

# Tohoqua Community Development District ENGINEER'S REPORT

**Prepared For**  
Tohoqua Community Development District

**Date**  
September 25, 2017

**POULOS & BENNETT**

2602 East Livingston Street | Orlando, Florida 32803 | Tel: 407.487.2594 | [www.poulosandbennett.com](http://www.poulosandbennett.com)  
FBPE Certificate of Authorization No. 2856

# Tohoqua

## Community Development District

### ENGINEER'S REPORT FOR CAPITAL IMPROVEMENTS

### Osceola County, Florida

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# Tohoqua Community Development District Engineer's Report for Capital Improvements

## *Section 1 Introduction*

### *1.1. Background*

The Engineer's Report for Capital Improvements (the "Report") for the Tohoqua Community Development District (the "District") has been prepared to assist with financing and construction of the capital improvements contemplated to be constructed, acquired and/or installed within the District or outside of the District (the "Capital Improvement Plan") pursuant to requirements of Osceola County and the City of St. Cloud, Florida.

Capital Improvements reflected in the Report represent the current Capital Improvement Plan for the District. Many of the necessary regulatory approvals have been obtained for the Development (hereinafter defined). The remaining permits necessary to complete the Development are expected to be obtained during the normal design and permitting processes. To the best of our knowledge and believe it is our opinion that the balance of the required permits are obtainable as needed. For reference, a permit matrix for the Development is included herein. The implementation of any improvements discussed in this plan requires the final approval by many regulatory and permitting agencies as outlined in Section 2 below. This report, therefore, may be amended from time to time.

Cost Estimates contained in this report have been prepared based on the best available information at this time. The actual costs of construction, final engineering design, planning, approvals and permitting may vary from the cost estimates presented.

### *1.2. Location and General Description*

The overall Tohoqua CDD is a 784 acre tract currently located in unincorporated Osceola County, Florida. More specifically, the parcel is located within a portion of Sections 5 and 6, Township 26 South, Range 30 East lying south of Neptune Road, west of the Florida Turnpike, and east of the permitted Toho Preserve development. Please refer to Vicinity Map Exhibit 1 and Location Map Exhibit 2. The proposed project is a multiphase development to include approximately 2,216 single family homes, 1,004 multi-family units, 480,100 square feet of commercial/office space, 200 hotel rooms, a K-8 school site and a high school site. Zoning for the Development was approved by Osceola County on February 3, 2016. A more detailed breakdown of the proposed development program as provided by the Developer is as follows:

Commercial/Office Space	480,100 square feet
Hotel	200 Rooms
Apartments	750 Units
Townhouses	512 Units
Duplex/Garden	439 Units
32' Single Family	185 Units
40' Single Family	314 Units
45' Single Family	306 Units
50' Single Family	384 Units
55' Single Family	128 Units
65' Single Family	85 Units
70' Single Family	84 Units

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It should be noted that the property is in the process of annexing into the City of St. Cloud, and once annexed, future revisions to the entitlements will be processed through the City of St. Cloud.

The District Boundary and Legal Description are included as Exhibit 3.

### ***1.3. District Purpose and Scope***

The District was established for the purpose of financing, acquiring or constructing, maintaining and operating a portion of the public infrastructure necessary for community development within the District. The purpose of this report is to provide a description of the public infrastructure improvements that may be financed by the District. The District may finance, acquire and/or, construct, operate, and maintain certain public infrastructure improvements that are needed to serve the Development. A portion of the infrastructure improvements will be financed with the proceeds of bonds issued by the District.

The proposed public infrastructure improvements, as outlined herein, are necessary for the development of the District as required by the applicable independent unit of local government.

### ***1.4. Description of Land Use***

The lands within the District encompass approximately 784 acres. Based on the current MXD Zoning for the property, the development program currently consists of 2,216 single family homes, 1,004 multi-family units, 480,100 square feet of commercial/office space, 200 hotel rooms, a K-8 school site and a high school site. The approved land uses within the District include the following areas. Exhibit 4 provides the location of the development uses below. Exhibit 5 shows the current land use.

