material
30.02	Place 1.5 ft soil cover	bcy	126,808	(83,755 cy). Need additional material
		,	,	(43,000 cy) from new future on-site
				borrow area
30.03	Riprap ditches for cover	ton	6,800	20 ditches, 500 ft long, 1 ft deep, avg
30.04	Geotextile for riprap ditches	0)/	11 100	10 top width
		sy	11,100	Assume 4 in dia ADS HDPE drain
30.05	drainage tubing	If	70,100	tubing
30.06	Seeding/mulch	ac	52.4	
		- 40	··	
40.00	Borrow area development	acaes es	- na retractification	
40.04	Add some costs for future borrow area			Marine all the second
40.01	development			By estimator

50.00	Construction parking			
50.01	silt fence	If	1,000	
	Earthwork cut	bcy	1,000	
50.02	Earthwork cut	509	.,000	

ITEM	DESCRIPTION	UNITS	Quantity	Comments
50.04	Crushed stone base	ton	11.400	assume 100 x 100 ft x 6 in thick
				crushed stone base