

LEGAL NOTICE

The City of Tuscaloosa requests proposals for professional services for the following project: Design and Installation of Wireless Broadband Network. The City of Tuscaloosa seeks the services of a professional firm which has the knowledge, experience, and expertise to perform the scope of services as requested.

The City of Tuscaloosa intends to purchase a Wireless Broadband Network to support the CityWalk Project located throughout Tuscaloosa in Tuscaloosa County, Alabama. The City of Tuscaloosa is soliciting proposals from qualified firms for the wireless implementation along a 5.2 mile greenway walking/biking path. The greenway path (CityWalk) will originate at Harmon Park near the intersection of 10th Avenue and Greensboro Avenue and terminate at a community park located in the Alberta community. The CityWalk runs through neighborhoods and passes retail establishments and various businesses. The City is seeking to establish a partnership with one (1) selected firm who satisfies the RFP's minimum requirements for the provision of a complete technology installation and potential maintenance solution for this system/network. It is the purpose of the Request for Proposal (RFP) to determine the Vendor for the provision, installation, training, and maintenance for the Wireless Broadband Network.

The firm must comply with all applicable state, local, and federal regulations related to the services provided to the City. The City reserves the right, subject to negotiation and agreement, in writing, with the selected firm, to either expand or limit the scope of services as needed.

The selected firm will be required to have sufficient personnel to complete the tasks required by this scope of services. The selected firm will complete the required tasks in a timely and efficient manner.

A mandatory pre-proposal conference will be held on Thursday, July 16, 2015 at 10:00 am in City of Tuscaloosa Council Chambers, 2201 University Blvd., Tuscaloosa, AL 35401. Proposals are due by close of business Thursday, July 30, 2015. Firms are required to follow the instructions contained in the City's RFP document. To obtain a copy of the RFP for these services, please contact the Office of the City Attorney at 205-248-5140 and reference file number A15-0038. Alternatively, the RFP is available on the City of Tuscaloosa website at www.tuscaloosa.com.

A15-0038

CITY OF TUSCALOOSA)
STATE OF ALABAMA)

**REQUEST FOR PROPOSALS
(A15-0038)**

TO: Qualified Firms

FROM: The City of Tuscaloosa, Alabama

**RE: Request for Proposals for Professional Services Related to Wireless
Broadband Network**

DATE: June 15, 2015

Section 1. Introduction.

This is a Request for Proposals ("RFP") containing information concerning the above-referenced matter, an abbreviated scope of work, and evaluation items. Firms expressing interest should be fully capable of providing the end results requested.

This is a procurement of professional services as more particularly described herein. These professional services require a high degree of professional skill where the personality of the individual plays a decisive part. The unit price schedule, which includes hardware purchases and labor costs, represents costs which are incidental to and inextricably integrated with the professional services. This procurement will be conducted in a manner providing full and open competition consistent with the standards of 24 CFR § 85.36. To wit:

- a. Each firm's experience and qualifications will be evaluated primarily as they relate to the firm's ability to provide professional services related to the design and installation of a wireless broadband network.

- b. The City will make awards only to responsible firms possessing the ability to perform successfully under the terms and conditions of the procurement. Consideration will be given to such matters as firm integrity, compliance with public policy, record of past performance, and financial and technical resources. The City will require firms to execute a "Disbarment and Suspension Statement" certifying / verifying that the contractor is not suspended or disbarred or otherwise excluded under 2

CFR Section 408.220 of the government-wide non-procurement, disbursement and suspension list.

- c. Written proposals will be reviewed and rated by a panel of qualified City employees. The rating system will consist of a numerical grading system and a pass/fail grading system, as set forth in Section 3. The City may or may not elect to interview any of the responding firms.
- d. The City has exclusive and sole discretion to determine the firm whose services will be most advantageous to the City, with price and other factors considered, and reserves the right to reject all firms.

The purpose of this inquiry is to determine the interest or non-interest, pricing structure, and the qualifications of firms in providing the professional services required. A number of firms may be asked to express their interest in regard to these services. Following the receipt of Proposals, a certain firm or firms may be selected for further consideration.

Section 2. Project Overview; Contact Information

The City of Tuscaloosa intends to purchase a Wireless Broadband Network to support the CityWalk Project located throughout Tuscaloosa in Tuscaloosa County, Alabama.

The City of Tuscaloosa is soliciting proposals from qualified firms for the wireless implementation along a 5.2 mile greenway walking/biking path. The greenway path (CityWalk) will originate at Harmon Park near the intersection of 10th Avenue and Greensboro Avenue and terminate at a community park located in the Alberta community. The CityWalk runs through neighborhoods and passes retail establishments and various businesses. The City is seeking to establish a partnership with one (1) selected firm who satisfies the RFP's minimum requirements for the provision of a complete technology installation and potential maintenance solution for this system/network. It is the purpose of this Request for Proposal (RFP) to determine the Vendor for the provision, installation, training, and maintenance for the Wireless Broadband Network.

Given that conditions will vary from CityWalk Project to CityWalk Project, a number of specifics have been identified for unit cost proposal purposes. Vendors must base their proposal on the units as described in this document.

The Vendors shall include in their respective proposals a sufficient sum to cover the cost of all items, equipment, material and labor required to obtain a completed installation. Any defacement of the premises by the Vendor or their agents will be the responsibility of the Vendor for replacement or repair unless otherwise agreed to by the Owner in writing. Contact should be made with the Owner/Consultant to gain access to the premises and assure consideration of all physical requirements that may not be readily apparent to the Vendor upon visual inspection alone.

A detailed Scope of Services is provided as an exhibit to this RFP (Exhibit A), the terms of which are adopted by reference and included in this RFP as if contained herein. In addition, contract terms to which the successful firm will be expected to comply are provided as an exhibit to this RFP (Exhibit B), the terms of which are adopted by reference and included in this RFP as if contained herein. .

Consultants:

TALA Professional Services, Inc.
1116 20th Street South, #306
Birmingham, Alabama 35205
Phone: (205) 578-1993
And
Walker Associates, Inc.
917 22nd Avenue – Suite B
Tuscaloosa, AL 35401
www.walkercivil.com
(205) 561-3778 Office
(205) 561-3779 Fax

Requests for information regarding this RFP, including the procedures, regulations and/or technical requirements set forth herein, shall be directed only to the Owner. All such requests will be reviewed and responded to by the Owner. All requests must be in writing and mailed or delivered via facsimile transmission or electronic mail to the following:

Walker Associates / TALA Professional Services
Attn: Jason Walker or Tim Lewis
917 22nd Avenue – Suite B
Tuscaloosa, AL 35401
(205) 561-3778
(205) 561-3779 Fax
Jason Walker: jwalker@walkercivil.com

Tim Lewis: tlewis@talapro.com

No questions will be accepted for response after 10:00 a.m. CST on July 20, 2015. Any clarification of the RFP documents will be made by addendum to this RFP, which will be posted on the City's website. Owner will issue addendum in response to clarifications, or for any other reasons considered advisable. An addendum becomes a part of the RFP. All questions/answers will be shared with all Proposers.

Section 3. Proposal Requirements, Scheduling of Proposal Response and Mandatory Pre-Proposal Conference, and Firm Qualification Requirements

The selected firm must be experienced and qualified to provide the required scope of services. To be eligible, the firm will be required to be licensed and approved for work within the State of Alabama. The firm selected must have expertise as required by this RFP.

Firms interested in performing the work will be considered on the basis of a proposal containing information submitted in response to this request in a form, submitted as economically as possible, in 12-point font or larger of either Times New Roman or Arial. Front and back shall be considered 2 pages.

Proposals are due by close of business Thursday, July 30, 2015.

All proposals should be submitted in 8 ½" x 11" paper size. Each proposal shall be prepared simply and economically, providing straightforward, concise delineation of the firm's capabilities to satisfy the requirements of this RFP. **Fancy binding and color displays other than those necessary are highly discouraged.**

Provide three (3) bound copies to:

**Grant H. Wilson, Associate City Attorney
Office of the City Attorney
City of Tuscaloosa
Post Office Box 2089
Tuscaloosa, Alabama 35403-2089
(205) 248-5140**

**Courier address:
Office of the City Attorney
2201 University Blvd.
Tuscaloosa, Alabama 35401**

The Owner will conduct a Pre-Proposal Conference for the purpose of reviewing the RFP, answering questions, and establishing an understanding of all requirements governing each Vendor's response to the RFP. The Pre-Proposal Conference will be

held at the following location, date and time: Tuscaloosa City Hall – Council Chambers; 2201 University Blvd., Tuscaloosa, AL 35401; July 16, 2015 at 10:00 a.m. **Attendance at the Pre-Proposal Conference is mandatory in order to be considered.**

Proposals may be withdrawn prior to proposal submission time specified in this document by presentation of a written request to withdraw and received by the Owner prior to proposal submission date/time. No proposal shall be withdrawn or modified after the time set for proposal opening.

The City has exclusive and sole discretion to determine the firm whose services will be most advantageous to the City, with price and other factors considered, and reserves the right to reject all firms.

The selected firm or firms must be experienced and qualified to provide the required scope of services. The firm or firms selected must have expertise related to the general Scope of Services set forth in Section 2 and Exhibit A. The following information must be submitted with the proposal on the date indicated above **in the order indicated below.**

- a. A listing and complete description of at least five (5) systems recently (within two years) installed by the Vendor of similar size and complexity to that proposed is also requested and shall include the names and data numbers of persons to contact regarding these systems. Provide at least five (5) references.
- b. Experience and Qualifications. A statement of the firm's qualifications to perform the work and years in business. The statement should include the following:
 - 1. The general experience of the firm and a brief company profile.
 - 2. The specific experience of the proposed personnel in the fields that the proposed services are requested, their qualifications, years of experience, professional certifications and availability to perform the work and services to be provided. Statement should include number of personnel available in the following positions: installers for this project; telephone support; technical support; sales; other support; other staff as required to complete the scope of services. Also, Please provide a resume or a brief description of

technical skills/certifications for all installers, as well as a brief overview of the general technical skill sets for telephone support personnel and technical support personnel. Please include a statement as to the firm's proximity to Tuscaloosa and whether or not it maintains an office in Tuscaloosa.

3. A statement of experience and work of similar nature that all the proposed personnel have performed, a statement as to whether the proposed installers will be shared with other projects, and a statement as to how many other installations will be occurring simultaneously with this project..

4. A statement as to whether the firm or any subcontractors are a minority or woman owned business enterprise.

5. A statement as to professional standing including any pending controversies outstanding. If none exists, such a statement should be made.

6. A list of qualified persons in other disciplines required for the proposed services to be acquired from outside sources, if applicable.

7. A statement as to whether the firm can commit the necessary resources to meet the dates and staged implementations of this project.

c. Please include a statement as to the firm's proximity to and familiarity with the City of Tuscaloosa, as well as any proposed associations with local firms.

d. Please include a statement as to potential general conflicts of interest that would prevent the City of Tuscaloosa from entering into an agreement with your firm pursuant to this RFP. If none exists, such a statement should be made.

e. Firm must be licensed and approved for work in the State of Alabama; please include a statement to this effect.

f. Firm shall submit with their proposal the most current of the following financial statements (to include subcontractors):

1. **Most recent annual report.**
 2. **All subsequent quarterly statements.**
- g. Firm shall include in its response:**
1. **Complete technical and physical specifications (with visual representations for the systems proposed). This pertains to Wireless Broadband Network Equipment and all other specified peripherals.**
 2. **Technical documentation of the proposed type system shall include system capacity.**
- h. Each firm shall provide a narrative describing their proposed installation plan. Included in this narrative shall be a detailed work plan covering the time frame from contract award to implementation date, including milestone charts and work schedules, to include the following:**
1. **A definition of their current or planned service capability as related to satisfying the requirements of this RFP.**
 2. **A statement of location and size of the workforce and a current listing of installations similar to that proposed presently maintained by Vendor.**
- i. Submittal requirements as delineated in the Scope of Service, which is provided as an exhibit to this RFP (Exhibit A), the terms of which are adopted by reference and included in this RFP as if contained herein.**
- j. Pricing. Firm shall include pricing structure. Refer to Unit Price Schedule, which is provided as an exhibit to this RFP (Exhibit C), the terms of which are adopted by reference and included in this RFP as if contained herein. The prices listed in the Vendor's pricing tabulation must be the prices of services and equipment that can be delivered based on the quantities included.**
- k. Please include the Firm's proposed Service Plan, Installation Plan, and Training Plan.**

- I. Technical Information. Provide the following:**
- 1. Executive Briefing – Provide a brief overview of the proposed solution.**
 - 2. General Requirements – Explain how the proposed solution addresses the requirements listed in the RFP.**
 - 3. Technical Description – Provide a detailed review of each of the components of the proposed solution.**
 - 4. Equipment Inventory Examples – Provide a detailed description and example of the database or spreadsheet to be produced listing the installed equipment.**
 - 5. Solution Summary – Provide a brief statement which explains why your solution is superior.**
- m. Firm may add or include other pertinent information, not specifically requested, which they feel may serve to substantiate the capabilities of the equipment proposed or the Firm's ability to fulfill the obligations imposed. Owner reserves the right to request additional information to satisfy any responsibility requirements.**

Scoring Criteria

The City shall evaluate proposals upon criteria from three categories: equipment considerations, Vendor considerations, and financial considerations. A maximum of 1000 points per proposal will be awarded in these areas as indicated below. The Owner shall hold sole discretion in the evaluation of the proposals in these areas.

