RESOLUTION 49-14

RESOLUTION AMENDING RESOLUTION 84-12 AUTHORIZING AGREEMENT FOR CERTAIN PROFESSIONAL SERVICES ADOPTED BY THE BOROUGH OF CLAYTON

WHEREAS, there exists a need to amend Resolution 84-12 for specialized services on behalf of the Borough of Clayton; and

WHEREAS, funds are or will be available for this purpose; and

WHEREAS, the Local Public Contracts Law, N.J.S.A. 40A:11-1 requires that notice with respect to contracts for Professional Services awarded without competitive bids must be publicly advertised.

NOW, THEREFORE, BE IT RESOLVED by the Mayor and Council of the Borough of Clayton, County of Gloucester, and State of New Jersey as follows:

1. Sickels & Associates, Inc. is hereby hired to perform engineering services for the Water System Improvement Project for an additional amount not to exceed $20,420.00 in the Borough of Clayton.

2. The term of this contract shall be from February 27, 2014 to February 26, 2015.

3. The Contract is awarded without competitive bidding as a "Professional Service" in accordance with the Local Public Contracts Law, N.J.S.A. 40A:11-11-5(1)(a), because it is for services performed by persons authorized by law to practice a recognized profession.

4. A copy of this resolution as well as the Contract shall be placed on file with the Clerk of the Borough of Clayton.

5. A notice in accordance with the Local Public Contracts Law of New Jersey shall be published in The Gloucester County Times or The Sentinel Newspaper.

6. The Mayor and Clerk of the Borough of Clayton are hereby authorized to execute a Contract outlining the above on behalf of the Borough of Clayton.

ADOPTED at a meeting of the Mayor and Council of the Borough of Clayton, County of Gloucester, and State of New Jersey on February 27, 2014.

BOROUGH OF CLAYTON

THOMAS BIANCO, Mayor

Attest:

CHRISTINE NEWCOMB, Borough Clerk

CERTIFICATION

I, Christine Newcomb, Borough Clerk of the Borough of Clayton, do hereby certify that the foregoing Resolution was presented and duly adopted by the Borough Council at a regular meeting of the Borough of Clayton Council, held on February 27, 2014.

CHRISTINE NEWCOMB, Borough Clerk

CERTIFICATE OF AVAILABILITY OF FUNDS

From: Donna Nestore, Chief Financial Officer, Borough of Clayton

To: Mayor and Council, Borough of Clayton

Re: Sickels & Associates – Water System Improvement Project
Project No. 2012-26A

AMOUNT OF CONTRACT: $20,420.00

Any expenditures required for the above referred contract are properly chargeable to Bond Ordinance 15-2010.

I hereby certify that, as of this date, adequate funds have been appropriated in said line and are available to satisfy the expenditure required for the above referenced contract.

DONNA NESTORE
Chief Financial Officer
Borough of Clayton

Dated: February 27, 2014

SICKELS & ASSOCIATES, INC.

Engineers • Planners • Surveyors

February 21, 2014

Borough of Clayton
125 N. Delsea Drive
Clayton, NJ 08312

Attention: Ms. Sue Miller, Administrator

RE: PROPOSAL FOR PROFESSIONAL SERVICES
WATER TOWER PROJECT
BLOCK 2002, PART OF LOT 26
BOROUGH OF CLAYTON, GLOUCESTER COUNTY, NEW JERSEY
SICKELS PROPOSAL No. 2012-26A

Dear Ms. Miller:

This proposal is provided to update a previous proposal provided by this office for the above referenced project.

For ease of review, the proposal is organized in the following manner: Our Understanding of the Project and Scope of Work, Project Schedule, Fee Structure, Annual Fee Schedule and Terms and Conditions.

OUR UNDERSTANDING OF THE PROJECT – PROJECT APPROACH

The Borough approved Proposal 2010-106 in August 2010 for the design, approval and construction of a new water tower. Since 2010, Phases 1-6 have been completed under the previous approval. Proposal #2012-26 was updated for the scope of work to allow for the NJDEP Environmental Infrastructure Trust (EIT) Program requirements and also the change in our billing rates from 2010 to 2012 for Phases 7-9. Bidding and construction have been delayed due to NJDEP & USDA funding. Therefore, this proposal will reflect changes in our billing rates from 2012 to 2014 and also increases from our sub-consultants for Phases 7, 8 and 9.

