## **RESOLUTION NO. 2021-02-\_\_\_ (R)**

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF McKINNEY, TEXAS, AUTHORIZING THE CITY MANAGER TO EXECUTE AN AMENDED CONTRACT WITH HR GREEN, INC. FOR FIBER AND BROADBAND MASTER PLANNING AND CONSULTANT SERVICES

- WHEREAS, the City Council of the City of McKinney, Texas, in 2019 and 2020 during their annual Council Strategic Goals Work Session, determined the need for enhanced connectivity and broadband analysis,
- **WHEREAS,** the City Council, on May 21<sup>st</sup>, 2019, adopted a series of guiding principles for the rollout of enhanced wireless/5G infrastructure, and
- WHEREAS, the City engaged the services of HR Green, Inc. to serve as the City's strategic planning consultant for the evaluation of policies to manage wireless/5G rollout, and
- **WHEREAS**, the first phase of the City's planning efforts was presented to the City Council on July 21<sup>st</sup>, 2020, and
- **WHEREAS,** the McKinney City Council desires to continue its efforts and complete a study in relation to connectivity, enhanced wireless technology and fiber/broadband master planning.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF McKINNEY, TEXAS, THAT:

- Section 1. The City Council of the City of McKinney, Texas hereby authorizes the City Manager to enter into a contract with HR Green, Inc. for a fiber and broadband master plan and consultant services in an amount not to exceed \$117,150.00 as described in Exhibit A.
- Section 2. This Resolution shall take effect immediately from and after the date of passage and is so resolved.

DULY PASSED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF McKINNEY, TEXAS, ON THE 16<sup>th</sup> DAY OF FEBRUARY, 2021.

CITY OF McKINNEY, TEXAS

GEORGE C. FULLER
Mayor

ATTEST:

EMPRESS DRANE
City Secretary
JOSHUA STEVENSON
Deputy City Secretary

APPROVED AS TO FORM:

MARK S. HOUSER

City Attorney

SUBMITTED BY





McKinney, TX – Broadband Master Plan Proposal

February 16, 2021





February 16, 2021

**Trevor Minyard** Strategic Services Manager City of McKinney 222 N. Tennessee St. McKinney, TX 75069

Re:Broadband Master Plan Proposal

Dear Trevor,

It has been great to work with you and the City on the First phase of developing broadband related baselines in the City of McKinney. We are excited to take the next steps with you and the City, as we move towards a broadband master plan. We will continue to work with the Economic Development group for specific broadband and 5G needs they will have with their parcels - additionally, we agree with the City's desire to work through the larger broadband plans citywide.

In this proposal, we describe the steps that we typically recommend in developing a citywide broadband master plan. We also break out the costs per task. We do this so that we can discuss each piece and evaluate its necessity for McKinney. These tasks are what our experience tells us are important ingredients and we are glad to discuss order, phasing and relevance.

Thank you for what we feel like is a great relationship. We are excited to take the next important steps in keeping McKinney one of the best places to live.

Sincerely,

HR GREEN, INC.

**Edward Barrett** 

Practice Leader - Fiber and Broadband Services Local Project Manage

Ken Demlow

# **Project Approach**

Developing a broadband master plan that meets the City's needs and has consensus and buy-in, takes several steps. The process that we have found to be most successful to achieve those outcomes follows the work flow we have developed:



The first step (Vision) incorporates the tasks that need to be completed to know gaps and concerns there are with current and future broadband coverage. That data and information can include City assets, industry data of provider coverage, survey and discussions to verify industry data, City current needs and future plans, 5G, emergency management needs, Smart City possibilities, a review of current policies, ROW concerns, etc. From Phase I, we already have some of this data, so the beginning of the Vision phase for McKinney would be filling in the information we do not have yet.

The first goal in Visioning is to have solid data from which to take the next steps.

The next step in Visioning is to analyze the data to form a clearer picture of current and future connectivity gaps or issues. The goal is for the City to understand, at a detail level, what broadband issues currently exist and what can be anticipated from future plans and growth.

The last step in Visioning is to present the findings to key stakeholders to ensure their accuracy, to gain consensus on what the real issues are, and to develop or redefine broadband related goals. Also, in the Visioning steps, we encourage introducing the options of how to solve those issues. These

options could be City investment and control, working with partner providers to fill the gaps or a mix of those options. To be clear, we are not trying to solve the issues at this point. There are other tasks that need to be accomplished in the next step (Planning) that will provide the detailed information upon which to make decisions.

In Visioning, we seek to gather the data, define broadband goals and build the framework for the Vision for the broadband related issues the City needs to address.