- a. Equipment Considerations**
- It shall be considered of utmost importance that the systems be designed in a manner which fulfills the minimum size, capacity and performance characteristics contained in the systems requirements of this document. Systems which fail to meet any of the requirements as set forth herein may**

be rejected. The manner in which systems requirements are met as well as the availability and functionality of specified items such as, ease of systems operation and projected longevity are among the items which will be considered. Points awarded as a result of such equipment considerations shall not exceed 300. The Owner reserves the right to determine whether or not a given system meets, exceeds, or fails to meet their short and long range needs. Furthermore, those proposals which meet or exceed these needs shall be ranked by the evaluators and relative points awarded accordingly.

b. Vendor Considerations

It is important that the Vendor providing the cable be totally capable and qualified to provide, install and maintain the Wireless Broadband Network Equipment. The Owner shall evaluate the Vendors with regard to experience (particularly with other installations of comparable size and complexity), available manpower, financial stability and proposed installation, training and maintenance plans. Proposals from Vendors who are unable to demonstrate, to the satisfaction of the evaluators, that they are fully capable of fulfilling all the obligations imposed upon the Vendor by this document, shall be rejected. Furthermore, the Owner shall determine which Vendor is most qualified to fulfill these obligations and assign points not to exceed 300 in light of their ranking. Additionally, live demonstrations will bear weighting in this category as well as other key indicators regarding the Vendor.

c. Financial Considerations

Initial recurring costs of the system shall, of course, be the major determinant in the selection process. Financial evaluation will be undertaken to determine the lowest true and total cost over a three-year system life cycle. True and total costs of a given proposal shall be determined by the Owner utilizing financial data provided by the Vendor, as well as, other cost items which will be considered appropriate by the Owner. Those cost items which will be considered are: cost of lease or purchase; cost of maintenance; cost of future additions based upon an assumed annual average growth; cost of insurance; costs of systems administration; and any other determinate costs associated with the acquisition, installation and operation of the proposed systems. Owner reserves the right to determine total systems costs and will rank acceptable proposals according to the following cost formula:

$A/B \times 400 = C$, where:
A = Lowest Cost Proposal
B = Proposal Being Evaluated
C = Points to be Applied

d. **Understanding of Criteria**

The award, if any, shall therefore be made to the Vendor who, in the opinion of the Owner and its evaluators, offers the optimum blend of equipment capabilities, Vendor responsibility and total systems cost. By submitting a proposal, Vendor signifies that they understand and accept the criteria upon which their proposal will be evaluated and the sole discretion of the Owner's evaluators to determine ranking in these categories. Award for this contract will not necessarily be made on lowest cost bid.

The City reserves the right to interview a firm or multiple firms as it sees fit. There is no guarantee that a contract award will be made pursuant to this RFP. This RFP may be modified or amended at any time and for any reason, in the discretion of the City.

Any questions by the firm related to this RFP should be submitted in writing along with the firm's proposal.

Section 4. Scope of Services Overview

The City of Tuscaloosa is soliciting proposals from qualified Firms for the wireless implementation along a 5.2 mile greenway walking/biking path. The greenway path (CityWalk) will originate at Harmon Park near the intersection of 10th Avenue and Greensboro Avenue and terminate at a community park located in the Alberta community. The CityWalk runs through neighborhoods, passes retail establishments and various businesses. The City is seeking to contract with one (1) selected Firm who satisfies the RFP's minimum requirements for the provision of a complete technology installation and potential maintenance solution for this system/network.

The successful Firm will be required to submit a proposal that demonstrates a technical expertise, past experience with similar systems/networks, a clear understanding of the objectives/goals of the City, and capacity to engage additional resources to enhance or expand the system/network. The City may require presentations by firms to include their company and product description, approach, proposed solution, and any new ideas/innovations they offer that would add value for the City. The firm should clearly explain how their proposed solution will meet each of the following criteria. The Owner has the right to select the competitive proposal that is most responsive.

Firms are expected to review the description as described and note any perceived gaps in what is described here and provide feedback via questions.

The successful Vendor shall furnish all labor, materials and equipment necessary to perform and complete the work called for in the specifications, plans or other instructions attached to or referred to in the resultant contract. All work shall be done in a professional manner by workers skilled in their respective trades and all materials furnished shall be new and the best of their respective kinds, unless otherwise specified. The work shall be completed within the time stated in the proposal. It is the Vendor's responsibility to bring potential delays to the attention of the Owner. The successful Vendor must comply with the Owner's performance schedule unless the Owner formally declares and approves an extended time interval for work completion and project acceptance. The successful Vendor shall be held to repair or replace, at their expense, any defective equipment or materials furnished within one (1) year from the date of final acceptance of the work by the Owner.

Please note that the following documents are provided separately as exhibits, the terms of which are all adopted by reference and included in this RFP as if contained herein:

- **Exhibit A – Scope of Services**
- **Exhibit B – Draft Contract Terms**
- **Exhibit C – Unit Price Schedule**
- **Exhibit D – Wireless Drawings**

END RFP.

EXHIBIT A – SCOPE OF SERVICES

Wireless Network Hardware and Network

1. Scope of Project

- a. The City of Tuscaloosa is soliciting proposals from qualified Firms for the wireless implementation along a 5.2 mile greenway walking/biking path. The greenway path (CityWalk) will originate at Harmon Park near the intersection of 10th Avenue and Greensboro Avenue and terminate at a community park located in the Alberta community. The CityWalk runs through neighborhoods, passes retail establishments and various businesses. The City is seeking to contract with one (1) selected Firm who satisfies the RFP's minimum requirements for the provision of a complete technology installation and potential maintenance solution for this system/network.
- b. The successful Firm will be required to submit a proposal that demonstrates a technical expertise, past experience with similar systems/networks, a clear understanding of the objectives/goals of the City, and capacity to engage additional resources to enhance or expand the system/network. The City may require presentations by firms to include their company and product description, approach, proposed solution, and any new ideas/innovations they offer that would add value for the City. The firm should clearly explain how their proposed solution will meet each of the following criteria. The Owner has the right to select the competitive proposal that is most responsive.
- c. Firms are expected to review the description as described and note any perceived gaps in what is described here and provide feedback via questions.
- d. A complete proposal response will include the following sections:
 - a. Summary of the proposed solution
 - b. High level project plan to implement the solution. This should show relative dates for each major step
 - c. Detailed test plan
 - d. Total solution price including hardware, installation, setup, configuration, and first year maintenance/support
 - e. List of itemize hardware, software, and other products / services required for the complete and functional system

The services described herein require a high degree of professional skills where the personality of the individual plays a decisive part. Any purchases made pursuant to the required scope of services are incidental to and inextricably linked with the professional services, thereby making the purchases exempt from competitive bidding requirements.

2. System General Description

- a. Provide a coordinated installation plan for the wireless broadband network.
- b. Firm will be responsible for providing a fully functional wireless broadband network designed with ease of operation in mind. The Firm may propose, as an option, approved equivalent hardware that meets the performance and technical system design requirements.
- c. Must provide listing of the primary training needed for City staff and any additional training that would be recommended. Provide the cost of training included with the base system and additional cost for extra training, if required.

This section contains a description of the wireless broadband network plus how the system is expected to function once the installation and testing are completed.

The solution will consider three major aspects:

CityWalk WLAN Logical Diagram

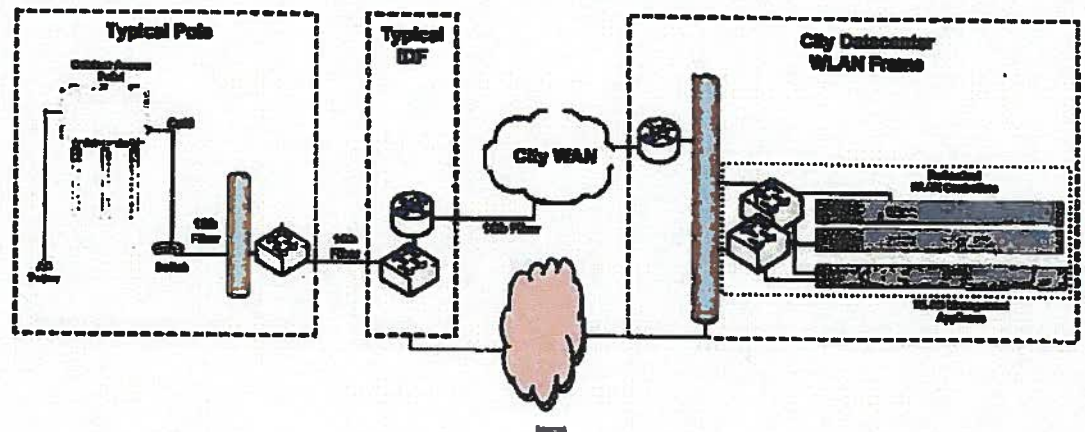


Figure 1 CityWalk Logical Diagram

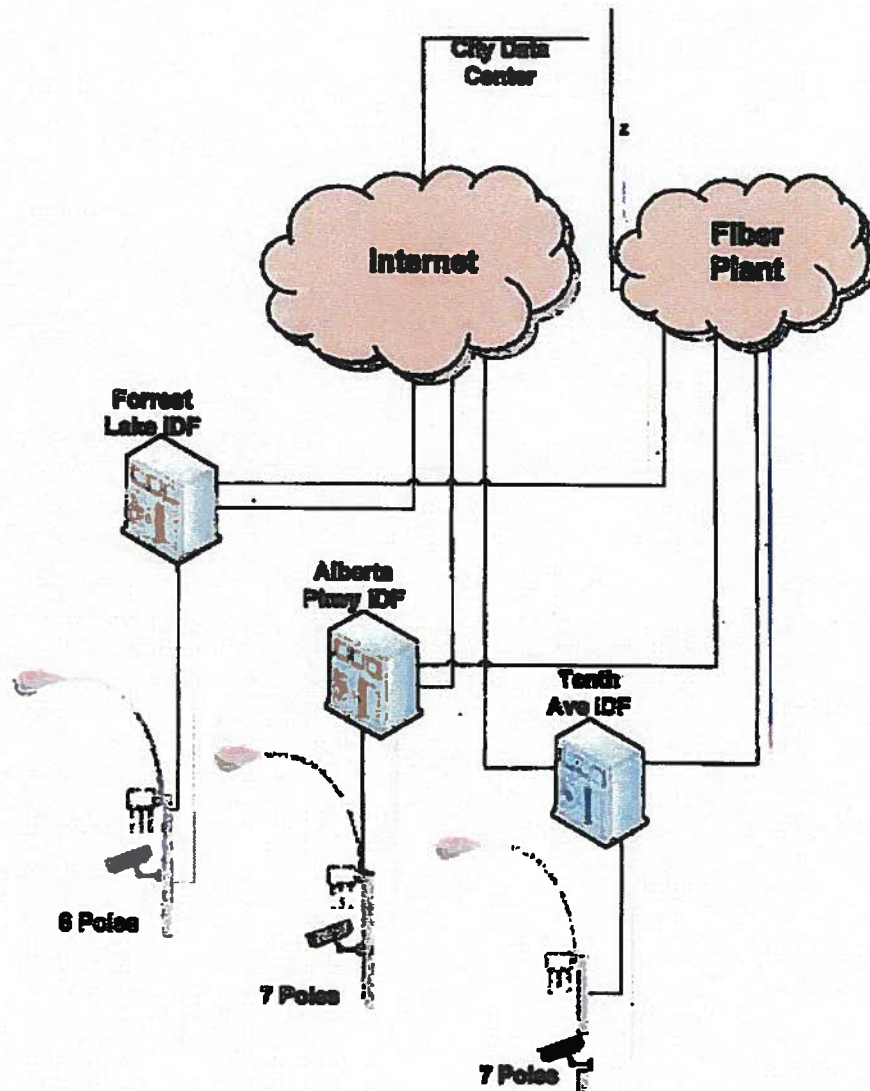


Figure 2 Solution Context

- **Light poles along the City walk. These poles will house the wireless access points. The light poles will be provided by the City and are described in appendix A: that will be located at the coordinates described in Appendix B:**
- **For the current scope, there will be up to three initial IDF buildings that concentrate the fiber optic cable from each pole. It is expected that there will be between 5-7 light poles per IDF and this IDF will have a 1 Gigabit link to the Internet. Additionally, each IDF will have a 1Gigabit fiber connected to the City Data Center to send video images back to the City.**

- All City Walk wireless management functions will be housed in the City of Tuscaloosa data center at 2201 University Blvd E, Tuscaloosa, Alabama 35404
- At the time of this writing, it is unknown if the City will have independent Internet links in each IDF or if there will be a consolidated link at the City data center. As a result, the vendors will need to bid this in two ways:
 - The IDFs have no security or routing functions. Traffic will be segregated via VLANs such that Internet traffic will be carried on one VLAN, public safety on a second, and management will travel on a third. All of this traffic will flow back to the city data center where each flow will go be routed appropriately. The security functions will then be placed in the data center.
 - The IDFs have independent routing, VPN, and security functions that are managed at the city data center.
 - The APs will be hard wired at the top of the pole to AC power to be provided by others.

Design - Install

Conceptual

1. Provide a narrative description of how the bidder's solution will provide wireless access for users of City Walk. This narrative description should address management, resiliency, capacity, security, serviceability and access control.
2. Include a connectivity diagram illustrating how the major hardware components will be connected.
3. Describe infrastructure, services and other hardware needed to ensure your proposed solution will work in the Owner's environment.

