

RESOLUTION
of the
BOROUGH OF NEW PROVIDENCE
Resolution No. 2020-063

Council Meeting Date: 01-27-2020

Date Adopted: 01-27-2020

TITLE RESOLUTION ACCEPTING THE PROPOSAL OF MASER
CONSULTING, P.A. FOR PROFESSIONAL ENGINEERING SERVICES
REGARDING FAIRVIEW AVENUE ROADWAY IMPROVEMENTS

Councilperson Muñoz submitted the following resolution, which was duly seconded by Councilperson DeSarno.

WHEREAS, the Borough of New Providence acquired Professional Engineering Services as a non-fair and open contract pursuant to the provisions of N.J.S.A. 19-44A-20.5; and

WHEREAS, Maser Consulting was awarded a contract with the Borough of New Providence via Resolution 2020-021 to provide professional engineering services; and

WHEREAS, Maser Consulting Services has submitted a proposal dated January 7, 2020 indicating they will provide professional engineering services relating to Fairview Avenue Roadway Improvements, for an amount not to exceed \$52,750.00; and

WHEREAS, the fees assessed with this proposal are contained in said contract; and

WHEREAS, the maximum amount of the contract is not to exceed \$52,750.00, and said funds are available from the following accounts:

C-04-55-973-290-404900

and have been certified by the Chief Financial Officer; and

NOW, THEREFORE, BE IT RESOLVED by the Mayor and Council of the Borough of New Providence that they hereby approve and authorize the professional services included in the Maser Consulting Services proposal dated January 7, 2020.

APPROVED, this 27th day of January, 2020.

RECORD OF VOTE

	AYE	NAY	ABSENT	NOT VOTING
CUMISKEY	X			
DESARNO	X			
GEOFFROY	X			
MATSIKLOUDIS	X			
MUÑOZ	X			
ROBINSON	X			
MORGAN			TO BREAK COUNCIL TIE VOTE	

I hereby certify that the above resolution was adopted at a meeting of the Borough Council held on the 27th day of January, 2020.

Wendi B. Barry, Borough Clerk



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Surveyors
Landscape Architects
Environmental Scientists

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January 7, 2020

VIA EMAIL

Douglas Marvin, Borough Administrator
Borough of New Providence
360 Elkwood Avenue
New Providence, New Jersey 07974

Re: NJDOT Municipal Aid Various Streets Improvements (FY2019)
Proposal for Engineering Services
Borough of New Providence, Union County
MC Project No. NPT-006P

Dear Mr. Marvin:

As you are aware, the Borough of New Providence has received a grant from the New Jersey Department of Transportation (NJDOT), totaling \$250,000.00, for the improvements to Elkwood Avenue (Wellings Road to the northern end) and Fairview Avenue (Central Avenue to Municipal border). The FY2019 grant is part of the NJDOT Municipal Aid Program and funding is made available from the Transportation Trust Fund (TTF). The conditions of the grant require the Borough to award a construction contract within eighteen (18) months from the date of execution of the agreement with NJDOT. These portions of roadway improvements are estimated at approximately \$511,000.00, as submitted to the NJDOT.

It is our understanding the Borough intends to supplement the NJDOT FY2019 funding with Borough funds. It is also our understanding that the Borough has already paved Elkwood Avenue and wishes to allocate the entire grant amount toward the improvements to Fairview Avenue through the NJDOT Change of Scope process. Specifically, the project includes curbing along both sides, sidewalk along the southeast side, milling, base repair, roadway reconstruction, driveway aprons (as needed), ADA ramps, paving, striping, and restoration.

Therefore, this agreement includes Survey, Subsurface Utility Engineering (SUE), Due Diligence, Design, Bidding and Grant Administration services for the project. Accordingly, our office anticipates the following services:

TASK 1.0 – SURVEY SERVICES



TASK 1.1 – TOPOGRAPHIC SURVEY

Maser Consulting will prepare a topographic survey of the subject area in accordance with the standards set forth in the Laws of the State of New Jersey Statutory Reference NJSA 45:8-28(e) and more specifically, the administrative rules and regulations promulgated by the State Board of Professional Engineers and Land Surveyors and contained in NJAC 13:40-5.1.

We will prepare a topographic survey map that is a graphic pictorial representation of the above-ground features in the subject areas. The limits of the field survey include from center of the pavement to 25' behind the curb or edge of pavement on both sides (1.5± acres) and shown in **red** on the attached **Exhibit**.