Currently the Borough is working to obtain funding from the New Jersey Department of Environmental Protection's Environmental Infrastructure Trust (EIT) Program for the proposed tank.

Proposal 2010-106, Phases 1-6 included design and specification of a new 750,000 gallon elevated tank to be located at the Little Ease Park. The proposal also included the geotechnical investigation necessary for foundation design, topographic survey and site design, preparing permit applications, production of a bid package for site preparation work, water main extension to East Avenue and the new 750,000 gallon tank. This proposal includes Phases 1-6 as previously approved, billed and paid and the updated fees for bid, construction and records drawings/one year inspection phases of the project.

Sherwood Mews • 833 Kings Highway
Woodbury, New Jersey 08096-3110
(856) 848-6800 FAX (856) 848-8520
www.sickelsassoc.com

Our approach to this project consists of the following phases which are outlined in detail under the Description of Services:

PHASE	1	Outbound and Topographic Survey	COMPLETED
PHASE	2	Preliminary Plans	COMPLETED
PHASE	3	Geotechnical Investigation	COMPLETED
PHASE	4	Engineering Design and Construction Plans	COMPLETED
PHASE	5	Application & Submissions/Regulation Permits and Approvals	COMPLETED
PHASE	6	Construction Specifications and Bid Proposal	COMPLETED
PHASE	7	Bid Administration	
PHASE	8	Contract Administration/Construction Observation	
PHASE	9	Record Drawings/One Year Anniversary Inspection	

DESCRIPTION OF SERVICES- DUTIES

Based on the above project description, the scope of our services will be limited to the following activities:

PHASE 1 OUTBOUND AND TOPOGRAPHICAL SURVEY

The scope of this Phase includes obtaining topographical information and preparation of:

SECTION 1.1 AVAILABLE INFORMATION

To facilitate our outbound survey we request that the Borough's Tax Assessor's Office provide current information such as lot and block designations, names and addresses of property owners and street names within 200 feet of the project. We also request that the Borough provide any plans for the site that may be available.

In addition to the plans and property owner information we request that the Borough markout the locations of water, sewer and storm sewer utilities and call for markout of other utilities such as telephone, electric and gas prior to our survey.

SECTION 1.2 OUTBOUND SURVEY

Outbound of the tract will be based on the minor subdivision being prepared by this office for Block 2002, P/O Lot 26 under a separate contract.

SECTION 1.3 TOPOGRAPHIC SURVEY

Verify and supplement available information by field survey to locate and identify site features within the project limits. Establish elevations on site based on NAVD 88. Horizontal locations will be based on NAD 83. Plans will be drawn in NJ State Plane Coordinate System.

Topographic and planimetric features will be surveyed on the lot in question to establish existing conditions (including structure and grade). The access road for Little Ease Park will also be to extend a 12" main to East Avenue and connect to the existing 12" main in that R.O.W.

Investigate and identify the location, elevation, size and type of all accessible utility, sanitary and storm drainage facilities, within and adjacent to the project limits. Verify information with the respective utility companies.

Prepare a Plan of Topography for the above mentioned parcel of 1 foot contours on a fifty (50') foot grid with a fifty (50') foot overlap. The areas of topography are for the above referenced site. This area is approximately 3.0 acres.

All work will be completed with Auto CAD.

PHASE 2 PRELIMINARY PLANS

Sickels & Associates, Inc. will obtain requirements of the proposed elevated tank to be utilized on engineering plans for design purposes.

Obtain available information such as as-built utility plans, tax maps and other information pertaining to the property-in-question.

A preliminary plan of the site preparation work will be created for review by the Borough. The plan will include a site plan and basic details required for the elevated tank. The site plan will be prepared at a scale of not less than one inch to 50 feet.

This phase includes meeting with the Borough to review the preliminary plan and arrive at acceptable site plans on which to base our final design.

We also plan to attend one (1) Borough Council meeting to present the plan that was developed as a result of our meetings with the Borough. Although Planning Board approval is not required for the project, their involvement will be solicited by a submission of plans as a courtesy. A formal application will be made to the Borough Planning Board via the Borough Solicitor. An application will be made to the County Planning Board as a courtesy submission.