Technical

1. Provide a spreadsheet of each item required to fully implement your proposed solution, include quantity, unit cost and manufacturer.
2. Provide specification cut sheets on each major hardware and software item.
3. Provide a typical recommended layout/positioning functions as they will exist in the solution. For example, "we propose to place firewall

and content filter software in the router in the IDF that is connected to the carrier's Internet router" or "we propose to place the wireless controller function in the IDF".

Installation Requirements

Pre-Install

1. Provide a detailed project plan with timeline and milestones; resource allocation, sample progress report and sign off checklist.
2. Present a phased deployment/installation schedule for review and acceptance by the Consultant and Owner. Input will be provided by the Consultant and Owner regarding locations and activities that could impact installation.
3. Provide an end to end test plan that demonstrates the following:
 - Power on system testing
 - Implementation of up to 8 VLANs (including management, guest users, Public safety)
 - Ability of the solution to provide DHCP, DNS, NTP services to end users or to be configured to existing City managed servers. While the ISP may provide DNS and perhaps NTP, we recognize that the solution will need to provide DHCP at a minimum.
 - Ability for a user to access sites on the Internet
 - Ability to implement QoS such that each wireless user is given a predetermined and configurable burst of capacity. See Appendix B for the estimate of users per segment.
 - Ability to validate guest users via a validation process.
 - Ability to insert advertising into the guest validation splash screen
 - Ability to configure session timeout for guest users whose connections exceed the duration TBD by the City
 - Ability to block access to sites considered inappropriate and provide an automated subscription service to this list.
 - Ability to provide validated access to the Public Safety VLAN based on the City Public Safety Active Directory

- Ability to export event logs from each device included in the solution to the City SNMP console. Firm equipment should support SNMPv1, v2, and v3.
 - Ability to export event logs such as a failed access point or controller to the City SNMP console. Firm equipment should support SNMPv1, v2, and v3.
 - Ability of the solution to withstand a failed controller.
 - Ability of the solution to withstand the failure of access to the City Data Center for guest users and sustain performance
 - Demonstrate ability to support load up to 1Gbit of traffic back to the Internet and 2000 concurrent users per IDF
 - Demonstrate ability to produce SNMP alerts of different severity
 - Demonstrate ability to deliver SNMP alert notifications as dictated by the City.
 - Demonstrate service support services. This includes taking a device offline and demonstrating all of the processes required to replace the failed device and put it back into production
4. Provide a recommended training plan for technical support staff (show cost as separate line).
 5. Describe the staffing required by the city to manage the solution after it is placed into operation. This should include number of people, level of skills, and typical activities that these staff will perform.

Provide a detail description of the services required to implement the solution.

6. Provide an estimate of City resources (number and skill level of resources) required to support the installation
7. Provide a description of services to provide ongoing management of the infrastructure. This should include but not be limited to:
 - Problem management/resolution
 - Capacity management
 - Incident management
 - Restoring a failed device within 4 hours of failure

8. Provide an item by item and total cost for an annual maintenance agreement for the 2nd and 3rd year of operations

Installation

1. Provide a detailed installation plan (phased) with a timeline, progress review method and resource allocation.
2. Describe your project management methodology and how you will ensure smooth and on time project completion.

Post-Installation

1. Propose a systems acceptance checklist to be executed by the Owner to insure all features and functions have been realized.
 2. Deliver all required documentation to the Owner.
- a. Firm is responsible for providing all required switches, cables, and related hardware. While the wireless equipment can be provided by firms other than Cisco, the switches must be Cisco Systems. All materials, labor and equipment necessary to complete the scope of work defined in the Request for Proposal Wireless Network related hardware must be included in the firm's response. Upon completion of installation, the owner will not be responsible for costs outside the scope of work unless otherwise reviewed and approved by the Owner in advance. The specifications cover the Firm's installation of fully functional data network (with the appropriate image, domain and network connectivity) to be implemented by the Implementation Date: To Be Determined by the City.

3. Installation Guidelines

- a. All equipment, materials and work required to fulfill the scope of the project will be the responsibility of the selected Firm. All expenses related to shipping, travel, lodging, training and related costs where applicable shall be included in Firms response. The Owner will not be responsible for costs outside the scope of work unless otherwise reviewed and approved by the Owner in advance. The specifications cover the Owner's installation of a fully functional system to be implemented over a period of time as defined in the tentative project timeline to be issued.
- b. All work necessary to install, test and document the installation specifics shall also be included in the proposal. Documentation will include but not be limited to a project plan and schedule; equipment list with serial numbers, logical network diagram, and physical layout diagrams showing location of equipment and general implementation notes. Full and

comprehensive training of equipment users and administrators shall be included in the proposal.

- c. Firm shall be responsible for requesting clarification from the Owner regarding any equipment items or work, which Firm believes, may fall outside the scope of the project. Such requests for clarification, and any response, shall be made in writing and shall become a part of the Firm's proposal. Unless otherwise clearly indicated, the proposal submitted shall be interpreted to include work and equipment described in this RFP to be within the scope of the project.

4. User assumptions

The City Walk wireless environment is to be sized in order to accommodate University of Alabama Football and major event crowds. The crowd size is based on the following:

- The crowd is walking rather than static. If the crowd were static, the density would increase. There may be times when a given access point must support double the load specified in Appendix B.
- The City Walk is up to 12 feet wide.
- From each person's back to the back of the person in front of them will be 4.875 feet on average
- No more than 4 people abreast
- 0.5 active devices per person or every other person will have an active device.
- For each 300 feet of City walk, there could be up to 123 active users. $123 = (300\text{ft} / 4.875\text{ feet of space for a person from her back to that of the person in front of them.}) * (4\text{ users abreast} * .5\text{ active devices per user.})$
- If two poles are 600 feet apart each pole must support up to 246 active users.

5. IP addressing assumptions

When the City walk is complete, a user should be able to walk from beginning to the end without revalidating or obtaining a new IPv4 address

- A class "B" address should be assigned to the entire City Walk. (10.1.0.0 / 16)
- Each IDF should serve a /20 DHCP range

- DHCP leases should be configured to not exceed 8 hours
- The IDF will have a public IP address and 1 or more private addresses that fit in the 10.1.0.0 range)

1) Minimum Specifications for Access Points:

- WiFi Alliance certified
- WiFi MultiMedia (WMM) certified
- 802.11n/ac compliant
- Support up to the number of simultaneous users per access point provided in Appendix B.
- Support up to 8 WLANs
- Support 802.11 dynamic frequency selection (DFS)
- Must be capable of processing subscriber traffic during controller connectivity outages
- Support automated configuration from the WLAN controller
- Support manual configuration/troubleshooting from a local console connection or remotely via management IP interface
- External 110/120VAC power adapters
- Include a NEMA protective enclosure
- Operating temperature: -40 to 55°C (-40 to 131°F)
- Storage temperature: -50 to 85°C (-58 to 185°F)
- Wind resistance - up to 100-MPH sustained/165-MPH gust winds

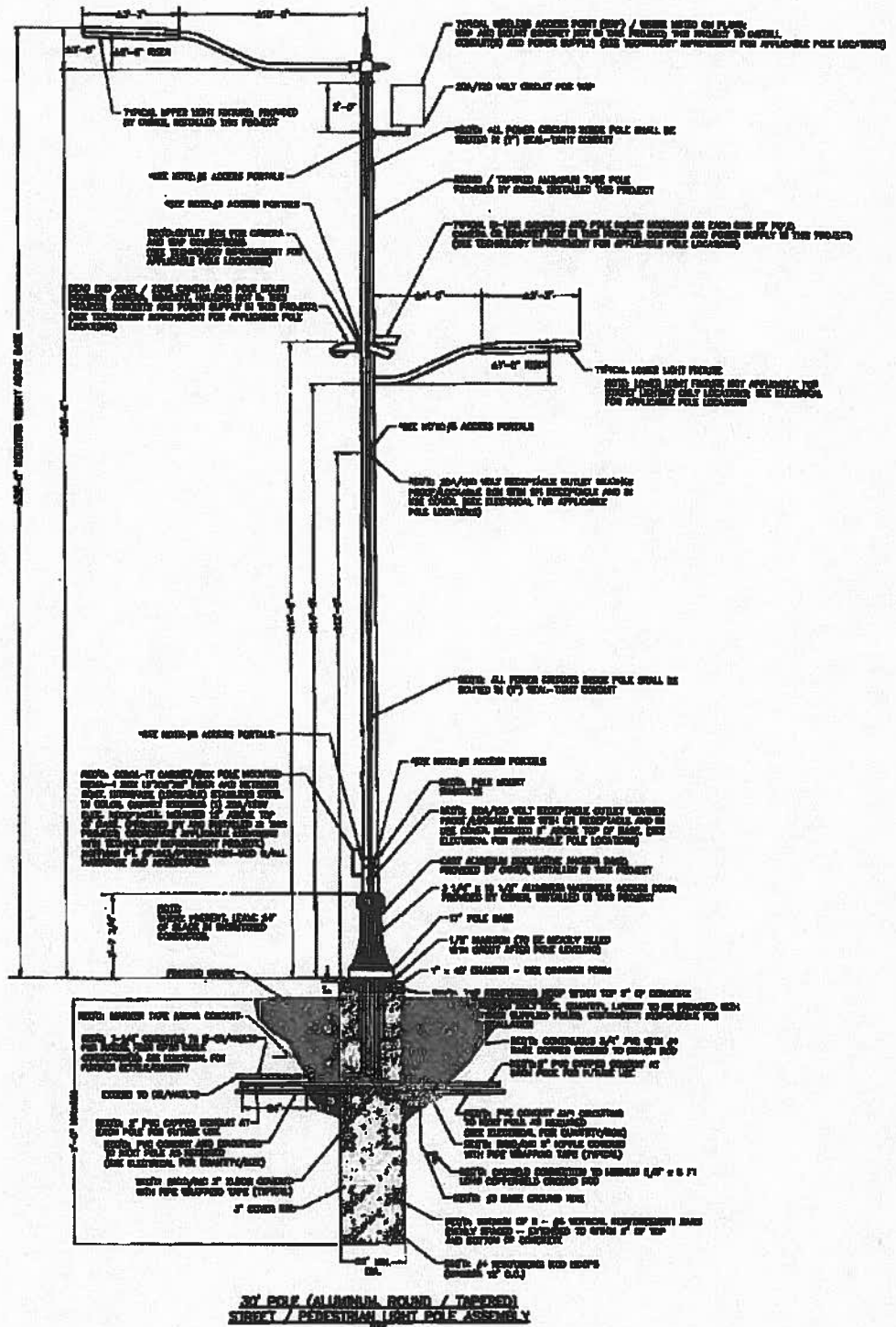
2) Minimum Specifications for the IDFs:

Router to the City Data center, wireless environment and Internet. Ethernet to fiber media converter. Router will provide VPN and Internet connectivity. The VPN will be used to provide management for the access points and the equipment in the IDF. This need may be addressed by VLANs running back to the city data center. The vendor should provide two configurations. One where routing and the security functions must occur in the IDF and a second where VLANs will be trunked from the City Data Center

- Security functions:
 - o Firewall function
 - o Content filtering with automated subscription service
 - o IPSec VPN function
- DHCP function
- Standard IP routing functions
- NTP function
- DNS or redirect to appropriate DNS source
- All specified equipment must not be within two years of end of sales support.

- Firewall function
 - Content filtering with automated subscription service
 - IPSec VPN function
- Sufficient 1G Ethernet switch ports to support the all functions described for the data center
 - Tool to provide Active Directory validation for Public safety employees using the City Walk Wireless network as well a guest user access on the City Walk.
 - The network shall support WPA2 and implement security measures at the application, data link and device layers of the communication hierarchy to prevent unwanted intrusion into the network. The Firm shall describe the security measures included in their proposal. The network shall also incorporate integrated security measures for data traffic between nodes.
 - The proposed wireless network should provide the highest-level of security with multiple layers utilizing proven, industry standard security technologies, including firewalls, data encryption and VPN. The system should support client authentication and policy based security such as Media Access Control; support Protected Access (WPA & WPA2); support Wired Equivalent Privacy (WEP) encryption, including both 64 and 128 bit keys; support for 802.1x authentication using Extensible Authentication Protocol (EAP) and Remote Authentication Dial-In Client Service (RADIUS); support for Virtual Private Network (VPN) tunneling; support Temporal Key Integrity Protocol (TKIP) encryption; support Advanced Encryption Standard (AES) encryption; support suppression of Extended Service Set Identifier (ESSID) broadcasts; support for multiple ESSIDs to map individually to Virtual LANs (VLANs); support for encryption of all control and network management traffic transmitted within the network; and support for filtering of traffic based on Internet Protocol (IP) addresses, subnets, and Transmission Control Protocol (TCP) ports.
 - The broadband wireless network shall provide high quality of service and reliability. The proposed solution shall deliver 99.99% network uptime, 24x7 and provide quality of service for such services as Voice over Internet Protocol (VOIP) and other prioritized services within the coverage area of service.

