



September 16, 2016 *updated October 7, 2016*

Mr. Stephen Trott, PE  
Town Transportation Engineer  
105 Gilead Road, Suite 300  
Huntersville, NC 28070

Re: Off-Site Roadway and Signal Modification Design for the Town of Huntersville – Mecklenburg County, NC

Dear Mr. Trott:

AMT is pleased to submit this proposal to provide roadway design and signal modification design engineering services for the Town of Huntersville project required for approval from the NCDOT, and Mecklenburg County, NC. For purposes of this proposal, “Consultant” will be AMT and the “Client” will be Town of Huntersville.

### **SCOPE OF SERVICES**

AMT is developing transportation improvement plans, construction drawings, and signal modification designs for Town of Huntersville. The following roadway improvements will be included:

#### **Hambright Road at Mt Holly Huntersville Road**

- Addition of an exclusive eastbound right-turn lane with 150 feet of full-width storage and appropriate taper on Hambright Road
- Addition of an exclusive westbound right-turn lane with 150 feet of full-width storage and appropriate taper on Hambright Road
- Redesign and retiming of the intersection signalization.

#### **Hambright Road at Statesville Road (US 21)**

- Addition of an exclusive eastbound left-turn lane with 175 feet of full-width storage and appropriate taper on Hambright Road
- Addition of an exclusive westbound left-turn lane with 150 feet of full-width storage and appropriate taper on Hambright Road
- Redesign and retiming of the intersection signalization.

#### **Mt Holly Huntersville Road at Statesville Road (US 21) (Southbound ramp intersection)**

- Addition of an exclusive left-turn lane with 125 feet of full-width storage and appropriate taper on Mt Holly Huntersville Road

The scope will also include the following:

- Submittal to the client for review and receipt of permits and encroachments from NCDOT and Mecklenburg County for all improvements.

Below is the proposed scope for the project:

### **Task 1 - Project Management**

AMT will provide project management consisting of day to day management of the Scope of Work by the Project Manager, Design Team, and provide coordination with “on-site” construction documents. It includes meetings; site visits; coordination with affected agencies, utilities, project administration and QA/QC activities.

### **Task 2 - Data Collection/Survey**

AMT will gather information necessary to complete the requested design. Data includes: design files, mapping information, R/W access permits, utility information, and drainage data.

#### **2.1 - Property Boundary Research, Control**

AMT staff will commence with performing property research of all of the adjoining parcels with the footprint of the survey. The project research will be gathered from online sources provided by NCDOT and Charlotte – Mecklenburg County GIS and the Registrar of Deeds. Property reconnaissance will be performed to locate property boundary monuments and reference the survey model to the North Carolina State Plane Coordinates System.

#### **2.2 - Topographic Survey**

The topographic survey will locate all of the land within the survey limits including all physical improvements above the surface, gravity fed sewer systems and underground utilities designated by NC811.

#### **2.3 - Plot Survey Data prepare base mapping**

Process field survey data in Micro Station format, compliant to NCDOT standards. The deliverable provided to the AMT engineering staff will be in the form of a digital file containing all of the forgoing scoped features.

### **Task 3 – Roadway Design**

AMT will utilize NCDOT standards for all elements of the roadway design, and preparation of the engineer’s estimate. Below is a list of tasks related to the development of the plans at each stage of the process:

#### **3.1 Design plans to include:**

- Review of existing conditions. This will establish the hard and soft constraints for the development of the design plans. Existing utilities and storm drainage; construction of widening with a possibility of curb and gutter and sidewalk (but not likely)
- Traffic Control and Pavement Markings Options: AMT will examine options for providing traffic control, signage, and / or pavement markings for temporary striping. Those options will be included if project team determines the options are necessary.
- Evaluate storm drain design. This assumes no stormwater management facilities (i.e. BMPs) related to the roadway improvements.
- Erosion Control and sedimentation.
- Evaluate location of utilities to include coordination with both public utilities and private utilities (gas, telephone, fiber optic, etc.) and possible need for relocations.
- Design Plan Set for first submittal to NCDOT and other public agencies: To include the following:
  - i. Existing Conditions Plan: GIS Survey Data and Existing Utilities
  - ii. Typical Sections
  - iii. Plan and Profile: Horizontal and Vertical Design
  - iv. Grading, Drainage and Erosion Control
  - v. Traffic Control Options

- vi. Pavement Marking Options
- vii. Storm Drainage
- viii. Evaluation of Stormwater pipe sizes
- ix. Roadway Cross Sections (if necessary)

### 3.2 Construction Drawings 100%

- Construction Plan Sets will be an update to the design plans after agencies review and comment. This submittal will concentrate on completion of the sealed drawings for all aspects of the project.

