

Potable Water and Sanitary Sewer Request for Confirmation of Available Capacity

| <u>To:</u> | Anjuli K. Panse, P.E. Utility Director Village of Wellington Utility Department 12300 Forest Hill Blvd. Wellington, FL 33414 | Signec | l and Sealed by | |
|------------|--|-----------|-----------------|-------|
| From: | Jason Gunther | | | |
| | Thomas Engeinnering Group, LLC | | | |
| | 840 SE Osceola Street | | | |
| | Stuart FL 34994 | | | |
| | | | | |
| | | | | |
| Project A | Address: | | | |
| | 2175 Wellington Green Drive | | | |
| | | PE Name | Jason Gu | nther |
| | | PE Number | 5862 | 29 |
| PCN: | 72-41-44-13-01-016-0000 | 1 | | |

Project Summary (Include all applicable land use, zoning, and density information)

220 Unit Multi-family residential with units ranging from 1 to 4 bedrooms. Also included is a 6,000+/- sf clubhouse which is accounted for by tabulating number of beds as patrons and 2 employess..

Demand Summary

Date:

(Submit Potable Water and Sanitary Sewer Average Day Projected Demand Table Worksheet as backup)

| Average Day Water Demands (MGD) = | 0.079 | MGD |
|--|-------|-----|
| Peak Day Water Demands (MGD) = | 0.110 | MGD |
| Average Day Wastewater Demands (MGD) = | 0.061 | MGD |
| Peak Day wastewater Demands (MGD) = | 0.085 | MGD |

By submittal of this document and backup information, the applicant requests that the Village of Wellington review the information provided in order to confirm that Wellington can meet the proposed demands for water and sewer service as noted above. The applicant is advised that no guarantee of available capacity is expressed or implied, until such a time that the Owner has reserved capacity through payment of all applicable fees and charges. **The capacity letter shall be considered expired 90 days from the date of issuance.**



Potable Water and Sanitary Sewer Average Day Projected Demand Table Worksheet- July 2022

| Totable Water and Sanitary Sewer Average Day 110jecte | | | | , | |
|---|-------------|------------|------------|-------------|------------|
| | | WW | Water | Avg WW | Avg |
| TYPE OF ESTABLISHMENT | Number | demand | demand | Demand | Water |
| THE OF ESTABLISHIVILINI | of Units | per unit | per unit | | Demand |
| | | (GPD) | (GPD) | (GPD) | (GPD) |
| Complete Green C | ells to Cal | culate Pro | jected Ave | rage and Pe | ak Demands |
| Water to Wastewater average day Demand Factor (12 month rolling average) | 1 20 | | | | |
| Updated October 1, 2018 | 1.30 | | | | |
| COMMERCIAL: | | | | | |
| Barber & beauty shops per service chair | | 75 | 98 | 0 | 0 |
| Bowling alley bathroom waste only per lane | | 50 | 65 | 0 | 0 |
| Country Club | | | | | |
| (a) Per resident | | 100 | 130 | 0 | 0 |
| (b) Add Per member or patron | 485 | 25 | 33 | 12125 | 15762.5 |
| (c) Add Per employee per 8 hour shift | 2 | 15 | 20 | 30 | 39 |
| Doctor and Dentist offices | | | | | |
| (a) Per practitioner | | 250 | 325 | 0 | 0 |
| (b) Add per employee per 8 hour shift | | 15 | 20 | 0 | 0 |
| Food operations | | | | | |
| (a) Restaurant operating 16 hours or less per day per seat | | 40 | 52 | 0 | 0 |
| (b) Restaurant operating more than 16 hours per day per seat | | 60 | 78 | 0 | 0 |
| (c) Restaurant using single service articles only and operating 16 hour or | | | | | |
| less per day per seat | | 20 | 26 | 0 | 0 |
| (d) Restaurant using single service articles only and operating more than | | | | | |
| 16 hours per day per seat | | 35 | 46 | 0 | 0 |
| (e) Bar and cocktail lounge per seat | | 20 | 26 | 0 | 0 |
| 1. add per pool table or video game | | 15 | 20 | 0 | 0 |
| (f) Drive - in restaurant per car space | | 50 | 65 | 0 | 0 |
| (g) Carry out only, including caterers | | | | | |
| 1. Per 100 square feet of floor space | | 50 | 65 | 0 | 0 |
| 2. Add per employee per 8 hour shift | | 15 | 20 | 0 | 0 |
| (h) Institutions per meal | | 5 | 7 | 0 | 0 |
| (i) Food Outlets excluding deli's, bakery, or meat department per 100 | | | , | | |
| square feet of floor space | | 10 | 13 | 0 | 0 |
| 1. Add for deli per 100 square feet of deli floor space | | 40 | 52 | 0 | 0 |
| Add for bakery per 100 square feet of bakery floor space | | 40 | 52 | 0 | 0 |
| Add for meat department per 100 square feet of meat department floor | | 70 | 32 | 0 | |
| space | | 75 | 98 | 0 | 0 |
| 4. Add per water closet | | 200 | 260 | 0 | 0 |
| Hotels | | 200 | 200 | 0 | |
| (a) Regular per room | | 100 | 130 | 0 | 0 |
| (b) Resort hotels, camps, cottages per room | | 200 | 260 | 0 | 0 |
| (b) Nesort Hotels, camps, cottages per 100m | | 200 | 200 | U | <u> </u> |
| (c) Add for establishments with self-service laundry facilities per machine | | 750 | 975 | 0 | 0 |
| Office building | | | | | |
| 1. per employee per 8 hour shift or | | 15 | 20 | 0 | 0 |
| 2. per 100 square feet of floor space, whichever is greater | | 15 | 20 | 0 | 0 |
| | | - | - | | |