Appendix A: Pole Description



Appendix B: Pole Locations

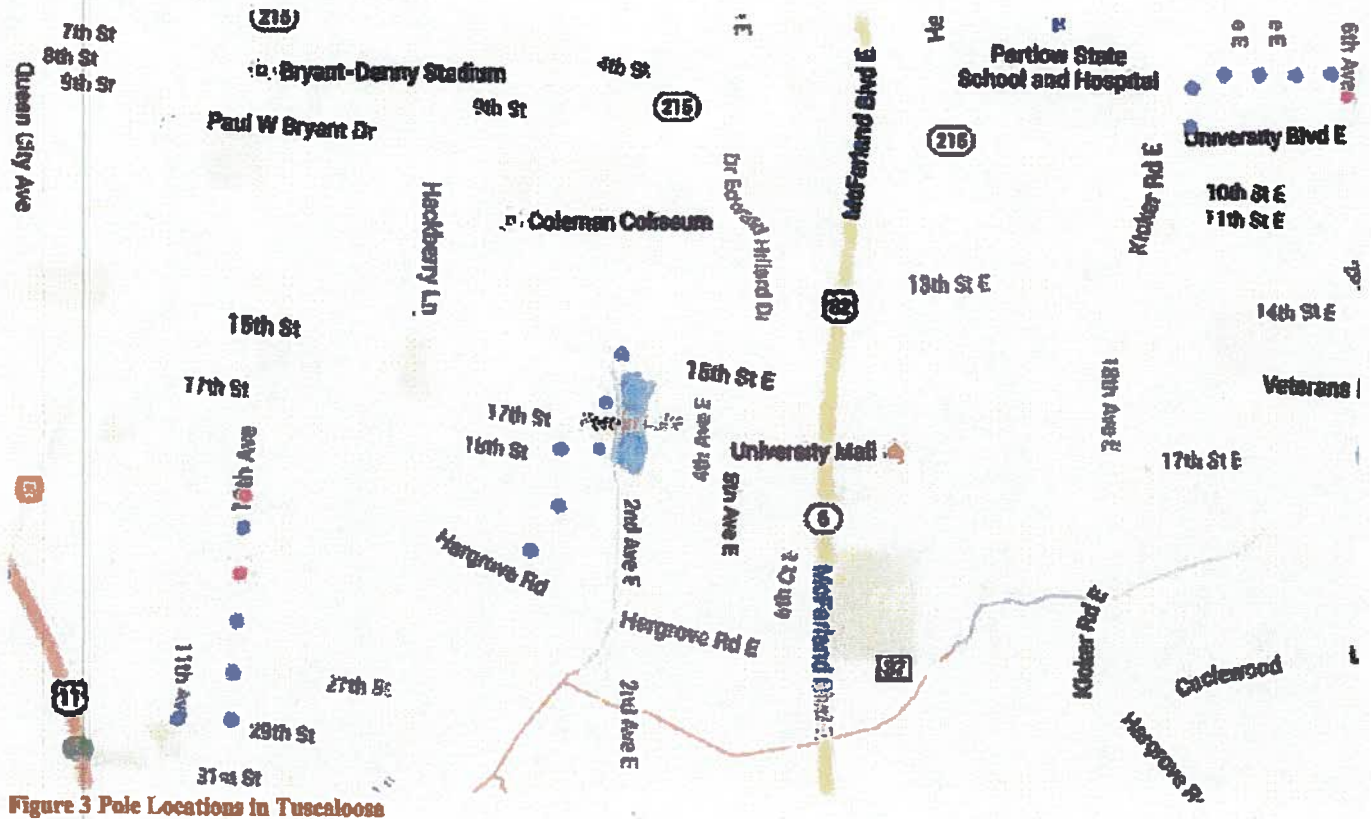


Figure 3 Pole Locations in Tuscaloosa

Segment	Coordinates	Miles between poles	Feet between poles	Users per pole	Users per segment
Alberta Parkway	33.20752945, -87.50358844				
	33.20832076, -87.50426123	0.07	353.00	145	
	33.20828663, -87.50583314	0.09	480.00	197	
	33.20828448, -87.50741139	0.09	482.00	198	
	33.20824788, -87.50891366	0.09	459.00	188	
	33.20636755, -87.51041662	0.16	844.80	346	
Forest Lake	33.20776974, -87.5103391	0.10	510.00	209	1,283
	33.19788893, -87.53487625				
	33.19619289, -87.53556719	0.12	633.60	260	
	33.19454375, -87.53583422	0.11	580.80	238	
	33.1945436, -87.53744342	0.09	492.00	202	
	33.19252582, -87.53755377	0.14	739.20	303	
10TH Street	33.19092059, -87.53867723	0.13	686.40	281	1,284
	33.19276408, -87.55101217		-	-	
	33.19160501, -87.55107355	0.08	422.00	173	
	33.18994172, -87.55120043	0.11	580.80	238	
	33.18823394, -87.55134814	0.12	633.60	260	
	33.18644867, -87.55145049	0.12	633.60	260	
	33.18477462, -87.55150072	0.12	633.60	260	
	33.18472232, -87.55377877	0.13	686.40	281	1,472

EXHIBIT B – DRAFT CONTRACT TERMS

City of Tuscaloosa
Office of the City Attorney
FORM: CONTRACT
CONSULTANT 2012

STATE OF ALABAMA)
TUSCALOOSA COUNTY)

AGREEMENT TO PROVIDE PROFESSIONAL CONSULTING AND RELATED SERVICES FOR _____
File No. _____

THIS AGREEMENT is entered into by and between the **CITY OF TUSCALOOSA**, Alabama, a Municipal Corporation, Post Office Box 2089, Tuscaloosa, Alabama 35403-2089, (hereinafter referred to as the "CLIENT" or "CITY") and _____

_____ (hereinafter referred to as "CONSULTANT"), on this _____ day of _____, 20____, as follows:

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WHEREAS, the Client desires to have performed _____, which it believes will promote the efficient operation of government; and,

WHEREAS, Consultant has made a proposal to the Client to provide such professional consulting services and has represented to the Client that it is staffed with personnel knowledgeable and experienced in such matters as to be able to provide those services to the Client in a professional and competent manner; and,

WHEREAS, heretofore, the Client duly enacted a resolution authorizing execution of an agreement between the Client and Consultant, and the Client now desires to enter into a contract with Consultant as more particularly set forth herein; as follows:

W-I-T-N-E-S-S-E-T-H:

A15-0038

NOW, THEREFORE, this agreement is made and entered into on the date first above written by and between the Client and Consultant, by which Consultant will provide professional consulting and related services to the Client as hereinafter specified, through individuals possessing a high degree of professional skill where the personality of the individual will play a decisive role and which is thereby exempt from the Alabama Competitive Bid Law, Ala. Code §41-16-51(a)(3) (1975); for the consideration as set forth herein as follows:

I. SCOPE OF SERVICES

Consultant agrees, for the consideration as stated herein, to provide professional consulting and related services to the Client in regard to _____ as more particularly set forth in Consultant's proposal to Client entitled _____ dated _____, which is adopted herein by reference except to the extent of a conflict with the terms and conditions herein, in which case the provisions herein shall prevail. Generally the Project services shall include, but not be limited to the following:

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Without limiting the generality of the foregoing, specifically the scope of services to be performed by CLIENT are as more particularly set forth in the attached document entitled _____ which is attached hereto and adopted herein by reference as Exhibit "A". Any changes in the scope of services as set

forth herein or in Exhibit "A" shall only be by amendment, in writing, duly authorized and executed by the parties.

II. TIME OF PERFORMANCE

Consultant shall commence providing services pursuant to this agreement as of the date first above written and diligently and expeditiously conduct its works in such a manner as to complete its commitments for _____ by _____. Consultant agrees and understands that time is of the essence in the performance of this agreement.

Consultant shall commence, carry on and complete the project with all practicable dispatch, in a sound, economical and efficient manner, in accordance with the provisions hereof and applicable laws. In accomplishing the project, Consultant shall take such steps as are appropriate to insure that the work involved is properly coordinated with related work and policies being carried on within the City.

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Consultant shall provide services in the order indicated by Client.

III. COMPENSATION

The Client agrees to pay Consultant for the services as set forth herein, a total maximum amount of \$_____. (Excluding _____). The total maximum amount includes the complete and satisfactory performance of all the Services specified in this agreement. Payment is to be made as follows:

Unless otherwise indicated above, Consultant will invoice Client monthly detailing the services performed on an hourly basis on behalf of Client. The invoice format shall be satisfactory to Client.

Client will remit payment to Consultant within forty-five (45) days from receipt of invoice.

Provided; however, the Client may delay payment for a reasonable time on all or any portion of an invoice, without the accrual of any interest or charges, on the basis of improper, contested or inadequate explanation of invoices by Consultant.

In the event of such disputed or contested invoice, only that portion so contested shall be withheld by the Client, and the undisputed portion shall be paid in accordance with the provisions herein. The Client will exercise reasonableness in contesting any invoice or portion thereof.

In the event Consultant is required by the scope of services to provide documents or testimony on behalf of the Client in response to claims, demands or actions against the Client, its officers, agents or employees by third parties, Consultant shall bill the Client for services rendered based on the then current professional fees and expenses incurred. Provided; however, in the event of a final adjudication by a court of competent jurisdiction that the services or any portion thereof provided by Consultant was not properly performed, then Consultant will refund to Client all sums paid Consultant for all work related to the testimony. No task will be undertaken by Consultant without prior notification to the Client. The provisions hereof are intended to apply only to third party actions based upon the Client's implementation of Consultant's report and findings and not in regard to claims or actions by or between the Client and Consultant.

Provided; however, nothing herein contained shall prevent the Client from utilizing any document studies, forms or other data or information otherwise resulting from the performance of this agreement by Consultant, in bringing, defending or otherwise assisting in litigation, claims, actions or demands undertaken or defended by the Client, without any additional cost to the Client.

In no event shall the making by the Client of any payment to Consultant constitute or be construed as a waiver by the Client of any breach of covenant, or any default which may exist on the part of Consultant and the making of any such payment by the Client while any such breach or default exists shall in no way impair or prejudice any rights or remedies available to the Client in respect to such breach or default.

IV. CLIENT RESPONSIBILITIES

In addition to paying Consultant for services according to the preceding paragraph, the Client shall have the following responsibilities to Consultant:

The Client shall provide **DRAFT** for Consultant access to its personnel, facilities, and materials including, but not necessarily limited to _____

V. LEVEL OF COMPETENCE

Consultant represents and warrants to the City that it and all of its employees that will be working on the Project for the Client are fully qualified and competent to perform all services required herein and that to the extent required, Consultant has or will secure at its own expenses, all personnel required in performing the services under this agreement.

Such personnel shall not be employees of or have any contractual relationship with the Client. All of the services required hereunder will be performed by Consultant or under its supervision and all personnel engaged in the work shall be fully qualified to perform such services.

Consultant represents and warrants to the Client that its Project Director for the performance of services by Consultant pursuant to the terms and conditions of this agreement shall be and remain _____, of Consultant's organization and there shall be no change in the Project Director without the prior written consent of the Client's representative.

VI. MATERIALS / CONFIDENTIALITY

The Client agrees to cooperate with and provide Consultant with access to facilities and information within its reasonable possession and control, requested by Consultant for its review and use in performing the services herein. Provided; however, all such documents, information, results, memoranda and all other written or verbal information ("information") shall be held confidential by Consultant and any of its subconsultants and shall not, without the prior written consent of the Client, be used for any purpose other than the performance of this agreement nor be disclosed to any other entity not connected with performance of this agreement. Upon completion of services, Consultant shall return all such information to the City. The City shall retain ownership of all such information and the same shall not be used by the Consultant for any purpose or purposes without the express written permission of the City. Consultant shall not use the City's name or insignia in any magazine, trade paper, newspaper or other medium without first obtaining the written consent of the City.

VII. INTELLECTUAL PROPERTY

The City and Consultant, jointly and separately, acknowledge and agree that the intellectual property of both parties shall remain owned by the respective party. With the exception of Consultant's periodic and final reports generated for performance of

this agreement to or for the City, reports, memorandums, electronic mail, facsimile transmissions and other written and prepared documents shall be owned by the party who authored, generated or who originally possessed the same and nothing in this agreement shall contravene said rights.

VIII. INFORMATION AND REPORTS

Consultant shall, at such time and in such format as the Client's representative may require, furnish a final written report and such periodic reports concerning the status of the Project as may be requested by the Client's representative. Consultant shall furnish the Client, upon request, with copies of all documents and other material prepared or developed in relation with or as part of the Project. Such requests shall be reasonable and within normal business practices for such work. The City shall own and acquire all rights to the periodic and final report of Consultant.

IX. RECORDS AND INSPECTIONS

Consultant shall maintain complete and accurate records with respect to all matters performed pursuant to this agreement. The Client shall have free access at all proper times to such records and the right to examine and audit the same and to make transcripts therefrom and to inspect all program data, documents, proceedings and activities of Consultant. Such inspections shall not be in violation of confidentiality guarantees provided for herein. Promptly upon the Client's request, all documents, materials, information and writings and all copies thereof provided by the Client to the Consultant directly or indirectly shall be returned by Consultant to Client (if applicable).

X. COPYRIGHT INFORMATION

The Client acknowledges that with the exception of periodic and final reports, all intellectual property developed during the course of this agreement by Consultant shall belong exclusively to Consultant. However, the Client may utilize any of the foregoing for

and on behalf of its internal operations, but will take steps reasonably necessary with its employees with respect to the use, copying, protection and security of the foregoing.

