CITY COUNCIL
Special Called Meeting Agenda

December 19, 2024
5:30 PM
6738 Dixon Street
Milton, FL 32570

1. **Open Meeting**
2. **Persons to Appear**
3. **Wastewater Treatment Plant Redesign**

   Item # 2024-2971
   Baskerville-Donovan, Inc. Task Order - New Wastewater Treatment Facility
4. **Public Input**
5. **Adjournment**

Pursuant to the provisions of the Americans with Disabilities Act, any person requiring special accommodations to participate in this meeting is asked to advise the City at least 48 hours before the meeting by contacting City Hall, 6738 Dixon Street, Milton, or by calling 983-5410.

"If any person decides to appeal any decision made by the board, agency, or commission, with respect to any matter considered at such meeting or hearing, he or she will need a record of the proceedings, and that for such purpose, he or she may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based." FS 286.0105

Agenda Item # 2024-2971

Baskerville-Donovan, Inc. Task Order - New Wastewater Treatment Facility

MEETING DATE	PREPARED BY
December 19, 2024	Ed Spears, City Manager

BACKGROUND

At the City Council meeting on December 10, 2024, Council voted to relocate the new wastewater treatment plant from the 24-acre City-owned property and the Intermediate Storage Facility, part of the effluent disposal system, off of the 100-acre City-owned parcel. Both are to be re-sited on an 80-acre City-owned parcel. Council instructed staff to work with the City's engineer, Baskerville-Donovan, Inc. (BDI) to develop a task order to conduct the redesign and call a special meeting for City Council to approve the task order prior to the end of the calendar year. A review by City Staff and the City Attorney has determined that the City may, through approval and execution of a task order, utilize the existing contract for design services with BDI.

At the request of the City Manager, BDI developed two task orders. The first is for a "Fast Track" process that will take the existing design and treatment methodology and sprayfield disposal method and re-site the plant on the new location. The Fast Track option will see the new design completed, permitted and ready to bid in 465 calendar days, provided there are no issues identified with the site from a geo-technical perspective and there are no challenges to the permit from the public. This option will be delivered for a fee of $2,531,825.

The second task order is for a "Blank Page" process completely starting over. This will allow the City to consider new treatment and disposal options to meet current or anticipated regulatory treatment levels. The Blank Page option will see the project ready to bid in 675 calendar days. This option will be delivered for a fee of $5,886,970.

At the instruction of the City Manager, either option calls for BDI to design a 4 Million Gallon/ Day (MGD) plant capacity expandable to 8 MGD. The current downtown plant has a permitted capacity of 2.5 MGD. The previous design called for a new plant with initial capacity of 2 MGD expandable to 8 MGD. Building a 2 MGD plant would be a step back and provide less capacity that currently permitted. By starting at 4 MGD, the new plant, when placed into service will have immediate capacity to serve new areas outside the City Limits. Building to this size in the first phase will create additional customers and revenue from start-up. City Utilities Director Joe Cook has estimated that the City has foregone over $5,000,000 in impact fees alone by denying requests for sewer service outside of the City Limits.

Council should note that there is a risk associated with either option. This risk is the requirement of a Conditional Use Permit (CUP) from Santa Rosa County to site the plant and Intermediate Storage System on the 80-acre parcel. That parcel is zoned AG-RR (agricultural-residential) and the Future Land Use (FLU) designation is also AG-RR (see attached maps). The FLU designation details the desired and expected development of a

particular parcel in the future. There are parcels a quarter of a mile south of the 80-acre parcel with an Industrial FLU Designation, but none are contiguous to the 80-acre parcel. Public Utilities, such as a wastewater treatment plant, are allowed in the AG-RR FLU, but only with approval of a Conditional Use Permit (CUP). A CUP is a public process through Santa Rosa County that will ultimately be up to a vote of the Board of County Commissioners. Notification of adjacent property owners and public hearings would be held. The criteria for a conditional use permit can be found in section 5.07 of the Santa Rosa County Land Development Code. A requirement to apply for a CUP is submission of a preliminary site plan showing where improvements will be located on the parcel. Through either design option, whether Fast Track or Blank Page, the design and engineering will have to progress to the point of BDI providing a site plan for submission to the County. It is estimated that a preliminary site plan can be delivered in 150 days under the Fast Track Option and 255 days under the Blank Page option. Obtaining a Conditional Use Permit is a 3-4 month process after submission. That will put this project approximately one year from the approval of the task order before we know officially if we can site the project on the 80-acre parcel. The City would have to identify and acquire a new site should the CUP be denied and begin a new design, engineering and permitting process.

It should also be noted that staff cannot submit new grants to pay for the construction of the new facility until we receive the Conditional Use Permit, FDEP Permits and plans ready to bid at the end of either process. As construction grants require "shovel-ready" projects, we will not be to that point until we secure all approvals. This will be 1-2 years from the approval of the task order depending on which option is chosen. Each grant will have its own timeline for submission, review and approval. Various grants may have environmental reviews that will be required prior to authorizing the release of funds. These environmental reviews vary in length and could take 6 months to a year to complete. All previous environmental reviews and project approvals from the various alphabet agencies at the state and federal level are no longer valid, as they were based on the previous project sites. Staff estimates a 12- 24 month grant/environmental review process. If Council chooses to finance the construction, a bond issuance could be completed in 3-4 months.