| TYPE OF ESTABLISHMENT | Number of Units | WW demand per unit (GPD) | Water demand per unit (GPD) | Avg WW Demand (GPD) | Avg Water Demand (GPD) |
|---|--------------------|-----------------------------------|--------------------------------------|---------------------------|---------------------------------|
| Service stations per water closet | | , | , , | | |
| (a) Open 16 hours per day or less | | 250 | 325 | 0 | 0 |
| (b) Open more than 16 hours per day | | 325 | 423 | 0 | 0 |
| Shopping centers without food or laundry per square foot of floor space | | 0.1 | 0.13 | 0 | 0 |
| Stadiums, race tracks, ball park per seat | | 4 | 5 | 0 | 0 |
| Stores per bathroom | | 200 | 260 | 0 | 0 |
| Theatres and Auditoriums, per seat | | 4 | 5 | 0 | 0 |
| Veterinary Clinic | | | | | |
| (a) Per practitioner | | 250 | 325 | 0 | 0 |
| (b) Add per employee per 8 hour shift | | 15 | 20 | 0 | 0 |
| (c) Add per kennel, stall or cage | | 20 | 26 | 0 | 0 |
| Warehouse | | | | | |
| (a) Add per employee per 8 hour shift | | 15 | 20 | 0 | 0 |
| (b) Add per loading bay | | 100 | 130 | 0 | 0 |
| (c) self-storage, per unit(up to 200 units) | | 1 | 1 | 0 | 0 |
| 1. Add 1 gallon for each 2 units or fraction thereof, for over 200 units, and shall be in addition to employees, offices or living quarters flow rates. | | 1 | 1 | 0 | 0 |
| INSTITUTIONAL: | | | | | |
| Churches per seat which includes kitchen wastewater flows unless meals | | 3 | 4 | 0 | 0 |
| prepared on a routine basis | | | | | |
| 1. If meals served on a regular basis add per meal prepared | | 5 | 7 | 0 | 0 |
| Hospitals per bed which does not include kitchen wastewater flows | | 200 | 260 | 0 | 0 |
| 1. add per meal prepared | | 5 | 7 | 0 | 0 |
| Nursing, rest homes, adult congregate living facilities per bed which does not include kitchen wastewater flows | | 100 | 130 | 0 | 0 |
| 1. add per meal prepared | | 5 | 7 | 0 | 0 |
| Parks, public picnic | | | | | |
| (a) With toilets only per person | | 4 | 5 | 0 | 0 |
| (b) With bathhouse, shower & toilets per person | | 10 | 13 | 0 | 0 |
| Public Institutions other than schools and hospitals per person which does | | 100 | 130 | 0 | 0 |
| not include kitchen wastewater flows | | 100 | 130 | U | U |
| 1. add per meal prepared | | 5 | 7 | 0 | 0 |
| Schools per student | | | | | |
| (a) Day-type | | 10 | 13 | 0 | 0 |
| (b) Add for shower | | 4 | 5 | 0 | 0 |
| (c) Add for cafeteria | | 4 | 5 | 0 | 0 |
| (d) Add for day school workers | | 15 | 20 | 0 | 0 |
| (e) Boarding -type | | 75 | 98 | 0 | 0 |



| TYPE OF ESTABLISHMENT | Number of Units | WW demand per unit (GPD) | | Avg WW Demand (GPD) | Avg Water Demand (GPD) |
|---|--------------------|-----------------------------------|-------|---------------------------|---------------------------------|
| RESIDENTIAL | | | | | |
| (a) Single or multiple family per dwelling Unit | | | | | |
| 1 Bedroom with 750 sq. ft. or less of building area | 55 | 100 | 130 | 5500 | 7150 |
| 2 Bedroom with 751 - 1200 sq. ft. of building area | 95 | 200 | 260 | 19000 | 24700 |
| 3 Bedroom with 1201 - 2250 sq. ft. of building area | 40 | 300 | 390 | 12000 | 15600 |
| 4 Bedroom with 2251 - 3300 sq. ft. of building area | 30 | 400 | 520 | 12000 | 15600 |
| For each additional bedroom or each additional 750 square feet of building area or fraction thereof in a dwelling unit, system sizing shall be increase by 60 gallons per dwelling unit | | 60 | 78 | 0 | 0 |
| (b) Other per occupant | | 50 | 65 | 0 | 0 |
| OTHER CATEGORY NOT LISTED (ENGINEER TO PROVIDE BACKUP) | | | | 0 | 0 |
| OTHER CATEGORY NOT LISTED (ENGINEER TO PROVIDE BACKUP) | | | | 0 | 0 |
| OTHER CATEGORY NOT LISTED (ENGINEER TO PROVIDE BACKUP) | | | | 0 | 0 |
| Summary of Average Day Wastewater and Water Demands (GPD) = | | | 60655 | 78852 | |
| Summary of Average Day Wastewater and Water Demands (MGD) = | | | 0.061 | 0.079 | |

| Summary of Peak Day Wastewater and Water Demands (MGD) = Average Daily Demand x 1.4 = | 0.085 | 0.110 |
|---|-------|---------|
| | (WW) | (Water) |

^[1] Systems serving high volume establishments, such as restaurants, convenience stores and service stations located near interstate type highways and similar high-traffic areas, require special sizing consideration due to expected above average volumes. The minimum estimated flows for these facilities shall be 3 times the volumes determined from the Demand Table Figures.