Proposed Development	Approximate Acres
Private	322.6
Schools	66.0
Stormwater	132.4
Amenities, Parks and Open Space	36.8
Roads Alleys & Utility Tracts	183.3
Conservation	42.9
Total Acres	784.0

## ***Section 2 Government Actions***

The following are the permitting agencies that will have jurisdiction for approval of construction within the District. Depending on the location and scope of each phase of project design, the individual permits that need to be obtained will need to be evaluated and not all of the permits listed below will necessarily apply to every

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sub-phase within the District. The property is currently located in unincorporated Osceola County and within the City of St. Cloud utility service area. The property is currently in the process and annexing into the City of St. Cloud.

**Permitting Agencies & Permits Required**

1. Osceola County (while located in unincorporated Osceola County)
  - a. Preliminary Subdivision Plan
  - b. Mass Grading (optional)
  - c. Site Development Plan
  - d. Final Plat
2. South Florida Water Management District (SFWMD)
  - a. Environmental Resource Permit
    - i. Mass Grading/Master Stormwater Construction
    - ii. Final Engineering for Onsite and Offsite Improvements
  - b. Water Use Permit (Dewatering)
    - i. Mass Grading/Master Storm
    - ii. Final Engineering for Onsite and Offsite Improvements
    - iii.
3. City of St. Cloud
  - a. Final Engineering Construction Plans for Water, Sewer, and Reclaimed Water Systems
  - b. Concept Plan Revisions (upon annexation)
  - c. Preliminary Subdivision Plan (upon annexation)
  - d. Final Construction Plans for Streets and Drainage (upon annexation)
  - e. Final Plat (upon annexation)
4. Florida Department of Environmental Protection (FDEP)
  - a. Water Distribution System
  - b. Sanitary Sewer Collection and Transmission System
  - c. National Pollutant Discharge Elimination System (NPDES)
5. Federal Emergency Management Agency
  - a. Letter of Map Revision
6. Army Corp of Engineers
  - a. Dredge and Fill Permit
  - b. Canal Crossing Permit
7. Florida Fish and Wildlife Conservation Commission (FWC)
8. State of Florida Department of Transportation
  - a. Utility Permit
  - b. Drainage Connection Permit

**Section 3      *Infrastructure Benefit***

The District will fund, and in certain cases maintain and operate public infrastructure yielding two types of public benefits. These benefits include:

- Project wide public benefits
- Incidental public benefits

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The project wide public benefits are provided by infrastructure improvements that serve all lands in the District. These public infrastructure improvements include construction of the master stormwater management system, the sanitary sewer, potable water, and reclaimed water mains, roadway network, offsite roadway and utility improvements, perimeter landscape and irrigation improvements within the District boundary. However some incidental public benefits include those benefits received by the general public who do not necessarily reside on land owned or within the District.

The proposed capital improvements identified in this report are intended to provide specific benefit to the assessable real property within the boundaries of the District. As much of the property is currently undeveloped, the construction and maintenance of the proposed infrastructure improvements are necessary and will benefit the property for the intended use. The District can construct any portion or all of the proposed infrastructure. In addition, the District can acquire, own, operate and/or maintain infrastructure not dedicated to the County or City. The Developer or other party/parties will construct and fund the infrastructure outside of the District and/or not funded by the District.

***Section 4 Capital Improvement Plan***

The District capital improvements will connect and interact with the adjacent offsite roads, stormwater management systems, potable water, reclaimed water, and sewer systems. The proposed infrastructure improvements addressed by this Report include elements internal and external to the District. The elements include the master stormwater management and drainage systems, roadway improvements, landscaping, street lighting, pavement markings and signage, as well as potable water main, reclaimed water main and sewer extensions required to provide utility service to the District. Detailed descriptions of the proposed capital improvements are provided in the following sections and Exhibits 4, 6 and 9 through 12. Exhibit 13, details the Cost Opinion for the District's capital improvement plan.

The Improvement Plan will be constructed and financed in logical segments, as property within the District is developed by the Developer. The District anticipates issuing multiple series of bonds to fund all or a portion of the Capital Improvement Plan.