Additional land will have to be acquired, designed, engineered and permitted for additional disposal capacity, regardless of methodology. These costs are not included in either option. Staff continues to pursue additional land.

Council has the following options:

1. Approve the "Fast Track" Task Order in the amount of $2,531,825.
2. Approve the "Blank Page" Task Order in the amount of $5,886,970.
3. Provide direction to staff.

SUMMARY

RECOMMENDATION

Provide direction to staff.

ATTACHMENTS

1. NSRR Water Reclamation Facility Fast Track Redesign
2. NSRR Water Reclamation Facility New Technology
3. 80-Acre Zoning & FLU Map

449 West Main Street
Pensacola, Florida 32502
Phone: 850.438.9661

CITY OF MILTON
NORTH SANTA ROSA REGIONAL WATER RECLAMATION FACILITY REDESIGN
SCOPE OF SERVICES

12/18/24

Section I. BACKGROUND

At the December 10, 2024, meeting of the Milton City Council, the Council voted to redesign the North Santa Rosa Regional Water Reclamation Facility (WRF) to a location different than the site of the current design. This approach would be to incorporate the previously selected equipment and reconfigure it onto a new site based upon existing site conditions. As a result, the Mayor directed staff to negotiate with Baskerville-Donovan, Inc. for these services. This task does not address redesign of Sprayfield 3 nor any other off-site improvements needed to accomplish effluent disposal.

The City has requested that BDI develop a task order to provide a basis of design utilizing the current selected equipment. However, the capacity needs to increase to 4.0 MGD. The site must be arranged to accomplish future capacity expansion to 8.0 MGD. The scope of work is to provide professional engineering services for the re-design, surveying, permitting and bidding of a complete 4.0 MGD WRF.

Section II. SCOPE OF SERVICES

BDI will prepare plans, specifications and contract documents for bidding and construction of the complete WRF inclusive of all ancillary buildings. The scope of services includes preparation of project documents at 30, 60, and 90% and ready-to-bid plans and specifications that generally include all large mechanical components, structures, buildings, piping, site paving and grading, and electrical and instrumentation & controls. The biological nutrient removal process will be based on the previously selected AERO-MOD system. The facility will be designed to meet the Class 1 Reliability in accordance with FDEP regulations, Chapters 62-600 and 62-610, F.A.C. for the treatment of domestic wastewater and reclaimed water.

TASK 1 – PRELIMINARY ENGINEERING REPORTAND DESIGN

The basis of design shall be based on previously evaluated and selected treatment processes as identified below. Changes in process or equipment directed by the City will require an amendment to this task order to incorporate the desired equipment into the design. Due to the complexity of constructing additional phases, some of the process units are sized to meet the full capacity of 8.0 MGD.

1.0 FLOW METERING

A flow meter will be located on the influent force main prior to the in-plant return connection. The influent flow meter will be a magnetic flow meter with a range in capacity to accurately measure the full range of flow into the WRF.

2.0 PRETREATMENT FACILITY

The pretreatment facility will include two Kusters 3mm rotating drum fine screens, each capable of treating a peak flow of 8.33 MGD. Additional space will be allocated for a third screen to be installed as flows to the WRF increase. The installation of two screens will meet redundancy requirements in the event one of the rotating drum screens is out of service. Each screen shall be equipped with a Kusters washer/compactor to remove organics and provide compaction to

collected organics prior to conveying to a dumpster for landfill disposal. Following the screen is one Hydro International Grit King vortex grit separator with room for a second separator when flows to the WRF increase. Recessed impeller pumps will be used to pump underflow from the vortex type grit separator to a Hydro International concentrator that will further remove organic particles from the grit. The concentrator will discharge into a Hydro International classifier that will allow the grit to settle and be conveyed by a classifier into a dumpster for landfill disposal.

3.0 SPLITTER BOX

A splitter box will be designed to shave peak flows to influent equalization and evenly distribute flows to downstream process trains.

4.0 FLOW EQUALIZATION BASIN

One 280,000-gallon flow equalization (EQ) basin will be constructed to receive surplus shaved peak flows entering the WRF. The basin will be sized such that, at build out with two basins in service, 25% of the projected 8.0 MGD build out flow can be attenuated. The EQ volume will be returned via pumping during low flow periods to the flow splitter box upstream of the Aero-Mod process.

5.0 BIOLOGICAL TREATMENT

The WRF will include the addition of four (4) Aero-Mod SEQUOX Nutrient Removal basins that will provide for removal of BOD, TSS, phosphorous and nitrogen. The Aero-Mod process utilizes a single concrete basin with common wall construction to house two pairs of aeration basins, clarifiers, and aerobic digestion basins. The process is divided into four processes so that a single basin can be taken out of service for maintenance or repairs while flow continues to be treated. The process uses a timed aeration sequence to alternate aeration basins between aerobic and anoxic conditions to achieve nitrogen removal. The clarifiers are used to settle sludge and draw treated water out of the basin to flow to the filtration system. Return activated sludge (RAS) flow and waste activated sludge (WAS) are internal to the process. The system uses air lift pumps, powered by the same compressors that supply air to the aeration basins, to transfer these flows to their respective locations. Aerobic digestion is also a component of the Aero-Mod basin. Diffused air is alternately supplied to the digesters so that as one basin is settling to thicken waste sludge and send it to the dewatering process, the other basin is being aerated. Each digester has a baffle wall to prevent short circuiting of the sludge back to the aeration basin.