Following review of and agreement with the preliminary site plan by the Borough, we will move forward with the geotechnical investigation, final design, and permitting.

PHASE 3 GEOTECHNICAL INVESTIGATION

Geotechnical investigation of the proposed tank site is critical to the design effort of the tank and its foundation. Our office will supplement our staff's engineering design and survey work and utilize Advantage Engineering, Inc. of Mt. Laurel, New Jersey, an engineering subconsultant specializing in soil mechanics and foundation design. The consultant will complete a geotechnical investigation in and around the proposed tank location and provide a written report with soil bearing capacities and foundation recommendations. This report will be included with the Bid Documents for use by the tank manufacturer in their design of the tank foundation.

The geotechnical investigation will include three (3) test borings within the area of the proposed tank footprint completed using a truck mounted drilling rig and hollow stem augers. Soil samples will be recovered at suitable intervals and the Standard Penetration Resistance Test values will be recorded. Each test boring will extend to a depth of 80 feet below existing ground surface or until auger refusal or suitable soil bearing conditions are encountered. Should it be determined that deeper borings are required due to unsuitable soil conditions, the Borough will be notified while the driller is in the field. A unit cost per foot has been included within the cost section of the proposal. The borings will be permitted and completed by a New Jersey licensed well driller and then sealed with bentonite/cement slurry upon completion.

To aid in the geotechnical investigation, our office will stake out the area designated for the proposed elevated tank and field locate and survey the soil borings completed during the geotechnical investigation.

Costs for our work and the consultant's investigation and report are included in this proposal.

PHASE 4 ENGINEERING DESIGN AND CONSTRUCTION PLANS

SECTION 4.1 FINAL ENGINEERING PLANS

Based on the available information stipulated therein, design the site improvements, elevated tank, and tank demolition, and prepare construction plans. Drawings which may be required include the following plans:

a. Cover Sheet with Location Map
b. Site Plan
c. Grading and Utility Plan
d. Lighting Plan
e. Offsite Water Main Extension Plans
f. Tank Elevations and Construction Details
g. Electrical Details and Control Schematics
h. Soil Erosion and Sediment Control Plan
i. Soil Erosion and Sediment Control Notes and Details

Design will include the tank, site modification, pipe work required for connecting the proposed tank to the existing water main within East Avenue and conveyance of tank overflow to the Borough storm sewer system.

During the design phase we will also coordinate with the communications companies to provide means for future connections to the tower. We have included one meeting with these parties to be held at the Borough municipal building to discuss requirements for the communication equipment transition and permanent relocation. Specific details for standoff supports on the new tower and other ancillary features will be included in the design. Scheduling will also be discussed for incorporation into the bid documents.

4.2 Update the Borough's model of the water distribution system in order to model the interaction of the new tank and the existing standpipe and water treatment plants. The model will use the Borough's NJDEP GIS map as a base and will depict and model all mapped water mains.

Four (4) fire flow tests will be performed by our staff to verify the system pressure in the East Avenue area. These flow and pressure readings will be used to verify/update the model and assist with calculating the final height of the water tower.

The objective of preparing the water model will be to select the appropriate elevations for the new elevated tank. The goal will be to maximize the most use of the existing water tower volumes, while ensuring proper pressures and fire flow throughout the distribution system, and limiting overtopping of the water tower.

4.3 Prepare a construction cost estimate for use by the Borough for budget and permitting purposes.

PHASE 5 APPLICATION & SUBMISSION FOR PRELIMINARY APPROVAL

SECTION 5.1 CONFERENCE WITH REGULATORY AGENCY

Arrange and attend pre-application meeting with the New Jersey Department of Environmental Protection Division of Water Supply to discuss the proposed elevated tank and the requirements that may be imposed on the project.

SECTION 5.2 SUBMISSION TO REVIEW AGENCIES

Preparation and submission of applications and reports for applicable review agencies. Applications will include: BSDW-Application, BSDW-PA05, BSDW-PA05E, BSDW-PA06, and BSDW-PA11, Application for Soil Erosion and Sediment Control Plan Certification, and FAA Notice of Proposed Construction (FAA Form 7460-1).