The topographical mapping will depict spot elevations and contours at a one-foot contour interval. Additionally, an elevation shot will be obtained at each garage or driveway at the building front line (whichever is less). Vertical and horizontal data will be tied to NAD83 and NAVD88. The house numbers will be depicted based on tax records.

Visible and accessible utilities and/or utility structures within and the next structure outside the survey area will be surveyed and the structure rim, grate and invert elevations, as well as pipe sizes entering and/or exiting the structures, will be obtained if accessible from ground level. For the purposes of this contract, accessible utilities shall be defined as those utilities that are visible to the naked eye at ground level and are safely accessible by foot by Maser Consulting field survey personnel without the need for additional safety measures and/or assistance with making pipes visible, open and clear for inspection and measuring

Traffic safety protection for field survey crew and cleaning of clogged or obstructed drain and sewer structures is **not** included in the fee for this survey. If it is determined that safety protection is required for any of the survey services performed under this contract, we will advise you of the approximate cost prior to moving forward. Such additional cost would be invoiced as a reimbursable expense pursuant to prior authorization.

TASK 1.2 – BOUNDARY SURVEY

Maser Consulting will perform a partial property boundary survey of the twenty-five (25) lots fronting Fairview Avenue from Central Avenue to Union Avenue. (1,000 L.F ±) and the Right-Of-Way (ROW) and lot lines within the survey area and will be depicted on the plan outlined in Task 1.1.

The basis for the boundary survey will be current property deeds and maps of record, along with physical evidence recovered and surveyed in the field, and the Horizontal Datum will be oriented to New Jersey State Plane coordinate system, NAD83.



Included in this phase of service are the following tasks:

- Public records research and pre-field records review;
- GPS field survey to establish proper datum;
- Field traverse, location survey and data collection;
- Field survey data reduction and computation;
- Boundary analysis and survey calculations; and
- Preparation of boundary/ROW survey map.

The fee for this survey does not include the installation of property corner markers. If requested, we will set a state-approved property corner marker at each property corner where no marker currently exists in accordance with New Jersey Administrative Code, for an additional fee. **The fee for this service is \$185.00 per corner marker** for mobilization and services. If you elect not to have property corner markers installed, please sign and return the attached corner marker waiver form which is being provided in accordance with the NJ Administrative Code.

The Borough should furnish our office with the following information/documents before we initiate service on the project:

- a) A statement in writing regarding replacement of corner markers; or
- b) A waiver not to set corner markers must be signed; and
- c) Permission to enter the property to perform the services.

The fee for this service is based upon the assumption that the deed mathematically closes, that there are no title problems, that there are no overlaps or gores with adjoining properties and that extraordinary research or analysis is not required. In the event that any of the issues cited in this paragraph do become issues during the course of our survey work, we will discuss the additional work and related costs with you prior to completion of such work. **This fee is based on performing this phase in conjunction with Task 1.1.**

TASK 1.3 – UNDERGROUND UTILITY DESIGNATION AND MARK-OUT

Maser Consulting will conduct record research to determine the owners of any underground utilities and to request any existing records of these lines within the project limits. This information will be used in the field as reference and will be provided in the final deliverable package.

Maser Consulting will designate conductive subsurface utilities using RadioDetection RD8000 pipe and cable locators within the project limits. Where possible, utilities will be identified by designation to a known termination point (manhole, pull box, etc.) or through direct connection. In order to directly connect to utilities, access to utility rooms and/or basements of buildings may be required. The RD8000 will also be used in passive and inductive modes across the project site to identify and designate utilities that cannot be accessed from the surface. A Geophysical Survey Systems, Inc. (GSSI) Ground Penetrating Radar (GPR) SIR-3000 unit with a 400 MHz antenna will also be used as necessary to locate any underground utilities that could not be designated with the RD8000.