6.0 TERTIARY FILTERS

Two Aqua Aerobics AquaDisk 12-disc filter units will be provided for the first modules of the WRF. The filters will provide tertiary treatment and removal of total suspended solids to less than 5 mg/l. The filters will be sized to provide for Class I Reliability. Following tertiary treatment, infrastructure will be in place for the addition of a treatment process for “forever” chemicals. Given the unknown of the type of treatment unit that could be incorporated into the design, the design fee does not include the effort to include this type of process.

7.0 DISINFECTION

Two (2) storage tanks for receiving bulk hypochlorite delivery and chemical injection equipment for disinfection will be provided. A flow splitter channel will be utilized to direct flow to multiple, properly sized chlorine contact channels to achieve the necessary contact time for disinfection.

8.0 EFFLUENT PUMP STATION

The effluent pump station will deliver treated effluent to the effluent disposal sites. Effluent not meeting permit limits will be diverted to the reject storage tanks.

9.0 REJECT STORAGE TANKS

Two 2.0 MG prestressed concrete reject storage tanks will be designed to provide the storage necessary for substandard effluent storage as required by FDEP. As flow increases at the WRF additional tanks will be added, to meet build-out flows.

10.0 ON-SITE RETURN AND REJECT PUMP STATION

The on-site pump station will be used to send process water collected in the in-plant sewer and reject water from the reject tanks to the pretreatment facility. The pumps will be sized to return reject water to the head of the plant and allow for processes to be drained without overflowing the pump station.

11.0 WASTE ACTIVATED SLUDGE (WAS)/DEWATERING FEED PUMPS

Progressive cavity pumps will be used to convey digested sludge, or residuals, from the digesters to the dewatering facility.

12.0 DEWATERING SYSTEM

Biosolid residuals will be dewatered with a pair of BDP Industries Dewatering System screw presses. A polymer feed system will assist with dewatering. A screw conveyor will be used to move the dewatered cake to a container and then transported offsite for disposal.

13.0 OPERATIONS AND CONTROL BUILDING

A 12,500 square foot administration, laboratory and operation control building will be provided for personnel to perform daily activities. The building will house the WRF controls for the operators to control and monitor the plant. The solids dewatering system will be integral to this facility.

14.0 ELECTRICAL

The proposed site is between several transmission lines and near a large substation. The WRF will be fed with 277/480-volt power. Controls will be provided for processes throughout the WRF. A supervisory control and data acquisition (SCADA) system will be designed to provide monitoring and control for plant operations. The facility will include a natural gas fueled Emergency Generator to provide backup power.

15.0 INSTRUMENTATION AND CONTROLS

Influent and effluent flow meters, dissolved oxygen meters, chlorine residual analyzers, turbidity analyzer, dissolved oxygen and oxidation-reduction potential (ORP) probes, and actuated control valves will be designed as necessary for operational system controls.

16.0 SITE LIGHTING

The lighting will be non-invasive to neighbors and will also provide total site lighting to ensure operational safety. The WRF is designed for 24-hour staffing.

17.0 WET WEATHER STORAGE

Wet weather storage will be designed in accordance with FDEP requirements to provide the required storage.

18.0 EFFLUENT HOLDING/STORAGE

Effluent storage will be a prestressed concrete tank or lined pond, depending upon site geometry and conditions, designed in accordance with FDEP requirements.

TASK 2 – <u>WRF DESIGN TO COMPLETION</u>

BDI will develop and submit design drawings plus updated specifications using MASTERSPEC format, City standard specifications and manufacturer's recommended specifications. This phase will incorporate City review comments from the preliminary design. Submittal materials for the 60 percent completion level shall include large mechanical components, overall structural dimensions, site grading and piping plan, electrical single line drawings and an updated opinion of probable construction cost. Submittal for 90 percent completion level shall include all drawings advanced to this completion level, an updated opinion of probable construction cost, and specifications. The final (100%) plans and specifications shall include City comments received on the 90% plans and specs plus all permits and geotechnical fieldwork to result in a ready-to-bid set of contract documents.

BDI shall provide estimates of Engineers Opinion of Probable Construction Cost at the 30, 60, 90 percent and final completion submittals. BDI's opinions of probable Construction Cost are to be made on the basis of Engineer's experience and qualifications and represent BDI's best judgment as an experienced and qualified professional generally familiar with the construction industry. However, since BDI has no control over the cost of labor, materials, equipment, or services furnished by others, or over contractors' methods of determining prices, or over competitive bidding or market conditions, BDI cannot and does not guarantee that proposals, bids, or actual Construction Cost will not vary from opinions of probable Construction Cost prepared by BDI.