Submissions are anticipated to be forwarded to:

a. NJDEP, Bureau of Safe Drinking Water.
b. Gloucester County Soil Conservation District
c. Federal Aviation Administration
d. Clayton Planning Board
e. Gloucester County Planning Board
(courtesy copy for review)
f. NJDEP EIT

Upon your request, we can coordinate, correspond and attend meetings with officials from these agencies to resolve issues relating to the design and construction of the elevated tank. Attendance at meetings has already been included within this proposal. If additional meetings are required, they will be invoiced according to prevailing hourly rates on our Annual Fee Schedule.

Fees required for submissions will be the responsibility of the client.

SECTION 5.3 RESPOND TO REVIEW COMMENTS

Respond to agency review comments and revise plans as necessary in accordance with the reviews. One set of minor revisions to respond to each agency is included in this proposal.

PHASE 6 CONSTRUCTION SPECIFICATIONS & BID PROPOSAL

SECTION 6.1 CONSTRUCTION SPECIFICATIONS

Prepare both General and Technical Specifications based upon the final design plans. The bid specifications will include site improvements, offsite water main extension and construction of the proposed 750,000 gallon tank.

SECTION 6.2 BID PROPOSAL

Prepare bid and contract documents for public bidding purposes. Incorporate USDA documentation into the document.

PHASE 7 BID ADMINISTRATION

Assist the Borough with the bidding process:

1. Preparing Notice to Bidders.
2. Prepare addenda for clarification, interpretation and/or expansion of bid documents and forward same to bidders.
3. Attending bid opening meeting.
4. Reviewing bids for completeness.
5. Tabulate bids and recommending award, contingent upon review of Borough Solicitor and availability of funds.
6. Forward bid results and applicable documentation to the NJDEP EIT Program for their review and approval.

PHASE 8 CONTRACT ADMINISTRATION/CONSTRUCTION OBSERVATION

Assist the Client during the construction process by:

1. Attending the pre-construction conference.
2. Complete NJDEP EIT funding documentation with the contractor to insure all of their contract requirements are addressed prior to construction.
3. Reviewing contractor's submissions and recommending approvals.
4. Reviewing contractor's vouchers and recommending payment.
5. Completion of quarterly reports to NJDEP EIT.
6. Periodic **(not full time)** observation and coordination during most construction activities with the Borough and the contractor. Full time inspection of the foundation construction will be provided. Full time construction observation will be conducted during the painting of the tank.

Forty two work days of construction observation during painting have been provided for in our proposal.

7 Preparing observation reports identifying the progress of the project and any observed deviation from the contract documents.

8. Preparing interim and final list of quantities to reflect those actually constructed based upon observation reports and field measurements.

9. Upon substantial completion, conduct observation of the work for conformance with the contract documents, observe manufacturer's and contractor's performance testing, and issue a punch list of any defects and/or deficiencies to the Borough.

10. Coordination with NJDEP EIT Program for project obligations and documentation.

11. Upon notification that punchlist items have been completed, conduct a final observation of the work for conformance with the contract documents and issue a recommendation of acceptance.

Our office will maintain communication with the Borough and report on the progress during the construction phase of the project. Our office will coordinate with the General Contractor and NJDEP EIT Program during this phase and work to provide guidance and resolve difficulties that may arise during the construction process.

Onsite construction observation will be provided by our office. We anticipate that this will be on a daily time basis during the length of the contract while construction is ongoing. The estimate is based on an estimate of 120 days of active foundation construction and tank erection with resident representation for four (4) hours per day on those days and twenty four (24) bi-weekly site visits by a licensed NJ Professional Engineer. During this phase our subconsultants specializing in elevated tank inspection and a geotechnical work will perform additional inspections to supplement the work conducted by our staff. On those days when we have a subconsultant observing the construction activities, we will keep informed of the project by phone and/or a short site visits. The geotechnical inspection effort assumes a standard spread footer or ring foundation for the tank and does not anticipate piles being used below the foundation, which would require additional days of geotechnical inspection beyond the scope of the proposal depending upon the requirements for a pile foundation.

The tank inspection subconsultant, Mumford-Bjorkman Associates, will perform periodic observation of the tank erection, direct contractor and observe the radiological inspection of the steel-work welds and perform full time observation during application of the tank coatings. They will also visit the Tank Contractor's shop painting facility and perform inspections of the initial sand blasting and priming of the steel components. Our proposal includes 10 full days of inspection,

approximately 1 day per week during tank erection and 42 days of inspection, full time during tank painting. This proposal includes a total of 67 days of construction observation by our subconsultant.