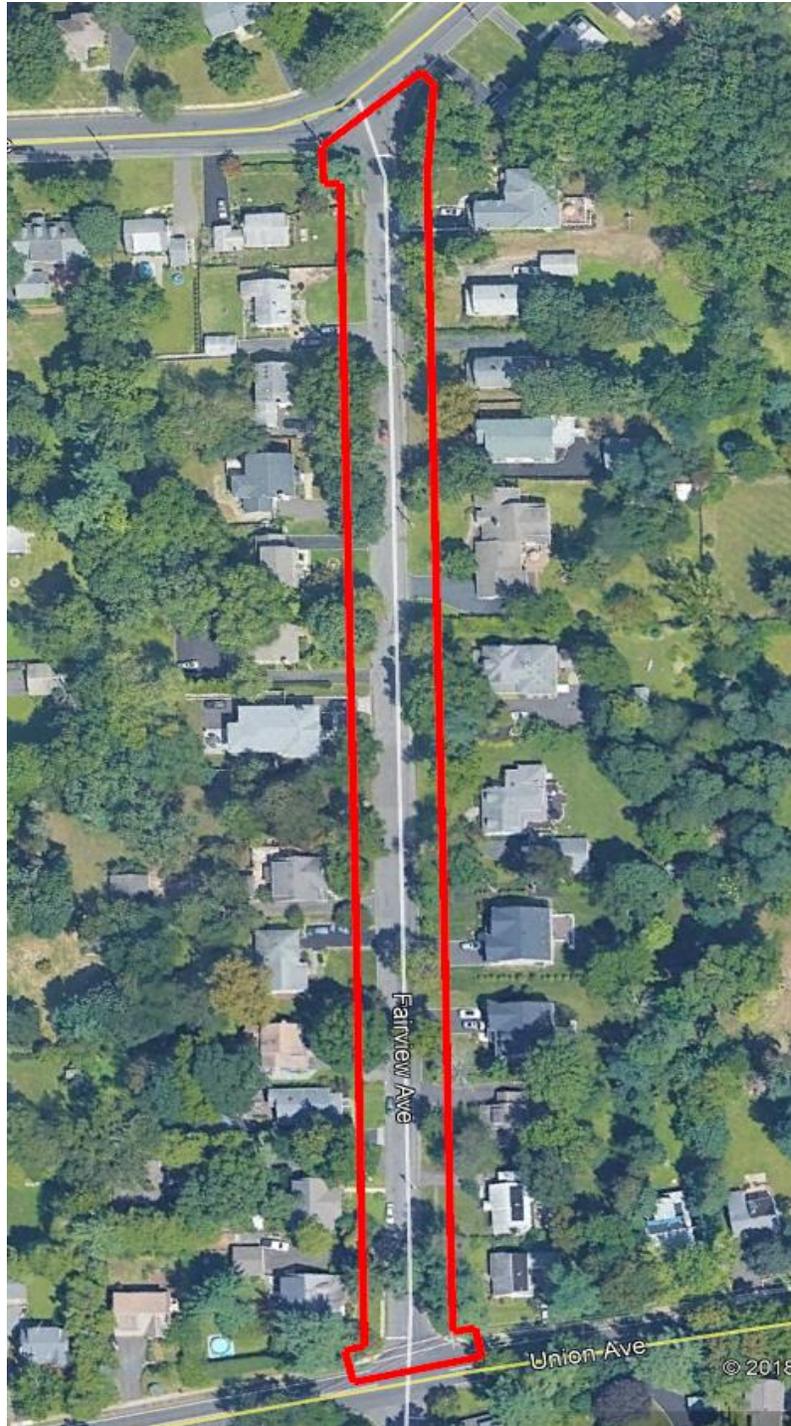
Utilities will be marked in the field using pink marking paint and/or pin flags in accordance with American Public Works Association (APWA) standard color code (pink signifies temporary survey markings). Approximate depth information for designated lines will be provided where possible. The results of the utility mark-out will be surveyed by a New Jersey licensed land surveyor for inclusion in the final deliverable (fees for the survey are included in another phase).

GPR data will be collected within the project limits to evaluate the pavement and sub-base thickness. The data will be post-processed and interpreted to determine the thickness of these materials within the project limits. This information will be included in the final deliverable.

A final report detailing the results of the utility investigation will be provided within two (2) weeks of completion of field work. The report will include the investigation methodology and equipment used, along with a detailed summary of all of the information obtained through the course of this work, including pipe sizes, materials, duct bank limits and any other pertinent information.

These services are conducted with due diligence and in a manner consistent with standards of the subsurface utility mapping industry. Every reasonable effort will be made to locate underground utilities within the project limits. The possibility exists that some or all targets may be located at greater depths than the maximum achievable investigation depths, or that some of these same targets may not have electrical properties that enable them to be differentiated sufficiently from the subsurface soils. For these and other reasons, the parties understand that no method can be as exact and reliable as an actual excavation and physical examination of all areas under examination. In areas deemed critical, the Owner/Engineer is encouraged to use empirical means such as vacuum excavation to validate the exact location of identified or unidentified subsurface targets.