3.3 Utility Coordination: From the topographic survey and existing data supplied, AMT will coordinate with utilities located in the area near the roadway and site development. Through the development of the plans, utility conflicts will be recognized. The project team will lead discussions with the utility owners to resolve the conflicts. Utilities may include: power, gas, fiber optic, cable, telephone, etc. Any water and sewer utility coordination will take place with Charlotte Water management (formerly Charlotte-Mecklenburg Utilities).

3.4 Project Submittals to Agencies: Erosion Control Plans will be submitted to Mecklenburg County and all plan sets will be sent to NCDOT for review.

3.5 Cost Estimates: At the completion of each phase of the drawings, cost estimates will be developed. The estimates will be based on take-offs from the quantities.

## **Task 4 – Signal Modification Design**

The intersections of Hambright Road at Mt Holly Huntersville Road and Hambright Road at Statesville Road (US 21) are currently signalized. Improvements at the intersection will make it necessary to upgrade these signals. It is also assumed that the signals are maintained by NCDOT. Both intersecting roadways are state maintained and therefore, the signal plan will be reviewed by NCDOT.

The scope of signal design services will include the following:

- Evaluation and Review of Intersection Capacity Analysis (to determine the phasing plan and timing parameters)
- Signal Plans (including phasing diagram, table of operating, loop and detector installation chart, signal face ID, intersection layout, timing chart, proposed pole and stop line locations, notes, legend, clearance distance diagram and clearance timing calculation sheets);
- Electrical Details (including malfunction management unit programming details, detector rack set-up details, equipment information, pedestrian push-button wiring detail, field connection hook-up chart, countdown pedestrian signal operation note, load resistor installation detail, load switch assignment detail, and notes);
- Communication Cable and Conduit Routing Plans;
- Fiber Optic Splice Details;
- Project Special Provisions (specifications for metal poles, if needed).

**Product:** Final signal design plans to be submitted to the Town and NCDOT. This is typically a two-review cycle with NCDOT. NCDOT will also need an application, letter, and \$5k review fee, to be supplied by the Client.

## **Task 5 – Additional Services, Assumptions, and Exclusions**

This task will include any additional services that are not included in Tasks 1-4. Such work will be completed only upon the Client's direction, on an hourly basis plus reimbursable expenses, according to the attached rate schedule.

Other assumptions and exclusions:

1. All cost for prints and reproductions shall be billed against the reimbursable estimated budget. If this is exceeded, billing will be based on an hourly rate sheet.
2. All permit, application, impact, etc. fees are to be paid by the Client.
3. If Construction Phase Services are provided by the Client and not by the Consultant, the Client assumes all responsibility for interpretation of the Contract Documents and for construction observation and supervision and waives any claims against the Consultant that may be in any way connected thereto.
4. Construction support services for the construction are not included in this contract. If those services are requested, a separate contract will be written for those services.
5. Any additional meetings not mentioned in Task 1-4 will be considered additional services.
6. Survey and SUE performed by others.
7. NCDOT submissions will be prepared in MicroStation.
8. Pavement section by others and or provided by NCDOT standard.
9. Scope of work does not include environmental documentation.
10. Other Additional Services: In addition to the foregoing services being performed the following items may be provided upon request of the Client:
  - Bidding Assistance services.
  - Soil testing evaluation and pavement design.
  - Water system analysis.
  - Retaining wall design.
  - Flood Studies.
  - Riparian Buffer Variance request.
  - Wetland/Stream Impact Permitting – assumes none on this site.
  - Construction Phase Services per diem basis.
  - Site amenities plans.
  - Offsite Improvements – Roadway or Utilities not mentioned in proposal.
  - Verification or correction of information supplied by others
  - Rock Quantities or Rock Excavation Analysis.
  - Boundary and Topographic surveying.
  - Platting and Mapping Services.

