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### Utilities Narrative

Proposed Project: MARCO LUXE MOTOR CONDOS  
Address: 138-168 S Barfield Dr., Marco Island, FL  
Building 1: 6,920 SF, 5 Units  
Building 2: 14,101 SF, 10 Units  
Building 3: 6,920 SF, 5 Units

#### **Sewer Demand:**

Sewer District-South Barfield

According to FAC 64E-6.008:

Warehouse, Self-storage ( $\leq 200$  units) rate: 1 GPD/ unit

Total Average Daily Flow = 1 GPD x 20 units = 20 GPD

*Assume max peaking factor of 4.5*

Total Peak Hour Flow = 20 GPD x 4.5 = 90 GPD = 0.1 GPM

#### **Water Demand:**

Proposed Connection to water main on S. Barfield Dr.

*Average Daily Flow (ADF) = 100 gal/day per person and 2.5 people per household = 250 GPD per residential unit (Collier County Design Criteria, Part 3)*

Equivalent Residential Connection (ERC) = Total Average Daily Flow (sewer)/250 GPD per residential unit = 20 GPD/250 GPD = 0.08 ERC

Average Daily Flow (ADF) = 20 GPD

Average Daily Demand (ADD) = ADF\*1.4 (Collier County Design Criteria 2.2.1) = 20 GPD\*1.4 = 28 GPD

Max Daily Demand (MDD) = ADD\*1.35 = 28 GPD \* 1.35 = 37.8 GPD (Maximum Day Peaking Factor is 1.35 per Collier County Water-Sewer District 2014 Master Plan/CIP Plan.)