EXHIBIT





TASK 2.0 – DESIGN SERVICES

Utilizing the survey base map prepared in Task 1.0 above, our office will perform a site visit and assess existing conditions in detail. Upon completion of data collection, the survey will be utilized as a base map for the preparation of design drawings. The improvements will include establishment of a uniform roadway alignment and width to the greatest extent feasible, given existing constraints. This roadway currently has a variable travel-way width between twenty-four (24) and thirty (30) feet. The roadway will be designed with a uniform travel way width in an effort to comply with industry standards. It is our understanding that sidewalk is proposed on the southeast side of the road only. The vertical profile and cross sections of the proposed roadway will be designed to meet industry standards while minimizing drainage issues and impact to the surrounding properties. Drainage infrastructure, curbing, and grading will be designed to direct stormwater runoff to a proposed collection system to alleviate ponding within the roadway. Accordingly, curbing, drainage structures, milling, paving, replacement of inlet grates and curb pieces, reconstruction of storm inlets to remain, pavement base repair as needed, striping and restoration of landscape areas are included as part of the project. During design it may be necessary for us to recommend tree removal(s) and removal or relocation of landscape material. We will advise accordingly.

Upon completion of the design, an Engineer's Construction Cost Estimate will be prepared. This will determine the necessary funds that will be required for the ultimate construction. As this design develops, status updates will be provided to the Borough so that alternate bids can be determined as necessary, to remain within the budget established.

Maser Consulting will prepare the Base Mapping, Title Sheet, General Notes and Legends, Estimate of Quantities, Construction Plans, Soil Erosion and Sediment Control Plans, and the Construction Details. Maser Consulting will also prepare the Supplemental and Technical specifications for the proposed site improvement items that are specified on our construction drawings for incorporation into the overall bid package. The specifications will be prepared in the latest NJDOT format, as amended.

Utility Coordination – The installation of curb and potential widening of the roadway may require relocation of utility poles. In addition, the reconstruction of the roadway may require relocation of other utilities, such as gas, sanitary sewer, cable, fiber optic and telephone. Maser Consulting will contact the utility providers along the roadway for available mapping, so this information can be incorporated into the design drawings. In addition, Maser Consulting will coordinate with the utility providers during the design phase so that proposed utility relocations can be identified and accommodated in the design. Any information available at the time of bidding will be incorporated into the bid package so the awarded contractor can assume the utility coordination for construction of the improvements.



Regulatory Agency Approvals – Maser Consulting will contact the regulatory agencies listed below to confirm whether permits will be required. The preparation and submittal of the applications and supporting information required to apply for the approvals and/or permits is indicated in this phase. The completed construction plans as described below will be packaged, along with the required applications, for permit review submission to the following agencies:

- Somerset-Union Soil Conservation District for Soil Erosion and Sediment Control Plan Certification and NJPDES Stormwater Discharge Permit (RFA).

Depending on the progress of the project, these applications may be submitted during the Construction Document Phase.

Construction Drawings – The following construction drawings will be included in the Construction documents:

- **Title Sheet** – A Title Sheet will be prepared that will indicate the location of the property within the Borough. This sheet will list the name of the project and the appropriate Borough officials. The Title Sheet also lists the drawings included within the design plan set.
- **General Notes and Legends** – A plan will be developed incorporating a list of general notes and legends that pertain to this specific project.
- **Estimate of Quantities** – The Total Estimate of Quantities will be tabulated and inserted onto the General Notes and Legends Plan. The breakdown of each item will be labeled on the appropriate plan; e. g. Dimension and Layout Plan or Landscape and Lighting Plan.
- **Site Dimension Plan** – A plan will be prepared that will indicate both the existing site conditions and the proposed site improvements to be removed and/or relocated to accommodate the proposed roadway improvements. The topographic survey will be utilized as the existing conditions base map throughout the project. The Site Dimension Plan will indicate the horizontal location and relationship of the site improvements relative to the existing topography. A centerline roadway profile will be included on this plan.
- **Grading, Drainage and Utility Plan** – A plan will be prepared that will include the vertical relationships between the existing conditions and proposed improvements. Proposed grading will be coordinated with the existing site conditions in order to provide positive drainage and appropriate slopes throughout the project limits. Accordingly, existing and proposed roadway profiles and cross sections will be prepared to ensure adequate slopes are achieved while minimizing earthwork to the greatest extent possible. Existing utilities that need to be rerouted will also be depicted

on the plan. Utility information that is available will be reviewed in an effort to detail utility/pipe crossings and minimize conflicts.