***Section 5 Description of Capital Improvement Plan***

***5.1 Roadway Improvements***

As indicated above, the District may fund roadway construction internal to the District consisting of local roadways and alleys. The funding of Cross Prairie Parkway will be by the Developer under a Separate Reimbursement Agreement with Osceola County. The Developer will pay all costs associated with road (and related stormwater improvements) for which impact fee credits are payable pursuant to transportation or other development agreements. The costs for such improvements are not included on Exhibit 13. Exhibit 4, Public and Private Improvements, provides a graphical representation of the proposed roadway improvements. All such local roadways will be open to the public.

***5.2 Stormwater Management***

As indicated above, the District may fund the construction of the master stormwater management system for the lands within the District. This system is made up of wet detention stormwater treatment ponds, control structures, spreader swales, inlets, manholes and storm pipes. The proposed ponds and outfall structures



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have been designed to provide water quality treatment and attenuation in accordance with Osceola County and the South Florida Water Management District regulations. The stormwater management system has been designed to accommodate on-site runoff in addition to offsite flows which have historically entered the project site. Exhibit 6, Post-Development Basin Map provides a graphical representation of the currently proposed stormwater management system.

### ***5.3 100-Year Floodplain***

Pursuant to the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map (FIRM) panels 12097C 0090G 12097G and 12097C 0255G both dated June 18, 2013, portions of the project site is located within the 100-year Flood Hazard Area (FHA), Zone AE or Zone A. Exhibit 7, FEMA 100-Year Floodplain details the floodplain limits relative to the District boundaries.

Any development within the mapped floodplain will require a Letter of Map Revision to be issued by FEMA to remove the development from the floodplain. In addition, the placement of fill within the floodplain is regulated by the SFWMD and Osceola County any filled areas below the floodplain may require mitigation in the form of compensating storage.

### ***5.4 Master Infrastructure***

#### ***5.4.1 Roadways***

Based on the current Concept Plan, the roadway improvements include approximately 96,000 linear feet of road and will define the major ingress and egress points throughout the Development. In addition to the roadways, the Concept Plan includes approximately 43,000 linear feet of public alleys. The roadways and alleys will also serve as locations for the placement of utility infrastructure needed to serve the development of the project, see Exhibit 4. In addition to the onsite roadways, offsite roadway intersection improvements to Neptune road, as required by the County to serve the project are included in the Master Infrastructure serving the District.

#### ***5.4.2 Potable Water Distribution System***

The District may fund the construction of the water distribution system within the District and those portions required to connect to existing or proposed offsite facilities. The potable water system will be conveyed to, and owned and maintained by the City of St. Cloud once it has been certified complete. The water mains within the District will be sized to provide water to residents of the District and will be required to be designed and constructed based on an approved Master Utility Plan (MUP). Exhibit 8 and 10, Potable Water Distribution System Map, provides a graphical representation of the contemplated water mains to be constructed within the District.

#### ***5.4.3 Reclaimed Water Distribution System***

The District may fund the construction of the reclaimed water distribution system within the District and those portions required to connect to existing or proposed offsite facilities. The reclaimed water system will be conveyed to, and owned and maintained by the City of St. Cloud once it has been certified complete by the District. The reclaimed water mains serving the District will be sized to provide reclaimed water to the lot boundaries and common areas within the District and will be required to be designed and constructed based on an approved MUP. Exhibits 8, 9 and 11, Reclaimed Water Distribution System Map, provide a

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graphical representation of the existing and proposed offsite reclaimed water system and onsite system contemplated within the District.

### ***5.4.4 Wastewater System***

The District may fund the construction of the gravity sewer, force main, and lift station infrastructure within the District and those portions required to connect to existing or proposed offsite facilities. The wastewater system will be conveyed to, and owned and maintained by the City of St. Cloud once it has been certified complete by the District. The sewer collection mains, lift stations and force mains serving the District will be sized to provide wastewater service to the residents of the District, and will be required to be designed and constructed based on an approved MUP. Exhibits 8, 9 and 12, Wastewater System Map, provide a graphical representation of the proposed offsite wastewater system and onsite system contemplated within the District.

### ***5.4.5 Parks, Landscape & Hardscape***

The landscaping and irrigation of the primary roadways will provide the "first impression" of the Development. The District may fund Parks, landscape and hardscape construction and maintenance within roadways and common areas which may include perimeter landscape buffers, master signage, way finding signage, entry hardscape features, entry landscape, amenity area and park area features, landscape and hardscape, pedestrian/multi-purpose trails, and street trees. The District will own and maintain foregoing improvements.

