

Appendix D

EIR Construction and
Operation Assumptions

The EIR analysis is based on the assumptions associated with construction and operation of the proposed project as presented in this appendix. These assumptions are based on data provided by the CNU Project Team, including Fong & Chan Architects and Wood Rodgers, Inc., and based on consultation with Sacramento Municipal Utility District. The actual construction schedule, construction equipment use and haul trips, construction workforce, and operations-related employment and trips may be subject to refinement based on market and economic conditions.

Construction Schedule, Earthmoving, and Trip Assumptions

Phase	Start Date		Completion Date		Construction Duration (months)	Construction Duration (days)	Demolition Volume (cy)	Excavation Volume (cy)	Total Demolition Haul Trips ^a (#)	Total Excavation Haul Trips ^a (#)	Total Delivery Trips (Import) (#)	Peak-Day Truck Trips (#/day)	Peak-Day Worker Commute Trips (#/day)	
	Month	Year	Month	Year										
1	1-May	Year 1	30-Nov	Year 3	31	682	3,422	115,542	171	5,777	1,229	125	450	
2	2A (Retail/Parking Garage 1)	1-Dec	Year 4	31-Dec	Year 5	13	286	7,654	22,844	383	1,142	127	30	100
	2B (Patient Tower 2)	1-Jul	Year 5	31-Jan	Year 7	19	418	0	0	0	17,802	60	100	
	2C (Medical Office Bldg/Outpatient Clinic)	1-Dec	Year 4	30-May	Year 6	18	396	0	21,219	0	1,061	19,326	80	80
	2D (Central Quad Landscape Area)	1-May	Year 6	31-Oct	Year 6	6	132	0	0	0	1,056	8	30	
3	3A (Retail/Parking Garage 2)	1-Dec	Year 7	30-Nov	Year 8	12	264	1,338	18,400	67	920	4,550	30	50
	3B (Dormitory/Admin Support Bldg)	1-Nov	Year 8	31-Dec	Year 9	14	308	0	0	0	4,800	30	60	
	3C (Med School Parking Garage/Sport Courts)	1-Jan	Year 10	31-Oct	Year 10	10	220	0	15,556	0	778	2,030	20	30

^a 20-cubic yard haul truck capacity

^b Excavation volume associated with SMUD electrical and SASD sewer line work based on 14,460 linear feet of 10-foot-wide x 12-foot-deep trenching

Construction Workforce and Equipment Assumptions

Phase	Construction Feature	Construction Activity	Construction Workforce (Max Day)	Construction Equipment	Number of Pieces of Equipment
1	Hospital/Patient Tower 1 / Central Plant/Offsite SMUD and SASD Improvements	Demolition and Site Preparation	20	Concrete/Industrial Saws Excavators Rubber Tired Dozers	1 3 2
		Excavation and Grading	50	Rubber Tired Dozers Tractors/Loaders/Backhoes Excavators Pavers Paving Equipment Rollers	3 6 4 1 1 1
		Foundation	75	Excavators Graders Rubber Tired Dozers Scrapers Tractors/Loaders/Backhoes	2 1 1 2 2
		Structural Framing	50	Cranes Forklifts Generator Sets Tractors/Loaders/Backhoes Welders	1 3 1 3 1
		Exterior Enclosure	35	Pavers Paving Equipment Rollers	2 2 2
		Interior	450	Air Compressors	1
		Offsite SMUD and SASD Improvements	10	Air Compressors Generator Sets Excavators Plate Compactors Pumps Rough Terrain Forklifts Loaders Pavers Signal Boards Trenchers	1 1 4 1 1 1 2 1 10 1
		2A	Retail/Parking Garage 1	Demolition and Site Preparation	20
Excavation and Grading	20			Rubber Tired Dozers Tractors/Loaders/Backhoes	3 4
Foundation	50			Excavators Graders Rubber Tired Dozers Scrapers Tractors/Loaders/Backhoes	2 1 1 2 2
Structural Framing	30			Cranes Forklifts Generator Sets Tractors/Loaders/Backhoes Welders	1 3 1 3 1