- **Cross Sections** – A plan depicting the cross sections at an appropriate scale will be prepared. Stationing referenced to the Site Dimension Plan will be indicated. Cross sections will be provided at 50-foot intervals and at the centerline of all driveways.
- **Soil Erosion and Sediment Control Plan** – A plan will be prepared in accordance with the County Soil Conservation District standards. The limit of disturbance and the extent of impact anticipated will be depicted. It is the intent of Maser Consulting to minimize the limit of disturbance and impact to the immediate area. The plan will include applicable notes, soil erosion and sediment control measure details, as well as the sequence of construction.
- **Construction Details** – Plans will be provided including specific construction details applicable to the site improvements.

Drainage Design and Calculations – Maser Consulting will prepare the drainage design and required calculations for the project in accordance with the NJDEP Stormwater Management Regulations. Conveyance will be designed to accommodate the resulting flow from the roadway and surrounding area to match the existing drainage patterns, to the maximum extent feasible. Please note that standard NJDEP Best Management Practices (BMPs) for detention, water quality and recharge will not be proposed as this is a linear public project and could be classified as “enlargement of an existing public roadway” per the provisions of N.J.A.C. 7:8-5.2(e).

Project Presentation – At the completion of the initial horizontal alignment preparation, Maser Consulting will present this plan to representatives of the Borough of New Providence to identify the encroachments and impacts to surrounding properties.

At the completion of 80% design phase, Maser Consulting will present our design to representatives of the Borough of New Providence in an effort to familiarize the staff and appropriate parties with the status of the project design to ensure it meets the needs and goals of the Borough. During the meeting, Maser Consulting will describe the design philosophy and design process utilized in the development of the plans. It is understood that during the project design phase, Maser Consulting will meet with the Borough two (2) times for presentation and review purposes.

Specifications – Maser Consulting will prepare Specifications, both Supplemental and Technical, for all site improvement items that are specified on our site plan drawings for incorporation into the overall bid package. The specifications will be prepared in the latest NJDOT format, as amended. The bid specifications will include the standard Borough front end along with the site proposal sheet and supplemental project-specific information, as required.

Construction Cost Estimate – Maser Consulting will finalize the Construction Cost Estimate (CCE) based on the completed construction drawings.

Final Bid Documents – Upon completion of the final contract documents (Construction Plans, Specifications, and Construction Cost Estimate), Maser Consulting will furnish the Borough with two (2) signed and sealed complete sets of the bid package with full-size design drawings for their use.



TASK 3.0 - NJDOT GRANT ADMINISTRATION

This phase includes the efforts required to administer the NJDOT Local Aid process for all milestones throughout the project. In addition to the required updates in the NJDOT SAGE (System for Administering Grants Electronically) system, our office will submit the design documents to the NJDOT and provide continued correspondence and coordination with NJDOT representatives to confirm the project approach and obtain their concurrence. Maser Consulting will also coordinate and prepare the required documentation for the NJDOT grant at the required milestones throughout the project to ensure the funding reimbursement to the Borough.

TASK 4.0 - BIDDING SERVICES & MEETINGS

As part of this phase, Maser will prepare the bid packages for sale to potential contractors, provide the Borough with the Notice to Bidders for advertisement, respond to contractor inquiries during the bid period, attend the bid opening, prepare a summary of bids, review and contact contractor references, as required, and prepare an award recommendation to the Borough. In addition, this phase includes attendance at project meetings up to the point of bid award, as required.

PROJECT SCHEDULE

The following is the anticipated project schedule:

	<u>Approximate Start Date</u>	<u>Approximate End Date</u>
Mayor & Council Approval of this proposal	January 27, 2020	-
Preparation of Construction Specifications/Design Documents ***	February 3, 2020	April 20, 2020
NJDOT Concurrence	April 24, 2020	May 29, 2020
Authorization to Bid	May 2020	-
Advertise for Bidding	June 2020	-
Bid Opening	June 2020	-
Council Award	July 2020	-
Preconstruction Meeting	July 2020	-
Construction	August 2020	October 2020



****Please note that field work is weather dependent and could be delayed due to inclement weather.*

FEE AGREEMENT

Maser Consulting will provide the services outlined in Tasks 1.0, 2.0, 3.0 AND 4.0 for a **COST NOT TO EXCEED \$52,750.00**. For your convenience, we have broken down the total estimated cost of the project into the categories identified within the Scope of Services.