XI. APPLICABLE LAWS

Consultant shall register and comply with all State or Federal laws and/or regulations as they may relate to the services or activities of the Consultant to the City.

XII. INDEMNIFICATION

Each party shall generally be responsible for its own acts and will be responsible for all damages, costs, fees, and expenses, including attorney's fees and costs, which arise out of the performance of this agreement and which are due to that party's own negligence, carelessness, unskillfulness and other unlawful conduct and/or the negligence, carelessness or unskillfulness or other unlawful conduct of its respective officers, agents and/or employees acting in their official capacities. Provided; however, Consultant shall defend, indemnify and hold the Client, its officers, agents and employees free and harmless from and against any claims, demands, actions, damages, expenses, fees, liabilities and/or attorney's fees arising out of, by virtue of or associated with, any claims, demands or actions brought by third parties which are related in any way or are associated with the negligence, tortious acts or other unlawful conduct of Consultant or its respective agents, officers and employees in the performance of this agreement. In addition, the Client shall release and remise Consultant, its officers, agents and employees from and against any claims, demands, actions, damages, expenses, fees, liabilities and/or attorney's fees arising out of, by virtue of or associated with, any claims, demands or actions brought by third parties which are related in any way or are associated with the negligence, tortious acts or other unlawful conduct of the Client or its respective agents, officers and employees in the performance of this agreement.

XIII. TERMINATION

The Client reserves the right with or without cause, to terminate this agreement by giving written notice to Consultant of such termination at least fifteen (15) days before the effective date thereof. In the event of termination pursuant to this paragraph, Consultant shall cease performing any work pursuant to this agreement and be entitled to compensation for services rendered through the effective date of termination.

XIV. INSURANCE

That unless waived in writing by the OWNER's representative, the CONSULTANT shall secure and maintain throughout the duration of this Agreement insurance of such type and in such amounts as may be necessary to protect its interests and the interests of the OWNER, its officers, agents and employees against hazards or risks of loss as hereinafter specified. The underwriter of such insurance shall be qualified to do business in Alabama. The certificates of insurance shall contain a provision that not less than 30 days' written notice shall be given to the OWNER before any policy or coverage is canceled. Without limiting the requirements hereinbefore set forth, the insurance coverages shall include a minimum of:

- (1) Workmen's compensation and employer's liability insurance as required by the State of Alabama.
- (2) Comprehensive automobile and vehicle liability insurance. This insurance shall be written in comprehensive form and shall protect the CONSULTANT and the OWNER against claims for injuries to members of the public and/or damages to property of others arising from employer's use of motor vehicles or any other equipment and shall cover operation with respect to onsite and offsite operations under this Agreement, and insurance coverage shall extend to any motor vehicles or other equipment irrespective of whether the same is owned, non-owned or hired. The limit of liability shall not be less

than a \$1,000,000 combined single limit or equivalent.

- (3) **Commercial general liability.** This insurance shall be written in comprehensive form and shall protect the CONSULTANT and the OWNER against claims arising from injuries to members of the public or damage to property of others arising out of any act or omission to act of the CONSULTANT or of any of its agents, employees, or subcontractors. The limit of liability shall not be less than a \$1,000,000 combined single limit.
- (4) **The CONSULTANT shall furnish professional liability insurance coverage in an amount not less than \$1,000,000 and subconsultants shall provide limits commensurate with the responsibilities of their work.**
- (5) **The insurance coverages specified above shall constitute minimum requirements and the OWNER, its officers, agents and employees shall be named as an additional insured in insurance coverages identified in items "2" and "3".**
- (6) **The Consultant shall take out and maintain during the term of this contract, and any extensions thereof, Umbrella Excess Liability Insurance. The minimum limits of coverage shall be as follows:**

Each Occurrence:	\$5,000,000
Aggregate:	\$5,000,000

XV. CONFLICTS OF INTEREST

The Consultant represents and warrants to the City that neither it nor its Project Director are aware of any conflict of interest which exists or could arise by means of its provision of services to the City pursuant to the terms and conditions of this agreement. Consultant further warrants that during the course of providing services to the City

pursuant to this agreement it will not represent or receive compensation from any vendor, supplier or contractor to the City. This is an exclusive personal service agreement and Consultant will not represent the interest of any other person, firm or entity that conflicts with the interest of the City of Tuscaloosa in regard to the subject matter of this agreement or the performance of services pursuant to the terms and conditions hereof.

It is understood by and between the parties hereto that neither the Consultant, nor any of its officers, agents or employees nor any sub consultant to the Consultant nor any subsidiary, parent entity, principal officers nor any entity having a beneficial interest in any of the same, may submit a bid or proposal in response to any request for proposals or advertisement for bids resulting from the services provided in whole or in part pursuant to this agreement.

XVI. NOTICES/PARTIES REPRESENTATIVES

The representative of the City of Tuscaloosa for this agreement shall be _____

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All notices, bills, invoices and reports required by this agreement shall be sufficient if sent by the parties hereto in the United States Mail, postage prepaid thereon to the addresses noted below:

Client: _____

Consultant: _____

XVII. REPRESENTATIVE CAPACITY:

While Consultant's role will be that of consultant to the City, Consultant shall be and remain an independent contractor and not act in the role of an agent or legal representative on behalf of the City. Consultant shall not have the authority to bind or obligate the City, its officers, agents or employees.

XVIII. LABOR, MATERIAL AND PERFORMANCE BONDS:

Within thirty (30) days after the prescribed forms have been presented, the Consultant shall execute a performance bond with good and sufficient surety from a company duly authorized and qualified to make such bond in the State of Alabama, a performance bond made payable to the City of Tuscaloosa, with a penalty equal to 100 percent of the amount of the contract price and in addition thereto, another bond with good and sufficient surety by a surety company duly authorized and qualified to make such bond in the State of Alabama, payable to the City of Tuscaloosa, in an amount equal to 100 percent of the contract price with an obligation that such contractor shall promptly make payments to all persons supplying it or them with labor, materials or supplies for or in prosecution of the Project provided for in such contract and for the payment of reasonable attorneys fees incurred by any successful claimants or plaintiffs in civil actions on said bond, pursuant to the provisions of Ala. Code §39-1-1 (1975).

XIV. MISCELLANEOUS:

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Capacity: Each Party to this Agreement represents and warrants to the other as follows:

- A. That it is an individual of the age of majority or otherwise a legal entity duly organized and in good standing pursuant to all applicable laws, rules and regulations.
- B. That each has full power and capacity to enter into this agreement, to perform and to conclude the same including the capacity, to the extent applicable, to grant, convey and/or transfer, areas, assets, facilities, properties, (both real and personal), permits, consents and authorizations and/or the full power and right to acquire and accept the same.
- C. That to the extent required, each party has obtained the necessary approval of its governing body or board and a resolution or other binding act has been duly and properly enacted by such governing body or board authorizing this agreement and said approval has been reduced to writing and certified or attested by the appropriate official of the party.

- D. That each party has duly authorized and empowered a representative to execute this agreement on their respective behalf and the execution of this agreement by such representative fully and completely binds the party to the terms and conditions hereof.**
- E. That absent fraud, the execution of this agreement by a representative of the party shall constitute a certification that all such authorizations for execution exist and have been performed and the other party shall be entitled to rely upon the same. To the extent a party is a partnership, limited liability company or joint venture, the execution of this agreement by any member thereof shall bind the party and to the extent that the execution of agreement is limited to a manager, managing partner or specific member then the person so executing this agreement is duly authorized to act in such capacity for the party.**
- F. That each party represents and warrants to the other that there is no litigation, claim or administrative action threatened or pending or other proceedings to its knowledge against it which would have an adverse impact upon this transaction or upon either's ability to conclude the transaction or perform pursuant to the terms and conditions of this agreement.**
- G. That each party has obtained and all required permits, approvals and/or authorizations from third parties to enable it to fully perform pursuant to this agreement.**
- H. Under the provisions of the Constitution and laws of the State of Alabama, each party has the power to consummate the transactions contemplated by this agreement.**
- I. Each party represents and warrants that the execution and delivery of this agreement and the consummation of the transactions contemplated herein will not conflict with, be in violation of, or constitute (upon notice or lapse of time, or both) a default under the laws of the State of Alabama, any resolution, agreement, or other contract agreement, or instrument to which a party is subject, or any resolution, order, rule, regulation, writ, injunction, decree or judgment of any governmental authority or court having jurisdiction over the party.**
- J. This agreement constitutes the legal, valid and binding obligation of each party and is enforceable against each party in accordance with its terms, except in so far as the enforceability thereof may be limited by:**
- (1) Bankruptcy, insolvency or other similar laws affecting the enforcement of creditors' rights**

- (2) General principles of equity, regardless of whether such enforceability is considered as a proceeding at equity or at law.
- K. Neither party will enter into any agreement to do anything prohibited in this agreement or enter into any agreement or take any action which would in any way impair the ability of the other party to faithfully and fully perform its obligations hereunder.
- L. Under the provisions of the Constitution and laws of the State of Alabama, each party has the power to consummate the transactions contemplated by this agreement.

Ownership of Contract Documents: The Contract Documents, and copies of parts thereof, are furnished and owned by the City. All portions of the Contract Document, and copies of parts thereof, are the instruments of serve for this project. They are not to be used on other work and are to be returned to the City on request at the completion of the work. Any reuse of these materials without specific written verification or adaptation by the City will be at the risk of the user and without liability or legal expense to the City. Such user shall hold the City harmless from any and all damages, including reasonable attorney fees from any and all claims arising from any such reuse. Any such verification and adoption shall entitle the City to further compensation at rates to be agreed upon by the user and the City.

City Logo and Name: The Consultant shall not use the City of Tuscaloosa's name or insignia or logo in any magazine, trade paper, newspaper, advertisement or other medium without first obtaining the written consent of the Owner.

Waiver: Non enforcement of any provision of this Agreement by either party shall not constitute a waiver of that provision, nor shall it affect the enforceability of that provision or of the remaining terms and conditions of the Agreement.

Prohibition on Assignment and Delegation: No party to this Agreement may assign or delegate its interests or obligations hereunder without the written consent of all other parties hereto obtained in advance of any such assignment or delegation. No such

assignment or delegation shall in any manner whatsoever relieve any party from its obligations and duties hereunder and such assigning or delegating party shall in all respects remain liable hereunder irrespective of such assignment or delegation.

Third Party Beneficiaries: It is the intent of the parties hereto that there shall be no third party beneficiaries to this Agreement.

Final Integration: This Agreement, together with any amendments, constitutes the entire agreement of the parties, as a complete and final integration thereof with respect to its subject matter. In the event of a direct conflict between the provisions hereof and any prior agreement or amendment, the latter shall supersede the former. All written or oral understandings and agreements heretofore had between and among the parties are merged into this Agreement, which alone fully and completely expresses their understandings. No representation, warranty, or covenant made by any party which is not contained in this Agreement or expressly referred to herein has been relied on by any party in entering into this Agreement.

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Force Majeure: Neither party to this Agreement shall hold the other party responsible for damages or delay in performance caused by acts of God, strikes, lockouts or other circumstances beyond the reasonable control of the other or the other party's employees, agents or contractors.

Amendment In Writing: This Agreement may not be amended, modified, altered, changed, terminated, or waived in any respect whatsoever, except by a further agreement in writing, properly executed by all of the parties.

Binding Effect: This Agreement shall bind the parties and their respective personal representatives, heirs, next of kin, legatees, distributees, successors, and assigns. If any provision in this Agreement shall be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be

affected or impaired thereby.

Captions: The captions of this Agreement are for convenience and reference only, are not a part of this Agreement, and in no way define, describe, extend, or limit the scope or intent of this Agreement.

Construction: This Agreement shall be construed in its entirety according to its plain meaning and shall not be construed against the party who provided or drafted it.

Mandatory and Permissive: "Shall", "will", and "agrees" are mandatory; "may" is permissive.

Governing Laws: The laws of the State of Alabama shall govern the validity of this Agreement, the construction of its terms, the interpretation of the rights, the duties of the parties, the enforcement of its terms, and all other matters relating to this Agreement.

Liability of the City or City Officials: Notwithstanding any provision hereof to the contrary, the parties agree and acknowledge that the liability and obligations of the City, City officials or City employees as set forth herein are subject to the limitations imposed on municipalities by the Constitution and laws of the State of Alabama. No present or future official, officer or employee of the City shall ever be personally liable for the performance of any obligations hereunder.

Non Discrimination: The Consultant agrees that in performing the work and services as required herein under this agreement, not to discriminate against any person on the basis of race color, religion, sex, age or disability. (The Contractor shall fully comply with the Americans with Disabilities Act, the Fair Labor Standards Act and all other applicable laws and regulations).

Fines and Penalties: The Consultant shall be solely liable for any and all fines or penalties which may be levied by any governmental authority against the Owner

and/or Consultant which are related to the Consultant's operations. The Owner shall deduct the amount of the levied fine or penalty from the contract amount.

Agreement Date/Counterparts: The date of this Agreement is intended as and for a date for the convenient identification of this Agreement and is not intended to indicate that this Agreement was necessarily executed and delivered on said date. This instrument may be executed in any number of counterparts, each of which so executed shall be deemed an original, but all such counterparts shall together constitute but one and the same instrument.

Use of Words and Phrases: The following words and phrases, where used in this document, shall be given the following and respective interpretations: "Herein," "hereby," "hereunder," "hereof," and other equivalent words refer to this document as an entirety and not solely to the particular portion hereof in which any such word is used.