<u>If Owner wishes greater assurance as to probable Construction Cost, Owner shall employ an independent cost estimator.</u>

TASK 3 – <u>PERMITTING/CONDITIONAL USE SERVICES</u>

An FDEP Domestic Wastewater substantial permit modification/renewal is required to construct the wastewater treatment plant. This modification/renewal application will be submitted upon completion of the preliminary engineering phase. Stormwater permitting will be submitted at 90 percent completion. BDI will prepare, submit and coordinate two (2) copies each of the following permits:

1) *Wastewater Facility or Permit Activity Form 1 General Information* (Form 62-620.910(1)).

2) *Wastewater Permit Application Form 2A for Domestic Wastewater Facilities* (Form 62-620.910(2)).
3) *FDEP and/or NWFWMD Stormwater Discharge Permit for Construction Activities.*

BDI shall prepare the necessary permit application forms and specifically the FDEP Domestic Wastewater Treatment Facilities Permit Application (1 and 2A), appropriately certified, with supporting documents for approval of the project and submit application to local, state, and federal regulators for the permits noted. Permit fees associated with permit applications and approvals shall be paid by the City. BDI will submit responses to FDEP Requests for Additional Information (RAIs) as part of this scope of services.

BDI shall prepare conditional use documentation and site plan approval documentation and be responsible for securing site plan approval or other local government land development orders required for this WRF project.

TASK 4 – BIDDING SERVICES

BDI will perform traditional bidding services including:

1) Complete and compile for distribution plans and specifications, permits, and geotechnical field work from final design and permitting efforts in Tasks 1 and 2.
2) Conduct and attend one (1) pre-bid conference for this project.
3) Review questions and comments posed by bidders and develop appropriate responses.
4) Attend the bid opening meeting for the WRF project.
5) Review all bids and make a recommendation of award to the City for the lowest responsible bidder.

Section V. DELIVERABLES

BDI will provide the following deliverables:

1. Three (3) copies of draft Preliminary Engineering Report
2. Three (3) copies of final Preliminary Engineering Report
3. Three (3) copies each of the FDEP Domestic Wastewater Permit documentation
4. Three (3) sets of preliminary (60%) design construction plans
5. Three (3) sets of draft final (90%) design construction plans and specifications
6. Three (3) sets of final ready-to-advertise construction plans and specifications
7. One (1) set of electronic final ready-to-bid construction plans and specifications
8. Three (3) sets of Released for Construction plans and specifications

Section VI. SCHEDULE

The following is a project schedule by milestone task from the "Notice to Proceed" through the final, ready to advertise, contract documents. The total project schedule is based on the City review periods of 15 calendar days at each submittal. It is anticipated that the project schedule will be 465 days to ready-to-bid and an additional 60 days after sufficient funding has been arranged. The overall project schedule is dependent on a timely response review from all regulatory agencies in review and approval of the completed permit application documentation.

Milestone Task	Calendar Days (each Task)	Calendar Days (from NTP)
Notice to Proceed	0	0
Preliminary Engineering Report, 30% Design	45	45
Client Review Duration	15	60
Conditional Use Process/FDEP Permitting	90	150
60% Plans and Specifications	120	270
Client Review Duration	15	285
90% Plans and Specifications	45	330
ERP Permit	90	420
Client Review Duration	15	435
Final ready to Advertise Contract Documents	30	465
Total Project Duration until Bidding Phase	-	465 days
Bidding Phase	60	510

Upon completion of the ready-to-bid documents, the City will begin aligning new financing through loans, grants, and reserve funds. Once sufficient funding has been arranged, the City may advertise the project for bids. After the bidding phase, construction phases are anticipated to be approximately 835 days. Construction Administration and Construction Engineering and Inspection (CEI)_are not included in the scope of work.

Section VII. METHOD OF COMPENSATION

The different engineering disciplines necessary for the project have reviewed the current construction documents. The effort for a redesign of the WRF located on a new site is $2,353,000. Permitting and bidding services are considered additional services and are presented as separate fees.

For any additional services, including Value Engineering, required of the Engineer by the City on a project due to changes other than written construction change orders ordered by the City after approval of preliminary plans and cost estimates, or causes beyond the control of the Engineer, the City shall pay the Engineer the expense of such additional services based upon time chargeable to the project at the current hourly rates with such payment being in addition to the fee for basic design service. In no event will the City pay the Engineer for redesign or additional design or construction phase services necessitated by errors or omissions on the part of the Engineer.

Partial payment shall be made upon the mutually agreed percentage of completion of each task. Both partial payment and final payment shall be made within thirty (30) days after receipt of certified invoices

from the Engineer. Invoices shall be submitted by the 7th of each month for all work completed within the previous month.

Summary of Services

Task 1 - Preliminary Engineering Report And Design	$705,900
Task 2 – WRF Design to Completion	$1,647,100
Task 3 – Permitting/Conditional Use	$120,000
Task 4 - Bidding Services	$58,825
Total	$2,531,825

BDI shall invoice the City monthly based on percent of the project completed or in accordance with an agreed upon payment schedule.

Section VIII. ACCEPTANCE

If the above scope and fees meet your approval, please indicate by your signature in the space provided below and return one (1) signed copy which will constitute an agreement and a "Notice to Proceed" for the above referenced tasks to accomplish this work:

BASKERVILLE-DONOVAN, INC.