TASK 1.0 – SURVEY SERVICES	\$12,250.00
TASK 2.0 – DESIGN SERVICES	\$30,500.00
TASK 3.0 – NJDOT GRANT ADMINISTRATION	\$ 4,500.00
TASK 4.0 – BIDDING SERVICES & MEETINGS	\$ 5,500.00
TOTAL LUMP SUM FEE	\$52,750.00

The above design services will be provided on a lump sum basis not to exceed the listed amount. This Contract and Fee Schedule is based upon the Borough Engineering Contract Authorized by the Borough of New Providence. Please note, Construction Administration and Inspection are NOT included in this proposal. A proposal for those services will be prepared and provided to the Borough upon opening of contractor bids. The hourly rates utilized for the project will be in accordance with the Borough Engineering Contract previously approved by Mayor and Council.

The Borough CFO should also review and discuss this agreement with the appropriate Borough staff regarding allocation of the appropriate funding and/or bond ordinance for said engineering services.

PROJECT DELIVERABLES

Upon completion of the bid package, Maser Consulting will provide the requested number of copies to the Borough.

REIMBURSABLE EXPENSES

Reimbursable expenses including delivery, printing, copying, postage and other reproducible costs for the above-mentioned deliverables are not included within this agreement and will be billed

based on the Contract and Fee Schedule for the Borough Engineering Contract Authorized by the Borough of New Providence.



EXCLUSIONS

Any service associated with the following items is specifically excluded from the scope of professional services within this agreement:

- Construction stakeout services;
- Preparation of easements and/or metes and bounds documents;
- ALTA surveys;
- Property title search;
- Permitting with outside agencies other than submission to NJDOT for concurrence;
- Wetland delineation or reports;
- Snow removal;
- Utility mark-out coordination; and
- Traffic Safety Control.

If you find this proposal acceptable, please forward a copy of the Resolution of Approval for this proposal to this office. This will constitute approval of the proposed work.

Thank you for the opportunity to offer our services for the NJDOT FY2019 Fairview Avenue Improvements. We look forward to working with you on this and future projects. In the meantime, should you have any questions regarding this proposal, please feel free to contact me.

Very truly yours,

MASER CONSULTING P.A.

A handwritten signature in blue ink, appearing to read 'Kevin Boyer', is written over the printed name.

Kevin Boyer, P.E., C.F.M.
Project Manager / Senior Associate

KEB/ljb



Engineers
 Planners
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 Environmental Scientists

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**ULTIMATE USER'S WAIVER AND DIRECTION
 NOT TO SET CORNER MARKERS**

TO: Jeffrey D. Bunce, P.L.S.
 Maser Consulting P.A.
 400 Valley Road, Mt. Arlington, NJ 07856
 (973) 398-3110 Phone
 (973) 398-3199 Fax

FROM: Name: _____

Phone Number: _____

Address: _____

RE: Block _____, Lot _____

Town _____

This is to advise that I have been made aware of my right to have corner markers set as part of a survey to be performed on the aforementioned property. In addition, I have been made aware of the potential impact of signing the waiver including: (1) the possible need for a future survey as a result of physical improvements to the property, such as a fence, addition, deck, pool or shed, and (2) the potential inability of the ultimate user to identify the actual boundary of the property which could result in a boundary dispute with an adjoining property owner and /or property improvements not accurately situated on my property. The right to have corner markers set is hereby waived, and you are directed to perform the land survey without the setting of corner markers as provided by the regulation (N.J.A.C. 13:40-5.2) of the State Board of Professional Engineers and Land Surveyors.

 Ultimate User's Signature

 Date

 Witness' Signature

 Date

 Name of Witness (typed or printed)

SURVEYOR'S NOTE: When this form is completed, signed and witnessed, the Surveyor will NOT set corner markers.

 Address of Witness (typed or printed)

FOR SURVEYORS USE ONLY AFTER RECEIPT OF EXECUTED "WAIVER"

I hereby certify that I have:

1. Advised the ultimate user of the impact of signing the corner marker waiver, which shall include, but not be limited to, the possible need for a future survey as a result of physical improvements to the property and the potential inability of the ultimate user to identify the actual boundary of the property;
2. Reviewed the waiver to ensure that it was properly signed by the ultimate user and witnessed by a person other than a land surveyor; and
3. Performed a physical measurement of the property.

New Jersey Licensed Land Surveyor

Date

Client's Initials _____