Phase	Construction Feature	Construction Activity	Construction Workforce (Max Day)	Construction Equipment	Number of Pieces of Equipment		
		Exterior Enclosure	20	Pavers Paving Equipment Rollers	2 2 2		
		Interior	100	Air Compressors	1		
2B	Patient Tower 2	Site Preparation	20	Graders Scrapers Tractors/Loaders/Backhoes	1 1 1		
		Structural Framing	45	Cranes Forklifts Generator Sets Tractors/Loaders/Backhoes Welders	1 2 1 1 3		
		Exterior Enclosure	30	Cement and Mortar Mixers Pavers Paving Equipment Rollers Tractors/Loaders/Backhoes	1 1 1 2 1		
		Interior	100	Air Compressors	1		
		Demolition and Site Preparation	20	Rubber Tired Dozers Tractors/Loaders/Backhoes	3 4		
2C	Medical Office Bldg/Outpatient Clinic	Excavation and Grading	20	Excavators Graders Rubber Tired Dozers Tractors/Loaders/Backhoes	1 1 1 3		
		Foundation	50	Cranes Forklifts Generator Sets Tractors/Loaders/Backhoes Welders	1 3 1 3 1		
		Structural Framing	30	Cranes Forklifts Generator Sets Tractors/Loaders/Backhoes Welders	1 3 1 3 1		
		Exterior Enclosure	30	Pavers Paving Equipment Rollers	2 2 2		
		Interior	80	Air Compressors	1		
		2D	Central Quad Landscape Area	Site Preparation	30	Rubber Tired Dozers Tractors/Loaders/Backhoes	3 4
		3A	Retail/Parking Garage 2	Demolition and Site Preparation	20	Concrete/Industrial Saws Excavators Rubber Tired Dozers	1 3 2
Excavation and Grading	20			Rubber Tired Dozers Tractors/Loaders/Backhoes	3 4		
Foundation	50			Excavators Graders Rubber Tired Dozers Tractors/Loaders/Backhoes	1 1 1 3		

Phase	Construction Feature	Construction Activity	Construction Workforce (Max Day)	Construction Equipment	Number of Pieces of Equipment
		Structural Framing	30	Cranes Forklifts Generator Sets Tractors/Loaders/Backhoes Welders	1 3 1 3 1
		Exterior Enclosure	20	Pavers Paving Equipment Rollers	2 2 2
		Interior	30	Air Compressors	1
3B	Dormitory/Admin Support Bldg	Site Preparation	20	Rubber Tired Dozers Tractors/Loaders/Backhoes	3 4
		Foundation	50	Excavators Graders Rubber Tired Dozers Tractors/Loaders/Backhoes	1 1 1 3
		Structural Framing	30	Cranes Forklifts Generator Sets Tractors/Loaders/Backhoes Welders	1 3 1 3 1
		Exterior Enclosure	20	Cement and Mortar Mixers Pavers Paving Equipment Rollers Tractors/Loaders/Backhoes	2 1 2 2 1
		Interior	60	Air Compressors	1
3C	Med School Parking Garage/Sport Courts	Site Preparation	20	Graders Rubber Tired Dozers Tractors/Loaders/Backhoes	1 1 1
		Excavation and Grading	20	Graders Rubber Tired Dozers Tractors/Loaders/Backhoes	1 1 1
		Foundation	30	Graders Rubber Tired Dozers Tractors/Loaders/Backhoes	1 1 1
		Structural Framing	20	Cranes Forklifts Generator Sets Tractors/Loaders/Backhoes Welders	1 1 1 1 3
		Exterior Enclosure	20	Cement and Mortar Mixers Pavers Paving Equipment Rollers Tractors/Loaders/Backhoes	1 1 1 1 1
		Interior	20	Air Compressors	1

Operations Medical Emergency Trip Assumptions

Phase	Ambulance Trips per year	Ambulance Trips per week	Helicopter Trips per year	Helicopter Trips per week
1	3600	69	52	1
2	4200	81	78	1.5
3	4200	81	78	1.5