T. Keith Hill, P.E.
President/CEO

Date

CITY OF MILTON

Ed Spears
City Manager

Date

449 West Main Street
Pensacola, Florida 32502
Phone: 850.438.9661

CITY OF MILTON
NORTH SANTA ROSA REGIONAL WATER RECLAMATION FACILITY
SCOPE OF SERVICES

12/18/24

Section I. BACKGROUND

At the December 10, 2024, meeting of the Milton City Council, the Council voted to redesign the North Santa Rosa Regional Water Reclamation Facility to a location different than the site of the current design. This approach would allow the City to consider new treatment options and levels of treatment to meet current or anticipated regulatory treatment levels. As a result, the Mayor directed staff to negotiate with Baskerville-Donovan, Inc. for these services.

The City has requested that BDI develop a task order to provide a basis of design and an Engineering Report including treatment levels and treatment processes, professional design engineering, geotechnical investigations, land surveying, permitting, and bidding services through a multi-phase process for the design and construction of a complete 4.0 MGD WRF. This task does not address redesign of Sprayfield 3 nor any other off-site improvements needed to accomplish effluent disposal.

Section II. SCOPE OF SERVICES

TASK 1 – BASIS OF DESIGN

This task includes the identification and evaluation of unit processes including primary, secondary, tertiary, and advanced wastewater treatment (AWT) for effluent discharge. The solids waste stream will be evaluated for residuals treatment and dewatering, and support systems (electrical, instrumentation and control, and sitework) for improvements needed to design and construct a 4.0 MGD wastewater treatment facility. Consideration will be given in this evaluation for anticipated needs to accommodate the projected build-out capacity of 8.0 MGD. The evaluation will consider factors such as process reliability and operational flexibility, safety, power requirements, utilities required, instrumentation and controls, and proven operation history.

A preliminary site layout will be prepared to maximize the treatment capacity of the proposed plant site. The design and layout should build-out the proposed plant site with a minimum 8.0 MGD treatment capacity. The basis of design will determine the design influent and effluent parameters for the treatment plant and level of treatment requirements for selected effluent disposal options. BDI will perform unit process calculation modeling for the entire WRF and biological process modeling of biological nutrient removal (BNR) processes. The results of these evaluations and calculations will be documented in an Engineering Report of the findings including associated opinions of cost for these improvements. This report will be tailored to match the documentation requirements of the Florida Department of Environmental Protection for the Domestic Wastewater Facilities Permit Application.

TASK 2 – PUBLIC MEETING CHARRETTES

The community has demonstrated a great deal of interest in this project. Effective communication with key stakeholders is critical to a successful project. The City Council intends to be fully transparent with the stakeholders in the selection of treatment unit processes, levels of treatment, and site layout. To accommodate this goal, the project will include two (2) public meeting charrettes. The first charrette will present the basis of design including levels of treatment, and the second workshop will present the

proposed site layout based on the selected treatment unit processes. BDI will coordinate with the City to facilitate these workshops. BDI will work with the City to set up and maintain a project web site during the design phase of the project and establish a project social media page that can be accessed by the public, providing progress updates during the design phase and a means to submit questions and comments. City and BDI will vet public input suggestions to design aspects for exclusion or inclusion into the project.

TASK 3 – WRF DESIGN AND CONTRACT DOCUMENTS

BDI will prepare plans, specifications and contract documents for bidding and construction of the complete WRF inclusive of all ancillary buildings necessary for a fully operational water reclamation facility. The scope of services includes preparation of project documents at 30, 60, and 90% and ready to advertise plans and specifications that include all large mechanical components, structures, buildings, piping, site paving and grading, and electrical and instrumentation & controls components. The design will be based on the equipment selected through the basis of design task. The design will meet the Class 1 Reliability requirements as defined in the FAC and shall meet the requirements and be in accordance with FDEP regulations, Chapters 62-600 and 62-610, F.A.C. for the treatment of domestic wastewater and reclaimed water.

The design phase of the treatment facility shall be for a 4.0 MGD unit processes capable of future expansion for at least 8.0 MGD based on the following components and tasks:

3.1 Preliminary Design Phase

Preliminary design phase documents consisting of final design criteria, preliminary drawings, outline specifications and written descriptions of the project shall be prepared. A revised opinion of probable construction cost, based upon the information in the preliminary engineering report shall also be provided. Submittal for 30 percent completion level shall include the preliminary engineering evaluation and report, updated opinion of probable cost, general construction drawings and site plans. This phase of the project will identify which facilities including Operations and Maintenance, Lab Building, Electrical, Chemical Feed and Solids Handling Buildings to be incorporated into the project. This phase of the project will include Owner's review and Quality Assurance reviews.

3.2 Final Design

BDI will develop and submit design drawings plus specifications using MASTERSPEC format, City standard specifications and manufacturer's recommended specifications. This phase will incorporate Owner review and value engineering comments from the preliminary design. BDI will be responsible for the oversight of the production and certification of construction documents including plans, specifications, and miscellaneous contract documents. Submittal materials for the 60 percent completion level shall include large mechanical components, overall structural dimensions, site grading and piping plan, electrical single line drawings and updated opinion of probable cost. Submittal for 90 percent completion level shall include all drawings advanced to this completion level, opinion of probable cost, and project specifications. The final (100%) plans and specifications shall include City comments received on the 90% plans and specs plus all permits and geotechnical fieldwork to result in a ready-to-bid set of contract documents.