The geotechnical subconsultant, Advantage Engineering, will inspect the Contractor for compliance with specifications, inspect and document the compaction procedure and perform in place density tests and perform laboratory testing to determine the moisture-density relationship for use in compaction control. The geotechnical subconsultant will also inspect the foundation subgrade for suitable bearing and construction practices along with the structural steel reinforcement and placement of concrete foundation. Concrete test cylinders will be collected during the placement of the concrete foundation. The cylinders will be tested for compressive strength and the results included in a report for the Borough's records. Fifteen (15) days are included in this proposal for the geotechnical subconsultant.

This proposal assumes the shop drawing preparation/approval, site construction and actual construction of the tower will total 47 weeks. If additional representation is required by the Borough for any reason, including, weather that slows the project or the inability of the contractor to proficiently run the project, this amount will be adjusted accordingly. If the project is completed more quickly than anticipated, the costs of contract administration and construction observation will be reduced accordingly as well.

Project Schedule

Please note while the tank construction will be initiated in 2012, contingent upon NJDEP EIT approval, the contract period will likely be set at 12 -14 months from award of the construction contract to account for NJDEP EIT approvals, submittal processing, manufacturing and forming of the steel plates and mobilization. This schedule is subject to when the contract is awarded as winter weather could alter the schedule by 6 months weather. We have arrived at this schedule based on our most recent consultation with tank builders regarding their projected schedules over the next two years. Due to the timing of when the Contract for the tank construction will likely be awarded, the tank construction may not proceed continuously. We anticipate that the tank foundation will be constructed in the Fall of 2012 or Spring of 2013 and the tank will be erected thereafter in the summer and fall of that year. The tank paint/coatings may not be finished until the latter portion of 2013 unless weather conditions delay the work for some reason.

The most significant variable is the duration of the governmental reviews. If shorter periods are realized, the schedule may be accelerated to complete the tank earlier than stated above.

If at any point in time we find that we can expedite the schedule or advance any of the tasks, we will do so accordingly in order to get the tank into operation more quickly.

Our office will complete the close out documents for EIT review as they are required as conditions of the funding contract.

PHASE 9 RECORD DRAWINGS

SECTION 9.1 AS-BUILT SURVEY

Perform as as-built survey of the site to locate site features and for use in updating the site plan.

SECTION 9.2 RECORD DRAWINGS

Prepare record drawings showing construction modifications as required. Record drawings will use the design plans as a basis and be modified per the final as-built survey and prints, drawings and other documents provided by the manufacturers and/or contractor.

SECTION 9.3 ONE YEAR INSPECTION

AWWA recommends performing a one year anniversary inspection to assess the Contractor's compliance with the specification and the condition of the coating. This proposal includes completing the one year inspection.

The exterior will be evaluated. The interior inspection will be performed with a ROV, allowing the tank to remain full and operational. The interior ROV inspection will be videotaped, and digital photographs will be taken of the areas taken above the water line. If defects in the interior lining are detected during the inspection or from the still photographs, we will determine the extent of the damage and the need for a thorough dry inspection and/or corrections.

Upon completion of the inspection, a report will be generated listing the findings as listing any remedial work required. Color photographs illustrating any failures and a CD of the underwater findings will be included in the Report.

SUPPLEMENTAL SERVICES

We believe our proposal as presented is comprehensive to satisfy the requirements of the project. However, if deemed necessary by the client or regulatory agencies, we will offer an addendum to perform these specialized services and/or will assist in obtaining proposals from qualified consultants:

a. Permits required under the New Jersey Realty Improvement Act.

b. Floodplain Determination and Delineation (Stream Encroachment Plan) General and Individual Freshwater Wetlands Permits.

c. Environmental Site Assessment/Audit.

d. Archaeological or Historical Investigation & Natural Resource Inventory Report.

e. Subsurface investigation to locate/verify facilities, utilities and/or services. Soil borings for any purpose other than those stated herein.

f. Preparation of bidding and contracting document other than those specifically indicated in the description of services.