The definitions set forth in any portion of this Agreement unless the text or context indicates differently shall be deemed applicable whether the words defined are herein used in the singular or the plural. Wherever used herein any pronoun or pronouns shall be deemed to include both singular and plural and to cover all genders.

Severability. Each provision of this agreement shall be considered to be severable and, if for any reason, any such provision or any part thereof, is determined to be invalid and contrary to any existing or future applicable law, such invalidity shall not impair the operation of or affect those portions of this agreement that are valid, but this agreement shall be construed and enforced in all respects as if the invalid or unenforceable provision or part thereof had been omitted.

**CITY OF TUSCALOOSA, A MUNICIPAL
CORPORATION**

BY: _____

Walter Maddox, Mayor

ATTEST:

City Clerk

CONSULTANT:

ATTEST:

BY:

STATE OF ALABAMA)
TUSCALOOSA COUNTY)

I, the undersigned authority, a Notary Public in and for said State and County, hereby certify that Walter Maddox, whose name as Mayor of the City of Tuscaloosa, is signed to the foregoing instrument and who is known to me, acknowledged before me on this day that, being informed of the contents of the within instrument, he, as such officer and with full authority, executed the same voluntarily on the day the same bears date.

DRAFT

Given under my hand and official seal this the _____ day of _____, 20____.

Notary Public.

My Commission Expires:

STATE OF ALABAMA)
COUNTY OF TUSCALOOSA)

I, _____, a Notary Public in and for said State at Large, hereby certify that _____, who is named as _____, is signed to the foregoing document, and,

- Who is known to me, or
- Whose identity I proved on the basis of _____, or
- Whose identity I proved on the oath/affirmation of _____, a creditable witness to the signer of the above document

and that being informed of the contents of the document, he/she, as such officer and with

full authority, executed the same voluntarily on the day the same bears date.

Given under my hand and official seal this the ____ day of _____,
20____.

Notary Public.

My Commission Expires:

DRAFT

PERFORMANCE BOND
(2015)

STATE OF ALABAMA)
TUSCALOOSA, COUNTY)

KNOWN ALL MEN BY THESE PRESENTS, that we, _____
as principal and _____ (hereinafter called the "Surety"), as
surety, do hereby acknowledge ourselves indebted and firmly bound and held unto the City of Tuscaloosa, Alabama,
(hereinafter called the "City") a municipal corporation existing under and by virtue of the laws of the State of
Alabama, for the use and benefit of those entitled thereto, in the penal sum of _____
for the payment of which well and truly be made in lawful money of the United States, we do hereby bind ourselves,
our successors and assigns and personal representatives, jointly and severally, firmly by the presents.

BUT THE CONDITION OF THE FOREGOING OBLIGATION OR BOND IS THIS:

WHEREAS, the City has entered into a certain written contract with said Contractor for the _____
_____ in accordance with contract documents
therefore on file in the Office of the _____ at the price of, to-wit: _____
(\$ _____) as more fully appears in
said written contract bearing the date of _____, 20____, which contract is
hereby referred to and made a part hereof to the same extent as set out herein in full.

DRAFT

NOW, THEREFORE, if the Contractor shall fully and faithfully perform all the undertakings and obligations
under the said agreement or contract herein before referred to and shall fully indemnify and save harmless the said
City from all costs and damages whatsoever which it may suffer by reason of any failure on the part of said
Contractor so to do, and shall fully reimburse and repay the said City any and all outlay and expense which it may
incur in making good any such default, and shall guarantee all workmanship against defects for a period of one year,
this obligation or bond shall be null and void, otherwise it shall remain in full force and effect.

And, for value received it is hereby stipulated and agreed that no change, extension of time, alteration or
addition to the terms of said agreement or contract or in the work to be performed thereunder or the specifications
accompanying the same shall in any wise affect the obligations of the principal or of the surety under this bond, and
notice is hereby waived of any such change, extension of time, alternative of or addition to the terms of the
agreement or contract or to the work or to the specifications.

IN WITNESS WHEREOF, the said Contractor has hereunder affixed its signature and said Surety has
hereunto caused to be affixed its corporate signature and seal, by its duly authorized officers on the _____ day of
_____, 20____.

Principal
By _____
Title

Surety

ATTEST:

By _____

Title

**LABOR AND MATERIAL BOND
(2015)**

KNOWN ALL MEN BY THESE PRESENTS, that we, _____
(hereinafter called the "Contractor") of _____
as principal and _____ (hereinafter called the
"Surety"), as surety, do hereby acknowledge ourselves indebted and firmly bound and held unto the City of
Tuscaloosa, Alabama, (hereinafter called the "City"), a municipal corporation, existing under and by virtue of the
Laws of the State of Alabama, for the use and benefit of those entitled thereto, in the penal sum of _____

(\$ _____) for the payment of which well and truly to be made in lawful money of the
United States, we do hereby bind ourselves, or successors, assigns and personal representatives, jointly and
severally, firmly by these presents.

BUT THE CONDITION OF THE FOREGOING OBLIGATION OR BOND IS THIS:

WHEREAS: the City has entered into a certain written contract with said Contractor for the
_____ in accordance with contract documents therefore on
file in the Office of the _____ at the price of, to-wit:
_____ (\$ _____)
as more fully appears in said written contract bearing date of _____, 20____, which contract is
hereby referred to and made a part hereof to the same extent as set out herein in full.

DRAFT

NOW, THEREFORE, if said Principal and all subcontractors to whom any portion of the work provided for in
said contract is subcontracted and all assignees of said Principal and of such subcontractors shall promptly make payment to
all persons supplying him or them with labor, foodstuffs, or supplies for or in the prosecution of the work provided for
in such contract, or in any amendment or extension of or addition to said contract, and for the payment of
reasonable attorney's fees, incurred by the claimant or claimants in suits on said bond, then the above obligation
shall be void; otherwise, it shall remain in full force and effect.

PROVIDED, however, that this bond is subject to the following conditions and limitations:

(a) Any person, firm or corporation that has furnished labor, foodstuffs, or supplies for or in the
prosecution of the work provided for in said contract, payment for which has not been made, shall have a direct right
of action in his or their name or names against the principal and surety on this bond, which right of action shall be
asserted in a proceeding, instituted in the county in which the work provided for in said contract is to be performed
and in any county in which said Principal or Surety does business. Such right of action shall be asserted in a
proceeding instituted in the name of the claimant or claimants for his or their use and benefit against said Principal
and Surety or either of them (but not later than one year after the final settlement of said Contract) in which action
such claim or claims shall be adjudicated and judgment rendered thereon.

(b) In addition to any other legal mode of service, service of summons and other process in suits on
this bond brought in Tuscaloosa County may be had on the Principal or the Surety in accordance with Title 27,
Chapter 3, Section 24 of the Ala. Code (1975) by serving a copy of the summons and complaint or other pleading or

process, with the Commissioner of Insurance of the State of Alabama or his/ her designee and the Principal and Surety agree to be bound by such mode of service above described and consents that such service shall be the same as personal service on the Principal or Surety.

(c) The Surety shall not be liable hereunder for any damages or compensation recoverable under any workmen's compensation or employer's liability statute.

(d) In no event shall the Surety be liable for a greater sum than the penalty of this bond, or subject to any suit, action or proceeding thereon that is instituted later than one year after the final settlement of said contract.

(e) This bond is given pursuant to the terms of Title 39, Chapter 1, Section 1 of the Ala. Code (1975), and all the provisions of law with reference to this character of bond as set forth in said section or as may hereinafter be enacted are hereby made a part hereof to the same extent as if set out herein in full.

IN WITNESS WHEREOF, the said Contractor has hereunder affixed its signature and said Surety has hereunto caused to be affixed its corporate signature and seal, by its duly authorized officers on the day of _____, 20____.

Principal

By: _____

Title

DRAFT

Surety

By: _____

Title

ATTEST:



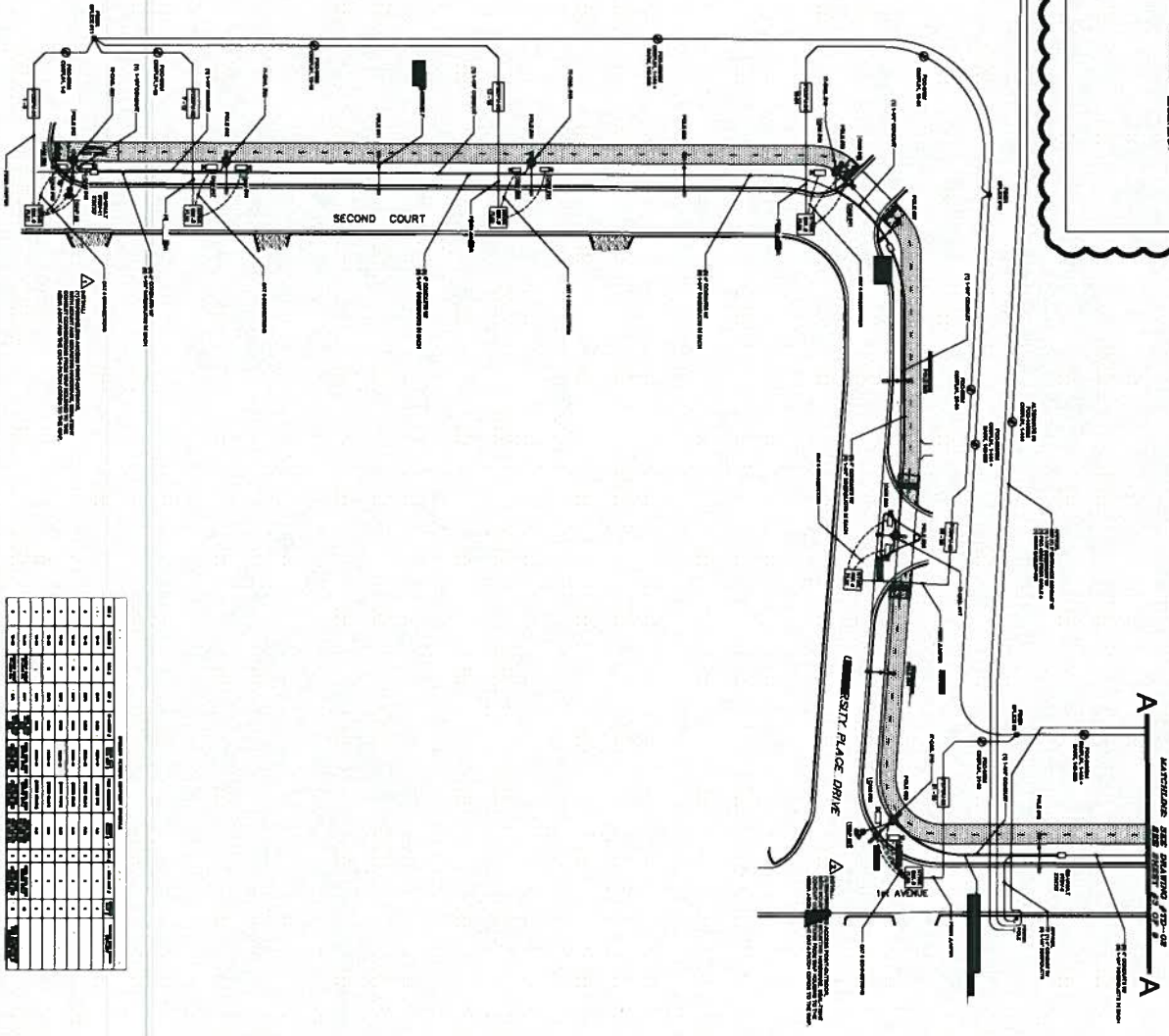
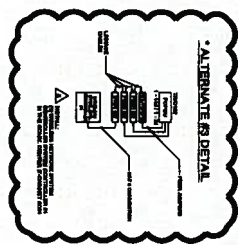
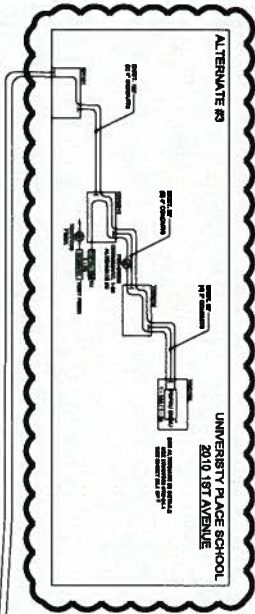
**Exhibit C - Unit Price Schedule
City of Tuscaloosa - CityWalk Technology
Wireless Broadband Network**



Item No.	Quantity	Unit	Description	Unit Cost	Total Cost
PROJECT BASE BID COST					
University Place / Forest Lake CityWalk Project					
1	6	each	Wireless Access Point (WAP) hardware and software, mounting hardware, and installation labor		
2	1	lot	IDF(1) and Data Center(1) hardware, software, and installation		
3	1	lot	Wireless Controller hardware, software, and installation		
4	1	lot	Wireless Management System hardware and software		
5	1	lot	Training per RFP requirements		
6	1	lot	Design, engineering, project management, programming, configuration, testing, commissioning, and documentation		
Alberta Parkway and CityWalk Project					
7	7	each	Wireless Access Point (WAP) hardware and software, mounting hardware, and installation labor		
8	1	lot	IDF(1) hardware, software, and installation		
9	1	lot	Wireless Controller hardware, software, and installation		
10	1	lot	Design, engineering, project management, programming, configuration, testing, commissioning, and documentation		
10th Avenue Improvements / City Walk Project					
11	7	each	Wireless Access Point (WAP) hardware and software, mounting hardware, and installation labor		
12	1	lot	IDF(1) hardware, software, and installation		
13	1	lot	Wireless Controller hardware, software, and installation		
14	1	lot	Design, engineering, project management, programming, configuration, testing, commissioning, and documentation		
				TOTAL BASE BID = \$	