3.3 Preparation of Final Opinion of Probable Cost and Construction Schedule

Estimate the construction cost for the improvements using the prepared contract documents. Opinions of cost will be prepared from equipment manufacturer's quotations, detailed material take-offs and past projects like the proposed WRF project described herein. Opinions of probable construction cost will be provided with 30, 60, 90 and final completion submittals.

3.4 Design Reviews and Final Contract Documents

1) Schedule and meet with City representatives to review comments on deliverables from 60 and 90 percent completion level submittals.
2) Manage various design and review meetings.
3) Complete internal QA/QC process throughout
4) Incorporate the City and BDI QC comments into deliverable phase plans and specifications for this project.

TASK 4 – PERMITTING SERVICES

4.1 WRF Permitting

An FDEP Domestic Wastewater permit is required to construct the new water reclamation facility at a different location. BDI will prepare, submit, and coordinate two (2) copies each of the following permits:

1) *Wastewater Facility or Permit Activity Form 1 General Information* (Form 62-620.910(1)).
2) *Wastewater Permit Application Form 2A for Domestic Wastewater Facilities* (Form 62-620.910(2)).
3) *FDEP and/or NWFWMD Stormwater Discharge Permit for Construction Activities.*

BDI shall prepare the necessary permit application forms and specifically the FDEP Domestic Wastewater Treatment Facilities Permit Application (1 and 2A), appropriately certified, and supporting documents for approval of the project and submit application to local, state, and federal regulators for the permits noted. Permit fees associated with permit applications and approvals shall be paid by the City. BDI will coordinate responses to FDEP Requests for Additional Information (RAIs) as part of this scope of services. Additional permitting assistance may be provided by supplemental authorization by the City.

The Domestic Wastewater Facilities permit will require the submittal of a Preliminary Design Report. The Preliminary Design Report will be prepared concurrent with the equipment selection and site layout during the planning phase. BDI will prepare and submit the Preliminary Design Report and treatment process calculations in accordance with 62-620, FAC.

BDI shall prepare site plan approval documentation and conditional use documentation and be responsible for securing site plan approval or other local government land development orders required for this WRF project.

4.2 Offsite Permitting and Local Approvals

This permitting will include all permits required outside the WRF site and local site plan approvals.

1) *Notice of Intent to Use the General Permit for Construction of Water Main Extensions for PWS* (Form 62-555.900(7)).

This task includes the effort required to respond to Requests for Additional Information (RAI) from the permitting agency for each permit identified.

TASK 5 – BIDDING SERVICES

BDI will perform traditional bidding services including:

1) Complete and compile for distribution plans and specifications, permits, and geotechnical field work from final design and permitting efforts in Tasks 3 and 4.
2) Conduct and attend one (1) pre-bid conference for this project.
3) Review questions and comments posed by bidders and develop appropriate responses.
4) Attending the bid opening meeting for the WRF project.
5) Review all bids and make a recommendation for award to the City for the lowest responsible bidder.

A contract is already in place for Engineering Services During Construction and Inspection Services. Upon completion of the Bidding Phase and prior to commencement of construction, this contract will be reviewed for necessary upgrades based on inflation from the date of execution to the date construction is to commence.

Section IV. OWNER'S RESPONSIBILITY

The City will provide all available information to assist in the permitting and design of the WRF. The City shall participate in treatment unit processes evaluation and effluent disposal selection, provide input into the design and layout, and provide written comments on the design construction plans and specifications. The City shall be responsible for all agency review fees associated with permitting.

Section V. DELIVERABLES

BDI will provide the following deliverables:

1. Three (3) copies of draft Basis of Design and Preliminary Engineering Report
2. Three (3) copies of final Basis of Design and Preliminary Engineering Report
3. Three (3) copies each of the FDEP Domestic Wastewater Permit documentation and Preliminary Design Report
4. Three (3) sets of preliminary (60%) design construction plans
5. Three (3) sets of draft final (90%) design construction plans and specifications
6. Three (3) sets of final ready-to-advertise construction plans and specifications
7. One (1) set of electronic final ready-to-bid construction plans and specifications
8. Three (3) sets of Released for Construction plans and specifications

Section VI. SCHEDULE

The following is a project schedule by milestone task from the "Notice to Proceed" through the final, ready to advertise, contract documents and project bidding services. The total project schedule is based on the City review periods of 15 calendar days at each submittal. It is anticipated that the project schedule

through the bidding phase will be 555 days. The overall project schedule is dependent on a timely response review from all regulatory agencies for review and approval of the completed permit application documentation and a permitting process that is uncontested by the public or third parties.

Milestone Task	Calendar Days (each Task)	Calendar Days (from NTP)
Notice to Proceed	0	0
Treatment Unit Process Evaluation	150	150
Public Meeting Charette	15	165
Preliminary Engineering Report, 30% Design	90	255
Public Meeting Charette	15	270
FDEP Permitting, Conditional Use	90	360
60% Plans and Specifications	120	480
Client Review Duration	15	495
90% Plans and Specifications	45	540
ERP Permit	90	630
Client Review Duration	15	645
Final ready to Advertise Contract Documents	30	675
Total Project Duration until Bidding Phase	-	675 days
Bidding Phase	60	735

Upon completion of the ready-to-bid documents, the City will begin aligning new financing through loans, grants, and reserve funds. Once sufficient funding has been arranged, the City will open the project for bids. After the bidding phase, construction phases are anticipated to be approximately 835 days.

