

APPENDIX 4.5(b)

Construction Calculations

Demolition Calculations
City Center II Phase I Construction Demolition

Demolition Schedule

Months	<input type="text" value="0.25"/> months	entered
Days/Month	22 days/mo	URBEMIS default

Building Dimensions

Length	49.16 feet	calculated
Width	49.16 feet	calculated
Height	49.16 feet	calculated
Building Volume	118,800 cubic feet	calculated

Daily Demolition

Length	27.85 feet	calculated
Width	27.85 feet	calculated
Height	27.85 feet	calculated
Volume	21,600 cubic feet	calculated

Demolition Debris

% of Bldg. Volume	25%	URBEMIS default
Total Debris Volume	<input type="text" value="1,100"/> cubic yards	entered

Haul Trucks

Capacity	<input type="text" value="20"/> cubic yards	URBEMIS default
Number of Trips	10.0 trips/day	calculated
Round Trip Length	<input type="text" value="30"/> miles	URBEMIS default
VMT	300.00 miles/day	calculated

**City Center II Estimated Ton-Miles of Exported Soil
(Input for High-Level of Detail for Fugitive Dust from Off-Site Haulage in URBEMIS)**

Project Name: Input

Building ID: Input

Excavation

Total Underground Volume CY

Total Above Ground Volume Input CY

Total Export Volume CY

Number of Months for Excavation Input

Haul Truck Trips per Day

Ton-Mile per Day Calculation

Soil Type Input

Soil Density (g/m³) g/cm³

Soil Density (lbs/CY) lbs/CY

Soil Density (tons/CY) tons/CY

Haul Distance (On-Site) Input Miles

Ton-Miles per Day <----->

Soil Type	Dry Density (g/cm ³)
Sand	1.52
Sandy Loam	1.44
Loam	1.36
Silt Loam	1.28
Clay Loam	1.28
Clay	1.20

Note: Dry density in most soils varies within the range 1.1 to 1.6