### ***5.4.6 Amenity***

The Amenity site will provide the Tohoqua community park and recreation uses. The District may fund construction of the amenity area to include things such as, but not limited to: pool, restrooms, community building, tot lot, sports courts, picnic areas, landscape and hardscape features, pedestrian/multi-purpose trails, etc. The District will own and maintain foregoing improvements that are public use.

## ***5.5 Professional and Inspection Fees***

For the design, permitting and construction of the proposed District Capital Improvement Plan, professional services are required by various consultants. The consultants required are: civil engineer, geotechnical, planner, environmental, surveying, and landscape architect. During construction, the various permitting agencies will observe and inspect the project. Each of the agencies will charge an inspection fee to cover the costs associated with an inspector visiting the site to observe construction progress and confirm that the project is constructed in accordance with their respective approved plans, permits, rules, and regulations. The Professional Services and Inspections Fees are included as Soft Costs for the District Capital Improvement Plan.

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***Section 6 Ownership and Maintenance***

Proposed District Capital Improvements Plan	Ownership	Maintenance
Onsite Roadway & Alley Improvements	County/CDD	County/CDD
Offsite Roadway Improvements	County	County
Master Stormwater Management System	District	District
Potable Water Distribution System	City of St. Cloud	City of St. Cloud
Sanitary Sewer System	City of St. Cloud	City of St. Cloud
Reclaimed Water Distribution System	City of St. Cloud	City of St. Cloud
Parks, Landscaping, Irrigation and Signage	HOA/District	HOA/District
Amenity Site	HOA/District	HOA/District

***Section 7 Roadway Rights-of-Way, Stormwater Management Ponds and Other Open Spaces***

Real property interests for lands within the District needed for construction, operation, and maintenance of District facilities will be conveyed and/or dedicated by the owner thereof to the District or other Public entity at no cost.

***Section 8 Estimate of Probable Capital Improvement Costs***

The Estimate of Probable Capital Improvement Plan Costs is provided in Exhibit 13. Costs associated with construction of the improvements described in this report have been estimated based on the best available information. Other soft costs include portions of the surveying, design and engineering for the described work, regulatory permitting inspection fees and materials testing. In addition, a reasonable project contingency estimate has been included. Please note that the costs are preliminary in nature and subject to change based on final engineering, permitting, and changes in the Concept Plan and construction cost due to market fluctuation.

***Section 9 Conclusions and Summary Opinion***

The Capital Improvement Plan as described is necessary for the functional development of the property within the District as required by the applicable local governmental agencies. The planning and design of the infrastructure will be in accordance with current governmental regulatory requirements. The public infrastructure as described in this Report will serve its intended function provided the construction is in substantial compliance with the future design and permits which will be required by for the District by the various jurisdictional entities outlined earlier in this report. In addition to the annual non-ad valorem assessments to be levied and collected to pay debt service on the proposed bonds, the District will levy and collect an annual "Operating and Maintenance" assessment to be determined, assessed and levied by the District's Board of Supervisors upon the assessable real property within the District, for the purpose of defraying the cost and expenses of maintaining District-owned improvements.

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The construction costs for the District's Capital Improvement Plan in this report are based on the concept plans for the District as currently proposed. In our professional opinion, and to the best of our knowledge and belief, the costs provided herein for the District are reasonable to complete the construction of the infrastructure improvements described herein. All of the proposed infrastructure Capital Improvement Plan costs are public improvements or community facilities as set forth in sections 190.012(1) and (2) of the Florida Statutes.

The summary of probable infrastructure construction costs is only an opinion and not a guaranteed maximum price. Historical costs, actual bids and information from other professionals or contractors have been used in the preparation of this report. Contractors who have contributed in providing the cost data included in this report are reputable entities with experience in Central Florida.

The labor market, future costs of equipment and materials, increased regulatory actions and requirements, and the actual construction process are all beyond our control. Due to this inherent opportunity for fluctuation in cost, the total final cost may be more or less than this opinion.

**As District Engineer:  
Poulos & Bennett, LLC**



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Eric E. Warren, PE  
State of Florida Professional Engineer No. 45423