Section VII. METHOD OF COMPENSATION

It is mutually agreed that compensation to the Engineer for Basic Design Services shall be based upon a percentage of construction of work designed. The engineering fees shall be based upon the formula used by the Florida Department of Environmental Protection State Revolving Fund (SRF) Program. The initial fee for Basic Design Services will be based upon the engineer's opinion of probable construction cost of $80,000,000.00 and then adjusted based upon the cost of construction. For a $80,000,000.00 project, the SRF fee curve results in a basic engineering design fee of 6.8% of the construction cost.

Cost of Construction as used herein to compute compensation shall be the final award of bid amount including all materials, labor, and equipment. Such cost shall not include cost of land, right of way, or Engineer's fee. In the event that the designed project is not bid or awarded, the fee adjustment shall be based upon an agreed fair estimate of construction cost and settled within 90 days from completion of

ready-to-bid construction documents. With the intent of paying a fair and just fee for design services, the following exception to this paragraph shall apply: Upon receipt of bids, if the lowest qualified bid is more than 10% below the second lowest qualified bid**,** and the latest construction cost estimate**,** the design services fee will be based on the lesser of: (1) the average of all qualified bids, or (2) the latest construction cost estimate.

For any additional services, including Value Engineering, required of the Engineer by the City on a project due to changes other than written construction change orders ordered by the City after approval of preliminary plans and cost estimates, or causes beyond the control of the Engineer, the City shall pay the Engineer the expense of such additional services based upon time chargeable to the project at the current hourly rates with such payment being in addition to the fee for basic design service. In no event will the City pay the Engineer for redesign or additional design or construction phase services necessitated by errors or omissions on the part of the Engineer.

Partial payment shall be made on designs, drawings, and specifications in progress based upon the product of mutually agreed percentage of completion and construction cost. Both partial payments and final payment shall be made within thirty (30) days after receipt of certified invoices from the Engineer. Invoices shall be submitted by the 7th of each month for all work completed within the previous month.

Summary of Services

Task 1 - Equipment Evaluation	LS	$125,000
Task 2 – Public Charrettes (2 programmed)	EA	$50,000
Task 3 - Basic Design Services and Contract Documents	LS	$5,441,970
Task 4 - Permitting	LS	$125,000
Task 5 - Bidding Services	LS	$145,000
Total Engineering Fee		**$5,886,970**

Section VIII. ACCEPTANCE

If the above scope and fees meet your approval, please indicate by your signature in the space provided below and return one (1) signed copy which will constitute an agreement and a “Notice to Proceed" for the above referenced tasks to accomplish this work:

BASKERVILLE-DONOVAN, INC.