### **SCHEDULE**

The goal of the permit completion for the above improvements would be so that construction completion would occur prior to the start of the 2017 school year.

The design plans will be complete 8-10 weeks after receipt of the survey via CAD. The signal design will take 6-8 weeks to be completed after completion of roadway design.

Construction drawings and signal designs will be complete 4 weeks after comment responses from NCDOT.

## DELIVERABLES

- Submissions prepared in MicroStation
- Construction Plans (follows the below NCDOT standard process)
- Utility Coordination
- Project Submittals to Agencies
- Cost Estimates at each milestone
- NCDOT permits required for construction

NCDOT Plan development/review and permitting will follow this standard process:

1. Hold a preliminary scoping meeting with NCDOT and the Town to set design parameters and address any concerns moving into preliminary design. The following items will be addressed during the preliminary meeting:
  - Detail proposed roadway improvements- turn lane and taper lengths
  - Typical sections
  - Lane restriction times
  - Preliminary clear-zone issues
  - Special site considerations and constructability issues
  - Overall NCDOT plan development and project construction expectations
2. Complete 25% plans, hold a project plan review-progress meeting with NCDOT
3. Coordinate any needed utility relocation
4. Complete 65% plans, hold a project plan review-progress meeting with NCDOT
5. Coordinate any needed ROW acquisition with the Town
6. Complete 100% plans, submit to NCDOT for review, along with the following items:
  - Cover Letter
  - Encroachment Agreement (Form 16.1B)
  - NPDES Statement (Form NPDES-1)
  - Verification of Compliance (Form VCER-1)

## FEE PROPOSAL

The work described in Tasks 1-4 will be completed for a lump sum fee of **\$68,095**, including reimbursable expenses. Any additional services (Task 5) will only be completed at the direction of the Client, on an hourly basis plus reimbursable expenses, according to an hourly rate schedule. Reimbursable expenses including travel, subsistence, and out-of-pocket expenses, multiplied by 1.15, will be charged to the Client. Standard rates for in-house expenses are as follows: mileage to be charged at the published IRS rate (currently at \$0.50 per mile), \$0.18 per copy, and \$1.00 per facsimile page.

**TERMS OF AGREEMENT**

If you are in agreement with this proposal and the attached terms and conditions, you may execute the agreement by signing where indicated below and returning one copy for our files. Please contact Mike Surasky at (919) 855-9989, should you have any questions regarding the proposal or scope of work.

A. Morton Thomas and Associates, Inc.  
"CONSULTANT"

\_\_\_\_\_  
"CLIENT"

BY:

*Michael Surasky*

BY:

\_\_\_\_\_

NAME:

Michael Surasky, PE, PTOE

NAME:

\_\_\_\_\_

TITLE:

Associate

TITLE:

\_\_\_\_\_

ADDRESS:

6131 Falls of Neuse Road,  
Suite 106,  
Raleigh, NC 27609

ADDRESS:

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\_\_\_\_\_

DATE:

10-7-16

DATE:

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ADDENDUM TO THAT PROPOSAL OF AMT TO TOWN OF HUNTERSVILLE DATED SEPTEMBER 16, 2016  
AND UPDATED OCTOBER 7, 2016

This Addendum shall modify and control over the Proposal and the Standard Contract Terms and Conditions.

Section 9 of the Standard Contract Terms and Conditions ("Standard Terms") is modified by adding the following: "except to the extent that any such liability is covered by and within the limits of coverage of the Insurance required by Section 7, in which case the limits of coverage of such insurance shall be the limits of liability."

Section 12 of the Standard Terms is modified in its entirety to read as follows:


SECTION 12 – GOVERNING LAW, VENUE. This Agreement shall be interpreted by and governed by the laws of the State of North Carolina, and the sole venue for the resolution of any dispute shall be a state or federal court in Mecklenburg County, North Carolina.

Add the Following:

AMT certifies that it is not listed on the Final Divestment List ("**Divestment List**") created by the North Carolina State Treasurer pursuant to Article 6E, North Carolina General Statute 147-86.55 *et seq* ("**Iran Divestment Act of 2015**"). AMT shall not utilize in the performance of its obligations under this Contract any contractor or subcontractor listed on the Divestment List, nor assign this Contract to any assignee on the Divestment List.