g. Applications for permits, approvals, interpretations or exemptions from Federal, State, County and Municipal agencies other than those specifically indicated in the Description of Services, including, but not limited to wetlands permits of any type and stream encroachment permit, modifications and/or permits to fill flood plains.

h. Preparation of design of special site features such as retaining walls. Depending on height and extent of said walls, special structural boring and engineering expertise may be required. Our design will attempt to eliminate or limit the need for said retaining walls, the need for which cannot be determined until design is commenced.

i. Geotechnical/Subsurface Investigation to identify, locate and evaluate soil conditions for building design purposes and utilities and/or service locations, other than those specifically indicated in the description of services.

j. Design of modifications to off-site infrastructure, which may be required by reviewing agencies to accommodate the proposed development.

k. Design and coordination of utilities other than those included within this proposal.

l. Traffic Impact Report or Air Quality Assessment.

m. Cultural Resource Survey or Economic Impact Report.

n. Cut and fill site analysis and corresponding cost estimates for improvements.

o. Landscape irrigation/sprinkler system design.

p. CBR or other soils testing to request paving reduction.

q. Additional information and analysis of any offsite sewer pump stations, treatment plants or off site water analysis and fire flow tests of the existing distribution system other than those specifically indicated in the description of services.

r. Permits required by the Army Corps of Engineers

s. Phase I Environmental Investigation.

t. Environmental Impact Study.

u. Traffic Study.

v. Stormwater Management Plan.

w. Construction stakeout.

CONSULTING FEE FOR SERVICES RENDERED

Based on the understanding of the project and description of service, our total consulting fee to complete the various activities described herein is estimated at **$312,270.00**.

Said consulting fee is apportioned in accordance with the following breakdown:

PHASE	1	Outbound and Topography Survey	$ 5,433.00 (complete)
PHASE	2	Preliminary Plan	$ 6,952.00 (complete)
PHASE	3	Geotechnical Investigation	$21,830.00 (complete)
PHASE	4	Final Design Plans	$31,945.00 (complete)
PHASE	5	Application & Submissions/Regulation Permits	$21,236.00 (complete)
PHASE	6	Construction Specifications and Bid Proposal	$ 9,604.00 (complete)

PHASES 1 THROUGH 6 SUBTOTAL **$97,000.00**

PHASE	7	Bid Administration	$ 14,225.00
PHASE	8	Contract Administration/Construction Observation	$ 190,120.00
PHASE	9	Record Drawings/One Year Inspection	$ 10,925.00
PHASES 7 THROUGH 9 SUBTOTAL			**$ 215,270.00**
		TOTAL	**$ 312,270.00**

Sickels & Associates is prepared to commence work immediately upon receipt of authorization to proceed. This proposal assumes that said authorization will be issued within sixty (60) days from the date of this proposal. The terms and conditions from our previous proposals (2010-106 and 2012-26) shall remain in effect.

We have enclosed two (2) signed copies of this proposal. If you concur with our Description of Services, Consulting Fee, Terms and Conditions and Annual Fee Schedule, please execute one copy as our formal authorization to proceed and return same with the retainer to our office.

Once again, we would like to thank you for the opportunity to offer the services of our firm and we look forward to working with you on this venture.

If you have any questions regarding this matter, please contact our office at (856) 848-6800.

Very truly yours,

SICKELS & ASSOCIATES, INC.

Patricia A. Owens
Corporate Secretary & Treasurer

MRB:PAO

Enclosures: Terms and Conditions
Annual Fee Schedule
cc: Donna Nestore , CFO
Christine Newcomb, Clerk

File: 2012-26a

PROPOSAL ACCEPTANCE & NOTICE TO PROCEED

Having reviewed the proposal for the various planning, surveying and engineering services, including the Terms and Conditions of the Service Agreement, and all sections relating to payment for services, which is a part thereof, acceptance of the proposal is hereby confirmed by the signature below. Sickels & Associates, Inc. is authorized to proceed with the work.

Accepted this 27th **day of** February **, 2014**

By: _____ Mayor
SIGNATURE **TITLE**

Thomas Bianco
NAME (PLEASE PRINT OR TYPE)

Borough of Clayton
COMPANY

125 N. Delsea Drive
ADDRESS

Clayton NJ 08312

PHONE NO. **FAX NO.**

CLIENT'S E-MAIL ADDRESS