T. Keith Hill, P.E.
President/CEO

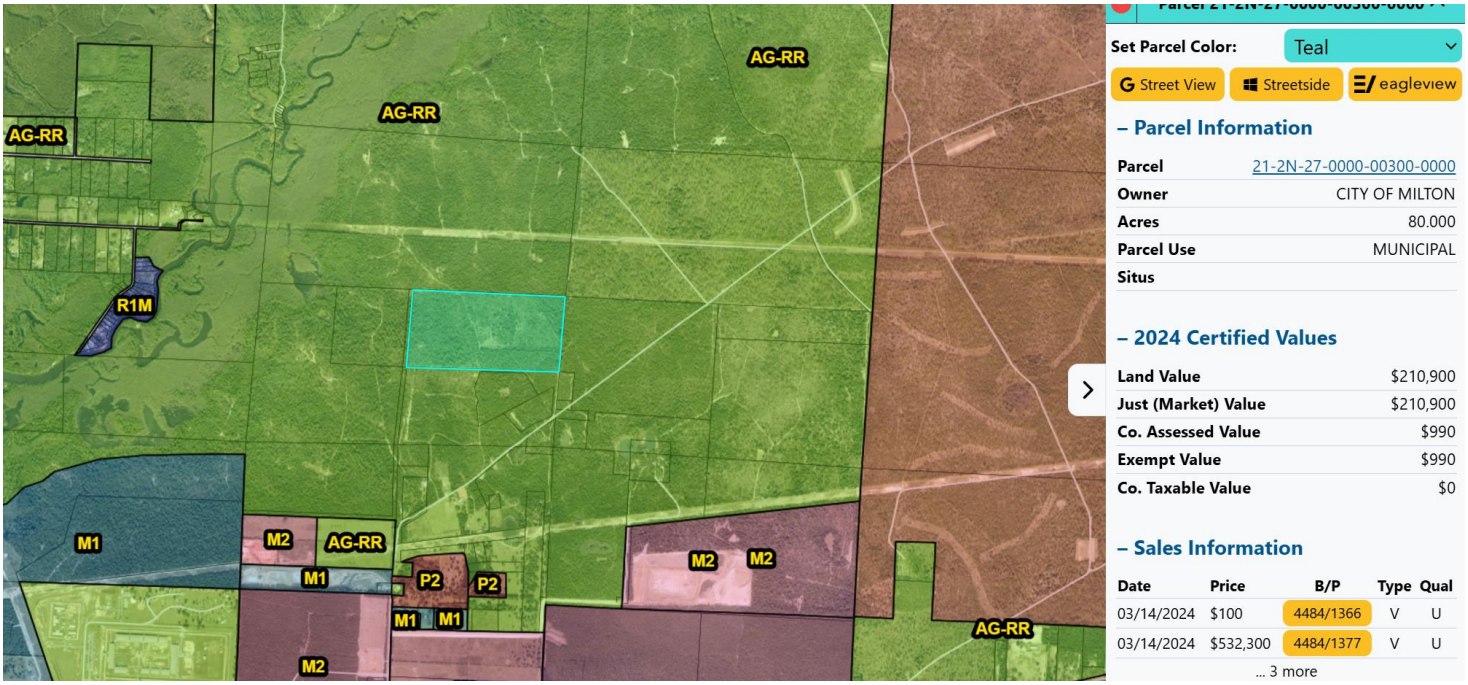
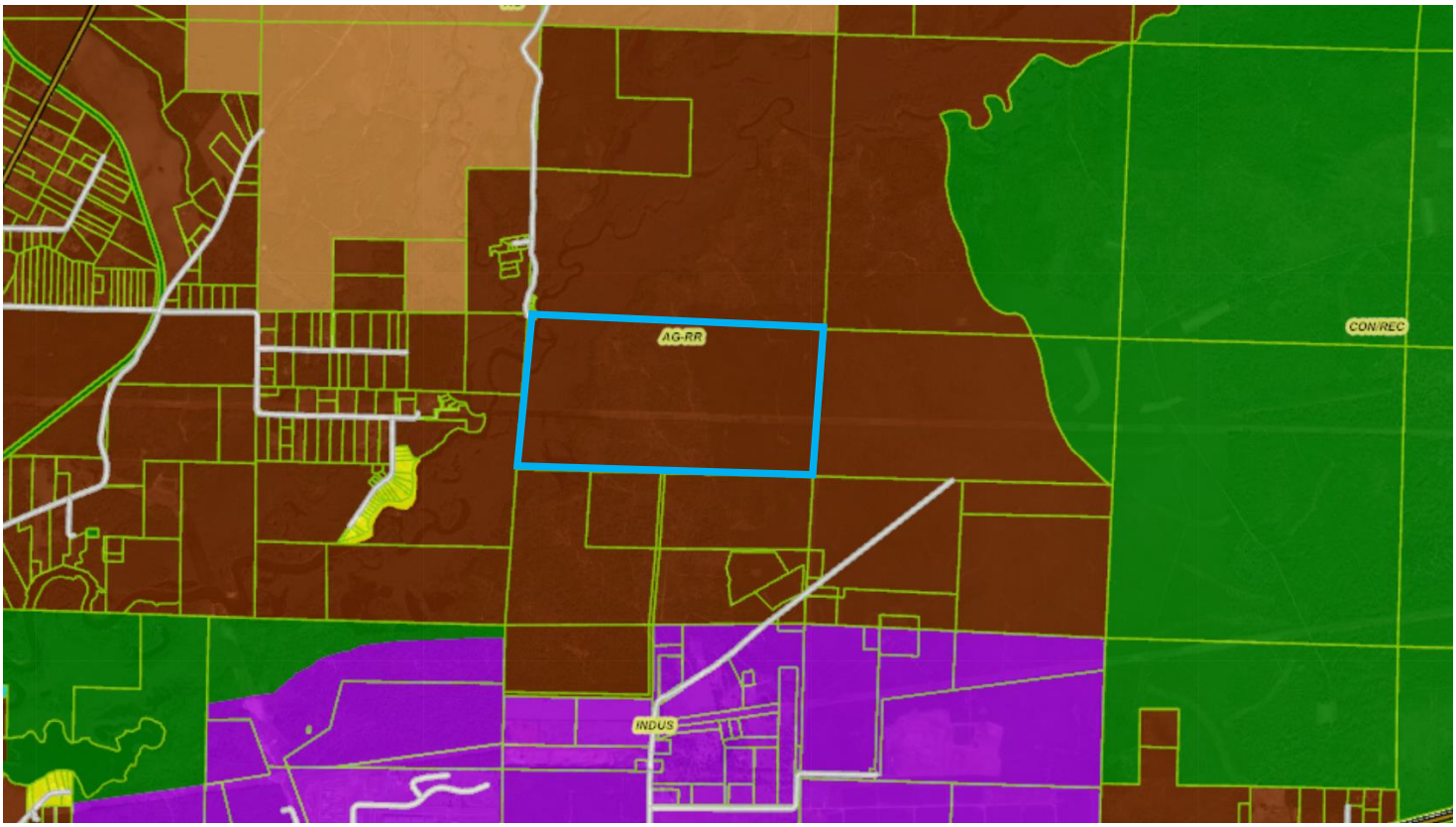
Date

CITY OF MILTON

Ed Spears
City Manager

Date

Current Zoning



Future Land Use