A15-0038

TUSCALOOSA CITY WALK PROJECT
 FOREST LAKE SECTION
 WIRELESS NETWORK SYSTEM AND RELATED HARDWARE



LEGEND

- WAP / WIRELESS ACCESS POINT
- SERVER RACK
- NETWORK SWITCH
- DEAD / ZONE CAMERA
- IN-LINE CAMERA
- POLE MOUNTED CCTV CAMERA
- REBAR / 18" X 18" X 8"

NO.	DESCRIPTION	QTY	UNIT	PRICE	TOTAL
1	WIRELESS ACCESS POINT	10	EA	150.00	1500.00
2	NETWORK SWITCH	5	EA	200.00	1000.00
3	SERVER RACK	2	EA	300.00	600.00
4	DEAD / ZONE CAMERA	10	EA	50.00	500.00
5	IN-LINE CAMERA	10	EA	75.00	750.00
6	POLE MOUNTED CCTV CAMERA	10	EA	100.00	1000.00
7	REBAR / 18" X 18" X 8"	10	EA	100.00	1000.00
8	CONCRETE	10	EA	100.00	1000.00
9	WIRING	10	EA	100.00	1000.00
10	LABOR	10	EA	100.00	1000.00
11	PERMITS	10	EA	100.00	1000.00
12	DESIGN	10	EA	100.00	1000.00
13	INSTALLATION	10	EA	100.00	1000.00
14	MAINTENANCE	10	EA	100.00	1000.00
15	TRAINING	10	EA	100.00	1000.00
16	TESTING	10	EA	100.00	1000.00
17	COMMISSIONING	10	EA	100.00	1000.00
18	OPERATION	10	EA	100.00	1000.00
19	REPAIR	10	EA	100.00	1000.00
20	REPLACEMENT	10	EA	100.00	1000.00
21	UPGRADE	10	EA	100.00	1000.00
22	EXPANSION	10	EA	100.00	1000.00
23	MODIFICATION	10	EA	100.00	1000.00
24	RECONFIGURATION	10	EA	100.00	1000.00
25	REPAIR	10	EA	100.00	1000.00
26	REPLACEMENT	10	EA	100.00	1000.00
27	UPGRADE	10	EA	100.00	1000.00
28	EXPANSION	10	EA	100.00	1000.00
29	MODIFICATION	10	EA	100.00	1000.00
30	RECONFIGURATION	10	EA	100.00	1000.00

WIRELESS NETWORK PRODUCT

CONTRACTOR'S NOTE:

THE WIRELESS NETWORK SYSTEM AND RELATED HARDWARE IS THE PROPERTY OF WALKER ASSOCIATES, INC. AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF WALKER ASSOCIATES, INC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF TUSCALOOSA AND THE ALABAMA DEPARTMENT OF TRANSPORTATION AND CONSTRUCTION (DOT) BEFORE COMMENCING ANY WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF TUSCALOOSA AND THE ALABAMA DEPARTMENT OF TRANSPORTATION AND CONSTRUCTION (DOT) BEFORE COMMENCING ANY WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF TUSCALOOSA AND THE ALABAMA DEPARTMENT OF TRANSPORTATION AND CONSTRUCTION (DOT) BEFORE COMMENCING ANY WORK.

TALN TALENT ACQUISITION & MANAGEMENT

WALKER ASSOCIATES, INC.
 ENGINEERING, PLANNING, GIS & SURVEYING

917 22nd Avenue - Suite B
 Tuscaloosa, AL 35401

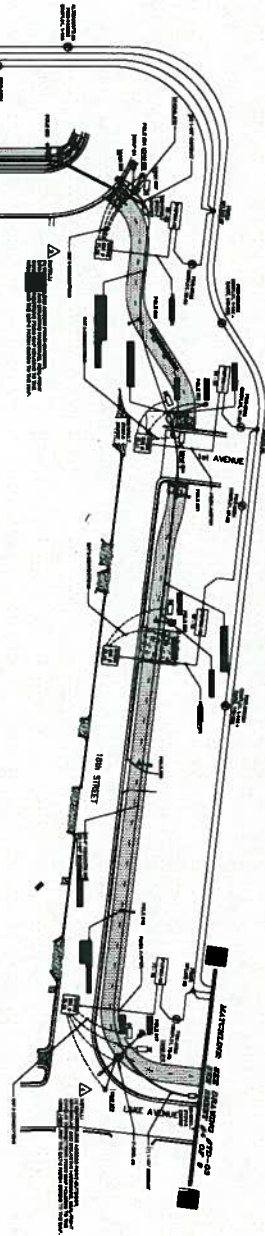
www.walkerinc.com
 P (205) 561-3778 | F (205) 561-3779

**TUSCALOOSA CITY WALK PROJECT
 FOREST LAKE SECTION**

Wireless Network System and Related Hardware
 City of Tuscaloosa
 Tuscaloosa, Alabama

DATE: 03/04/2015
 DRAWN BY: TSW
 CHECKED BY: TSW
 PROJECT NO.: TSW-01

**TUSCALOOSA CITY WALK PROJECT
FOREST LAKE SECTION
WIRELESS NETWORK SYSTEM AND RELATED HARDWARE**



LEGEND

- ☐ WAVE / WIRELESS ACCESS POINT
- DB / VALVE TB
- S.X.X.X / SIGN & S.X.X.X
- ⬇️ DEMO / ZONE CAMERA
- 📷 IN-LINE CAMERA
- 📷 POLE MOUNTED FT / COORDIN. CABINET
- ⊙ NEWMA / TR X.X.X.X

WIRELESS NETWORK EQUIPMENT SUMMARY

Item #	Quantity	Unit	Description	Notes
1	1	Wave	Wave / Wireless Access Point	
2	1	DB	DB / Valve TB	
3	1	S.X.X.X	S.X.X.X / Sign & S.X.X.X	
4	1	Dem	Dem / Zone Camera	
5	1	In-Line	In-Line Camera	
6	1	Pole	Pole Mounted FT / Coordin. Cabinet	
7	1	Newma	Newma / Tr X.X.X.X	

CONTRACTOR/OWNER NOTE:
THE WIRELESS NETWORK SYSTEM AND RELATED HARDWARE EQUIPMENT, NETWORK DESIGN AND PROJECT ARE FOR THE RESPONSIBILITY OF THE WIRELESS NETWORK SYSTEM CONTRACTOR/OWNER TO PROVIDE AND INSTALL A COMPLETE DESIGN INFORMATION CONCERNING THEIR PROPOSED SOLUTION TO THE CONSULTANT/ENGINEER FOR REVIEW AND APPROVAL.

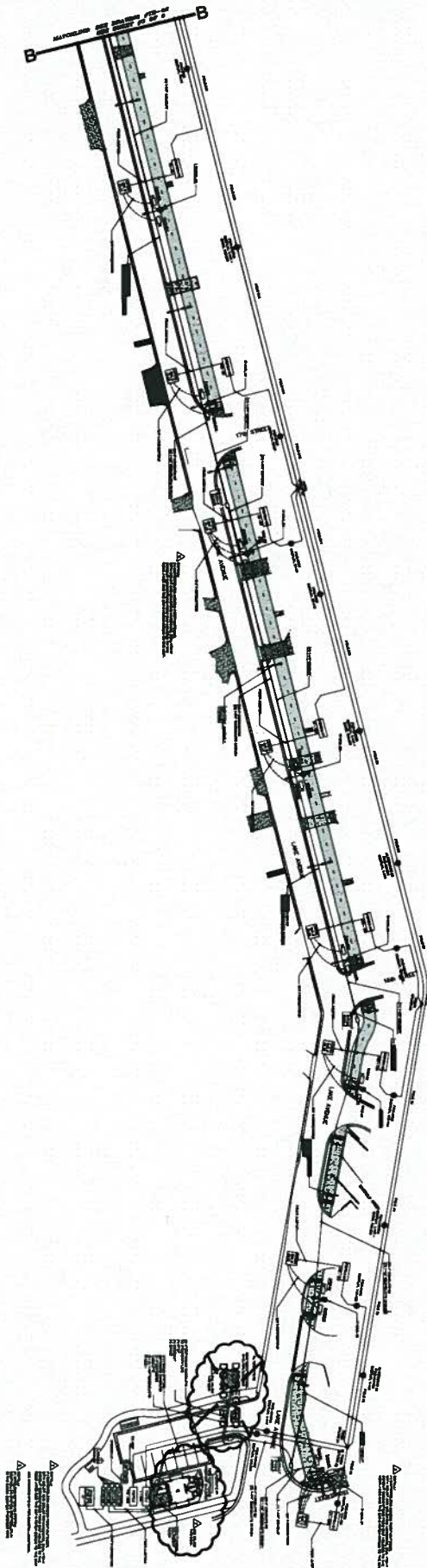
WIRELESS NETWORK SYSTEM PROJECT:
TUSCALOOSA CITY WALK PROJECT
FOREST LAKE SECTION
WIRELESS NETWORK SYSTEM AND RELATED HARDWARE
DESIGNED BY: TUSCALOOSA CITY WALK PROJECT
DATE: 03/04/2018

**TUSCALOOSA CITY WALK PROJECT
FOREST LAKE SECTION**
Wireless Network System and Related Hardware
City of Tuscaloosa
Tuscaloosa, Alabama

WALKER ASSOCIATES, INC.
ENGINEERING, PLANNING, GIS & SURVEYING
917 22nd Avenue - Suite B
Tuscaloosa, AL 35401
www.walkercivil.com
P (205) 561-3778 | F (205) 561-3779

TALLA/Professional Services, Inc.	03/04/2018	131-032
TUSCALOOSA CITY WALK PROJECT		
FOREST LAKE SECTION		
WIRELESS NETWORK SYSTEM AND RELATED HARDWARE		

TUSCALOOSA CITY WALK PROJECT
 FOREST LAKE SECTION
 WIRELESS NETWORK SYSTEM AND RELATED HARDWARE



LEGEND

☐	WALK/WIRELESS ACCESS POINT
☐	GPS/UTILITY
☐	5 X 5 X 5 AND 4 X 4 X 4
↓	DEAD / ZONE CAMERA
☐	INLINE CAMERA
☐	ROOF MOUNTED TV / COAM CABINET
☐	REINFORCEMENT X, B, A, G

WIRELESS NETWORK EQUIPMENT SCHEDULE

NO.	DESCRIPTION	QTY	UNIT PRICE	TOTAL PRICE
1	WIRELESS ACCESS POINT	10	150.00	1,500.00
2	GPS/UTILITY	5	20.00	100.00
3	5 X 5 X 5 AND 4 X 4 X 4	10	10.00	100.00
4	DEAD / ZONE CAMERA	5	10.00	50.00
5	INLINE CAMERA	5	10.00	50.00
6	ROOF MOUNTED TV / COAM CABINET	5	10.00	50.00
7	REINFORCEMENT X, B, A, G	5	10.00	50.00
TOTAL				2,350.00

CONTRACTOR/ENGINEER NOTE:
 THE WIRELESS NETWORK SYSTEM AND RELATED HARDWARE EQUIPMENT IS INDICATED ON THIS PROJECT MAP FOR THE FOREST LAKE SECTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE RESPONSIBILITY OF THE WIRELESS NETWORK SYSTEM CONTRACTOR/ENGINEER TO PROVIDE AND INSTALL A COMPLETE DESIGN AND INSTALLATION OF THE WIRELESS NETWORK SYSTEM. DESIGN INFORMATION CONCERNING THEIR PROPOSED SOLUTION TO THE CONSULTANT/ENGINEER FOR REVIEW AND APPROVAL.

WIRELESS NETWORK PROJECT:
 THE WIRELESS NETWORK PROJECT IS THE FOREST LAKE SECTION OF THE TUSCALOOSA CITY WALK PROJECT. THE PROJECT IS TO PROVIDE AND INSTALL A COMPLETE DESIGN AND INSTALLATION OF THE WIRELESS NETWORK SYSTEM. THE CONTRACTOR/ENGINEER SHALL BE RESPONSIBLE FOR THE RESPONSIBILITY OF THE WIRELESS NETWORK SYSTEM CONTRACTOR/ENGINEER TO PROVIDE AND INSTALL A COMPLETE DESIGN AND INSTALLATION OF THE WIRELESS NETWORK SYSTEM. DESIGN INFORMATION CONCERNING THEIR PROPOSED SOLUTION TO THE CONSULTANT/ENGINEER FOR REVIEW AND APPROVAL.