**E-Verify.** AMT shall comply with the requirements of Article 2 of Chapter 64 of the General Statutes of North Carolina. Further, if AMT utilizes any subcontractor, AMT shall require the subcontractor to comply with the requirements of Article 2 of Chapter 64 of the General Statutes of North Carolina.

A Morton and Associates, Inc.

By:   
Michael N. Surasky, PE

Town of Huntersville

By: \_\_\_\_\_



## STANDARD CONTRACT TERMS AND CONDITIONS

**SECTION 1 – GENERAL:** A. Morton Thomas and Associates, Inc., the "AMT", agrees to provide Professional Services described in the preceding PROPOSAL.

The "CLIENT", as referred to herein, is the other party to this "AGREEMENT" to which this PROPOSAL was prepared and submitted.

The entire AGREEMENT between AMT and CLIENT consists of the PROPOSAL, these Standard Contract Terms and Conditions, any applicable Supplemental Conditions of Service, and any other referenced exhibits or attachments.

**SECTION 2 – SCOPE OF WORK:** It is mutually understood that the scope of work and time schedule, if any, defined in the PROPOSAL are based on the information provided by CLIENT. If this information is found to be incomplete or inaccurate, or if unexpected conditions are discovered, the scope of work may change, even as the work is in progress. If the CLIENT requests additional services or when a change in the scope of work or time schedule is necessary, a written amendment to this AGREEMENT shall be executed by the CLIENT and AMT as soon as is practicable. Consent to such amendments shall not be unreasonably withheld.

**SECTION 3 – STANDARDS OF WORK:** AMT will perform services in a manner consistent with that level of care and skill ordinarily exercised by members of the Engineering profession currently practicing in the same locality under similar conditions. No other representations, express or implied, and no warranty or guarantee is included in this AGREEMENT, or in any report, opinion, document, or otherwise.

Any exploration, testing, surveys and analysis associated with the work will be performed by AMT for the CLIENT'S sole use to fulfill the purpose of this AGREEMENT. AMT is not responsible for interpretation by others of the information provided.

**SECTION 4 – RIGHT OF ENTRY:** CLIENT hereby grants AMT and any subconsultants or agents the right to enter from time to time the property to perform the services offered under this AGREEMENT.

**SECTION 5 – OWNERSHIP OF DOCUMENTS:** AMT will provide documents in a quantity and type as described in the PROPOSAL. Documents may include but not be limited to: engineering drawings and plans, specifications, survey reports and certifications, subsurface engineering reports, field data, and laboratory/test reports. Additional copies shall be furnished to the CLIENT at cost plus 10%.

AMT acknowledges CLIENT'S ownership of documents prepared for and paid for in full by the CLIENT. CLIENT acknowledges AMT'S rights of ownership and property interests in the documents, including all common law, statutory and other reserved rights, including copyrights, whether or not the project is completed. No third party may rely upon AMT'S documents, including but not limited to opinions, conclusions, certificates, reports, drawings, and specifications unless AMT has agreed to such reliance in advance.

CLIENT and AMT further agree that, if necessary, to execute under separate cover, electronic communications and CADD data transfer AGREEMENTS.

**SECTION 6 – COMPENSATION:** CLIENT shall compensate AMT for all services and direct expenses authorized and properly performed and delivered in accordance with the fees stated in the PROPOSAL. Subject to the foregoing, CLIENT may make partial payments based on regular monthly billings by AMT.

Payment of fees properly invoiced by AMT will be paid by CLIENT within 45 days of receipt of invoice. Notwithstanding the foregoing, CLIENT will make all reasonable efforts to collect from project owner(s), or other third party, for which AMT'S fees were invoiced as part of the CLIENT'S invoice to said owner, or third party.

CLIENT'S obligation to pay for the services invoiced by AMT are in no way contingent upon CLIENT'S ability to obtain financing, zoning, approval or governmental or regulatory agencies, final adjudication of a lawsuit in which AMT may be involved, or upon CLIENT'S successful completion of the project. Failure by CLIENT to make payments in accordance with SECTION 6 provisions may render any resultant AGREEMENT null and void.

The fees quoted in the PROPOSAL shall remain valid for a period of six (6) months from the date of the PROPOSAL. AMT may, at its sole discretion, honor quoted fees for services requested by CLIENT beyond the validity period.