TUSCALOOSA CITY WALK PROJECT
FOREST LAKE SECTION
 Wireless Network System and Related Hardware
 City of Tuscaloosa
 Tuscaloosa, Alabama

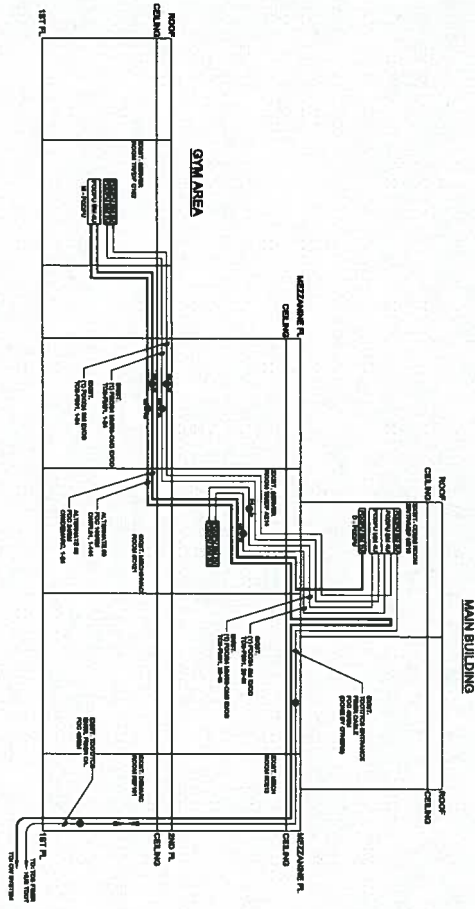
WALKER ASSOCIATES, INC.
 ENGINEERING, PLANNING, GIS & SURVEYING

917 22nd Avenue - Suite B
 Tuscaloosa, AL 35401

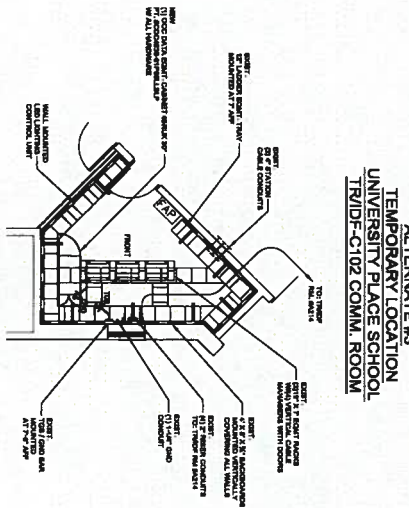
www.walkercivil.com
 P (205) 561-3778 | F (205) 561-3779

TALA-201401
 03/04/2015
 TO-03

TUSCALOOSA CITY WALK PROJECT
FOREST LAKE SECTION
ALTERNATE #3 TEMPORARY LOCATION
UNIVERSITY PLACE SCHOOL FIBER RISER SYSTEM
WIRELESS NETWORK SYSTEM AND
RELATED HARDWARE PROJECT



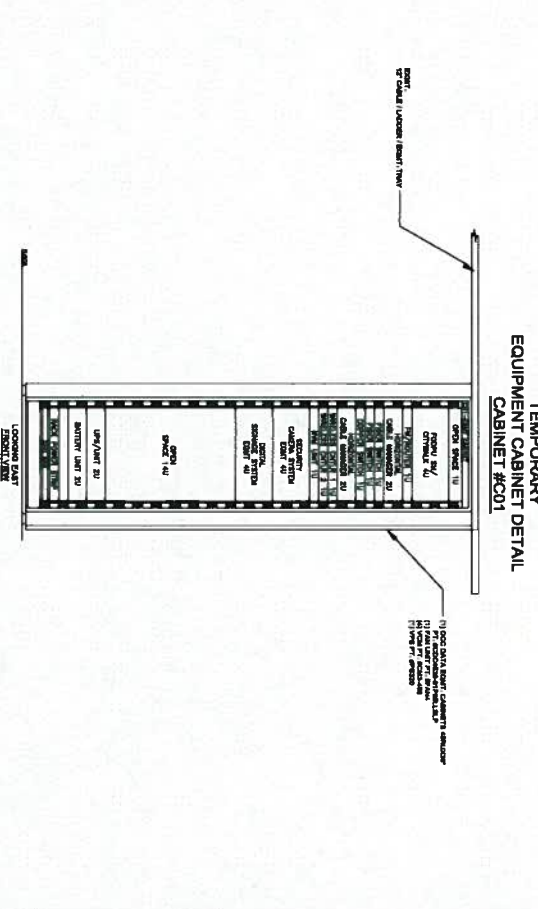
TUSCALOOSA CITY WALK PROJECT
FOREST LAKE SECTION
WIRELESS NETWORK SYSTEM AND RELATED HARDWARE PROJECT



NOTICE TO CONTRACTOR
 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF TUSCALOOSA AND THE ALABAMA DEPARTMENT OF TRANSPORTATION AND CONSTRUCTION (ADOT) FOR THE INSTALLATION AND MAINTENANCE OF THE FIBER OPTIC RISER SYSTEM AND RELATED HARDWARE.
 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES AND STRUCTURES DURING THE INSTALLATION AND MAINTENANCE OF THE FIBER OPTIC RISER SYSTEM AND RELATED HARDWARE.
 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ACCESS TO ALL AREAS OF THE BUILDING AT ALL TIMES DURING THE INSTALLATION AND MAINTENANCE OF THE FIBER OPTIC RISER SYSTEM AND RELATED HARDWARE.
 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL DATA AND INFORMATION TRANSMITTED THROUGH THE FIBER OPTIC RISER SYSTEM AND RELATED HARDWARE.

LEGEND

□	CHD RISER
□	AV - AUDIO/VISUAL
□	DATA - DATA
□	DATA - DATA (1) ON 6 CABLE / BLUE NON-FLEX
□	DATA - DATA (2) ON 6 CABLE / BLUE NON-FLEX
□	DATA - DATA (3) ON 6 CABLE / BLUE NON-FLEX
□	DATA - DATA (4) ON 6 CABLE / BLUE NON-FLEX
□	DATA - DATA (5) ON 6 CABLE / BLUE NON-FLEX
□	DATA - DATA (6) ON 6 CABLE / BLUE NON-FLEX
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□	DATA - DATA (16) ON 6 CABLE / BLUE NON-FLEX
□	DATA - DATA (17) ON 6 CABLE / BLUE NON-FLEX
□	DATA - DATA (18) ON 6 CABLE / BLUE NON-FLEX
□	DATA - DATA (19) ON 6 CABLE / BLUE NON-FLEX
□	DATA - DATA (20) ON 6 CABLE / BLUE NON-FLEX



LEGEND

ROOM 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TUSCALOOSA CITY WALK PROJECT

FOREST LAKE SECTION

Wireless Network System and Related Hardware

City of Tuscaloosa

Tuscaloosa, Alabama

WIRELESS NETWORK EQUIPMENT SCHEDULE

ITEM #	QTY	DESCRIPTION	MANUFACTURER	MODEL	UNIT PRICE	TOTAL PRICE	NOTES
1	1	WALKER	WALKER	WALKER	WALKER	WALKER	WALKER
2	1	WALKER	WALKER	WALKER	WALKER	WALKER	WALKER
3	1	WALKER	WALKER	WALKER	WALKER	WALKER	WALKER
4	1	WALKER	WALKER	WALKER	WALKER	WALKER	WALKER
5	1	WALKER	WALKER	WALKER	WALKER	WALKER	WALKER
6	1	WALKER	WALKER	WALKER	WALKER	WALKER	WALKER
7	1	WALKER	WALKER	WALKER	WALKER	WALKER	WALKER
8	1	WALKER	WALKER	WALKER	WALKER	WALKER	WALKER

THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF TUSCALOOSA AND THE ALABAMA DEPARTMENT OF REVENUE. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE ALABAMA DEPARTMENT OF REVENUE. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE ALABAMA DEPARTMENT OF REVENUE.

ABBREVIATIONS:

- 110 BK 110 BLOCK
- AB ABOVE
- AC ABOVE
- AD ABOVE
- AE ABOVE
- AF ABOVE
- AG ABOVE
- AH ABOVE
- AI ABOVE
- AJ ABOVE
- AK ABOVE
- AL ABOVE
- AM ABOVE
- AN ABOVE
- AO ABOVE
- AP ABOVE
- AQ ABOVE
- AR ABOVE
- AS ABOVE
- AT ABOVE
- AU ABOVE
- AV ABOVE
- AW ABOVE
- AX ABOVE
- AY ABOVE
- AZ ABOVE
- BA BELOW
- BB BELOW
- BC BELOW
- BD BELOW
- BE BELOW
- BF BELOW
- BG BELOW
- BH BELOW
- BI BELOW
- BJ BELOW
- BK BELOW
- BL BELOW
- BM BELOW
- BN BELOW
- BO BELOW
- BP BELOW
- BQ BELOW
- BR BELOW
- BS BELOW
- BT BELOW
- BU BELOW
- BV BELOW
- BW BELOW
- BX BELOW
- BY BELOW
- BZ BELOW
- CA CABLE
- CB CABLE
- CC CABLE
- CD CABLE
- CE CABLE
- CF CABLE
- CG CABLE
- CH CABLE
- CI CABLE
- CJ CABLE
- CK CABLE
- CL CABLE
- CM CABLE
- CN CABLE
- CO CABLE
- CP CABLE
- CQ CABLE
- CR CABLE
- CS CABLE
- CT CABLE
- CU CABLE
- CV CABLE
- CW CABLE
- CX CABLE
- CY CABLE
- CZ CABLE
- DA DATA
- DB DATA
- DC DATA
- DD DATA
- DE DATA
- DF DATA
- DG DATA
- DH DATA
- DI DATA
- DJ DATA
- DK DATA
- DL DATA
- DM DATA
- DN DATA
- DO DATA
- DP DATA
- DQ DATA
- DR DATA
- DS DATA
- DT DATA
- DU DATA
- DV DATA
- DW DATA
- DX DATA
- DY DATA
- DZ DATA
- EA ELECTRICAL
- EB ELECTRICAL
- EC ELECTRICAL
- ED ELECTRICAL
- EE ELECTRICAL
- EF ELECTRICAL
- EG ELECTRICAL
- EH ELECTRICAL
- EI ELECTRICAL
- EJ ELECTRICAL
- EK ELECTRICAL
- EL ELECTRICAL
- EM ELECTRICAL
- EN ELECTRICAL
- EO ELECTRICAL
- EP ELECTRICAL
- EQ ELECTRICAL
- ER ELECTRICAL
- ES ELECTRICAL
- ET ELECTRICAL
- EU ELECTRICAL
- EV ELECTRICAL
- EW ELECTRICAL
- EX ELECTRICAL
- EY ELECTRICAL
- EZ ELECTRICAL
- FA FLOOR
- FB FLOOR
- FC FLOOR
- FD FLOOR
- FE FLOOR
- FF FLOOR
- FG FLOOR
- FH FLOOR
- FI FLOOR
- FJ FLOOR
- FK FLOOR
- FL FLOOR
- FM FLOOR
- FN FLOOR
- FO FLOOR
- FP FLOOR
- FQ FLOOR
- FR FLOOR
- FS FLOOR
- FT FLOOR
- FU FLOOR
- FV FLOOR
- FW FLOOR
- FX FLOOR
- FY FLOOR
- FZ FLOOR
- GA GROUND
- GB GROUND
- GC GROUND
- GD GROUND
- GE GROUND
- GF GROUND
- GG GROUND
- GH GROUND
- GI GROUND
- GJ GROUND
- GK GROUND
- GL GROUND
- GM GROUND
- GN GROUND
- GO GROUND
- GP GROUND
- GQ GROUND
- GR GROUND
- GS GROUND
- GT GROUND
- GU GROUND
- GV GROUND
- GW GROUND
- GX GROUND
- GY GROUND
- GZ GROUND
- HA HANGING
- HB HANGING
- HC HANGING
- HD HANGING
- HE HANGING
- HF HANGING
- HG HANGING
- HH HANGING
- HI HANGING
- HJ HANGING
- HK HANGING
- HL HANGING
- HM HANGING
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- HP HANGING
- HQ HANGING
- HR HANGING
- HS HANGING
- HT HANGING
- HU HANGING
- HV HANGING
- HW HANGING
- HX HANGING
- HY HANGING
- HZ HANGING
- IA IDENTIFICATION
- IB IDENTIFICATION
- IC IDENTIFICATION
- ID IDENTIFICATION
- IE IDENTIFICATION
- IF IDENTIFICATION
- IG IDENTIFICATION
- IH IDENTIFICATION
- II IDENTIFICATION
- IJ IDENTIFICATION
- IK IDENTIFICATION
- IL IDENTIFICATION
- IM IDENTIFICATION
- IN IDENTIFICATION
- IO IDENTIFICATION
- IP IDENTIFICATION
- IQ IDENTIFICATION
- IR IDENTIFICATION
- IS IDENTIFICATION
- IT IDENTIFICATION
- IU IDENTIFICATION
- IV IDENTIFICATION
- IW IDENTIFICATION
- IX IDENTIFICATION
- IY IDENTIFICATION
- IZ IDENTIFICATION
- JA JUNCTION
- JB JUNCTION
- JC JUNCTION
- JD JUNCTION
- JE JUNCTION
- JF JUNCTION
- JG JUNCTION
- JH JUNCTION
- JI JUNCTION
- IJ JUNCTION
- JK JUNCTION
- KL JUNCTION
- LM JUNCTION
- LN JUNCTION
- LO JUNCTION
- LP JUNCTION
- LQ JUNCTION
- LR JUNCTION
- LS JUNCTION
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- NZ NORTH
- OA OFFICE
- OB OFFICE
- OC OFFICE
- OD OFFICE
- OE OFFICE
- OF OFFICE
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- OK OFFICE
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