Remittance address: 800 King Farm Blvd., 4<sup>th</sup> Floor, Rockville, MD 20850

**SECTION 7 – INSURANCE:** AMT will maintain General and Professional Liability Insurance for the protection of CLIENT and, if applicable, other third parties on an as required basis. Such insurance covering personal and bodily injuries or death shall be in the sum of not less than \$1,000,000 for one person and not less than \$1,000,000 for any one occurrence. Insurance covering damage to property shall be in the sum of not less than \$1,000,000 for any one occurrence and \$1,000,000 aggregate. Professional Liability Insurance coverage shall be in the sum of not less than \$2,000,000.  
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**SECTION 8 – INDEMNIFICATION:** AMT agrees to indemnify and hold harmless CLIENT'S shareholders, officers, directors, employees, and agents from and against any and all claims, suits, liabilities, damages, expenses which may arise from the performance of the services under this AGREEMENT.

CLIENT agrees to indemnify and hold harmless AMT from and against any and all losses to the extent caused by the negligence of the CLIENT, its employees, agents and contractors.

Neither CLIENT nor AMT will be liable to the other for any special, consequential, incidental or penal losses or damages including but not limited to losses, damages or claims related to the unavailability of property or facilities, shutdowns or service interruptions, loss of use, profits, revenue, or inventory, or for free use charges, cost of capital, or claims of the other party whatsoever.

**SECTION 9 – LIMITATION OF LIABILITY:** In recognition of the relative risks and benefits of the project to both the CLIENT and AMT, the risks have been allocated such that the CLIENT agrees to limit AMT'S total cumulative liability to CLIENT for any act or omission of AMT in connection with this AGREEMENT, including, but not limited to attorneys fees and costs, whether in contract, indemnity, contribution, tort, or otherwise, irrespective of the form of action in which such liability is asserted by CLIENT or others, shall not exceed the total compensation received by AMT under this AGREEMENT or \$75,000; whichever is less.

**SECTION 10 – TERMINATION:** CLIENT or AMT may, for any reason whatsoever, terminate this AGREEMENT in whole or in part, or for convenience or for cause, and upon 5 days written notice to the other. Upon receipt of written notice, AMT shall take all reasonable efforts to immediately avoid encumbering any further expenses for labor and/or materials under this AGREEMENT.

In the event of termination for convenience, AMT will promptly render to CLIENT a final invoice for all labor and material expenses encumbered through the date of termination, which may include, but will not be limited to expenses for demobilization, reassignment of personnel, and restocking charges for returned material. Upon receipt of aforementioned invoice, CLIENT shall immediately compensate AMT for all undisputed amounts.

Due to any default by AMT in the performance of services under this AGREEMENT, or, upon demand by CLIENT, to cure a failure to make progress consistent with the terms of the AGREEMENT or to provide adequate assurances of future performance, the CLIENT may elect to terminate this AGREEMENT for cause. CLIENT shall not be liable to AMT for any amount for services (labor and/or materials) not accepted, and AMT shall be liable to the CLIENT for any and all rights and remedies provided by law. If it is determined that the CLIENT improperly terminated this contract for cause, such termination shall be deemed a termination for convenience.

Regardless of whether termination was for convenience or cause, AMT will deliver to CLIENT, upon AMT'S receipt of all financial obligations due under the AGREEMENT, all reports and documents pertaining to services performed up to termination.

**SECTION 11 – DISPUTE RESOLUTION:** All claims, disputes or controversies arising out of, or in relation to the interpretation, application or enforcement of this AGREEMENT shall be submitted to non-binding mediation, in accordance with the current rules of the American Arbitration Association, as a condition precedent to litigation. Cost for mediation including the mediator's fees will be borne equally by each party to this AGREEMENT.

**SECTION 12 – GOVERNING LAW:** The validity of the terms of this AGREEMENT shall be governed by the laws of the State of Maryland. CLIENT waives the right to remove any legal actions to any other jurisdiction.

**SECTION 13 – TITLES:** The titles used in this AGREEMENT are for general reference only and are not part of the AGREEMENT. Parties to this AGREEMENT are advised to read the each provision and rely on the guidance of legal counsel as necessary to help assure a complete understanding of all provisions and the obligations imposed through acceptance.

**END OF STANDARD TERMS AND CONDITIONS**