That data, analysis, goals and Vision can, then, lead to tasks to define options (that fit in the City's Vision and goals) for how to improve and manage connectivity next steps and plan for the future. We refer to this step as "Planning". The Plan steps typically include:

- HR Green creating high level designs of paths of fiber (and other technologies) to meet current and future connectivity needs. These designs will have two focuses:
  - A design to meet City operational needs
  - A second design to help City leadership understand possibilities to improve connectivity for the community and related costs. We will work with staff and City leadership as to what option makes the most sense, as this high level design option is meant to provide City leadership with clear information to help the City decide what role (if any) the City should take in community broadband improvement

These designs are what are commonly referred to as high level. In the industry, it is common for high level to mean a representative approximation that is applied to the remainder of the design. HR

**Broadband Visioning** 

Green has developed a unique process that provides high level routes for the entire design option that includes the footages and costs for the entire design. To be clear, this step does not lead to construction level detail, but it will show full options the City can use for prioritization and decision making. Options can include conduit, fiber, Point to Point, Radio Frequency, etc.

- 2. Definition of the City's role in filling the gaps - with the knowledge of costs of options to organize and improve broadband, the City will have the information to decide what role the City wants to have. The City could invest in infrastructure and maintain some control or encourage outside investment and not have control. This is a particularly relevant question in broadband related to City operations
- 3. Provider outreach working with broadband providers will likely be an important part of improving broadband. Leading that conversation towards the City's Vision and goals is important. When the City takes goals and data to the providers, the providers will very likely want to collaborate to help reach mutually beneficial outcomes
- Develop a Broadband Master Plan that includes current and future broadband concerns (for City operations and the community), ROW issues, options to coordinate and improve connectivity and issues (with high level costs), options for providers, etc.

Once the Broadband Master Plan is in place, the next steps are to do a detail design of any routes that can move to construction, then build those routes. That is not included in this proposal because it is dependent on the options chosen from the Broadband Master Plan. We are glad to provide Scope and Fee

for that for each project identified.

As you know from Phase I, our approach is built around collaboration and communication. We break each step into Phases and Task and each Task has specific deliverables. We do that so that there are checks and balances as each Task begins and as each Task is completed. Working in that process, we can communicate about the level the City wants to be involved in each Task and make any adjustments along the way as the City reviews each deliverable. We strive to have each deliverable be exactly what the City needs, but sometimes there can be differences in expectations. With our approach, these can be discussed and adjusted to keep the project on track.

# Scope

## **VISION**

#### KICKOFF MFFTING

As we did in Phase I, we begin the process with a kickoff meeting to make sure everyone is on the same page about who will be doing what, how those tasks will be done and when they will be worked on and completed. We also discuss any information that needs to be exchanged.

### TASK 1: VERIFY EXISTING CITY ASSETS

In our kickoff (or before), we will discuss what information we might still need to verify broadband related City assets. This may be complete from Phase I, but we will do an analysis of that. These can help inform options for connecting and possible negotiation with potential partners. This is a GIS exchange. We are not budgeting for field verification, although that could be an additional scope if needed.

**DELIVERABLES** 



**Broadband Visioning** 

□ GIS map of current City assets

#### TASK 2: INDUSTRY MARKET ASSESSMENT

The industry produces information on reported broadband coverage. This information is very helpful in understanding what the carriers report that they provide. The data is known to often have flaws, but it does provide a baseline of understanding.

#### **DELIVERABLES**

■ Market Assessment report

#### TASK 3: COMMUNITY ENGAGEMENT

Engaging in a dialogue with City of McKinney business and residents and with City staff across departments, individually and in small groups, helps determine the issues that the City, businesses and residents face when it comes to broadband access and utilization.

HR Green team members will coordinate with City staff to develop and implement a community engagement and outreach program that includes both the general population and a subset of key stakeholders. Resident and business owner surveys will help decision makers better understand community needs. One-on-one and peer meetings with policymakers, anchor institutions and key influencers will drive visibility into community goals, setting the stage for future success.

These surveys and meetings will help determine the community's desire for improved levels of broadband service, current market conditions and deficiencies, stakeholder needs, and insights on what role local government should take in providing the service. For later planning phases, this information helps predict take rate and the optimum monthly cost users would be willing to pay for new services.

### TASK 3.1: COMMUNITY SURVEY

The survey will include a detailed list of questions to capture the data needed to statistically evaluate the status of the market. Surveys will be emailed to citizens and local businesses for which the City has email addresses, as well as be accessible via a link online. The City may choose to allow alternative methods for gathering survey data, including paper surveys, at an additional cost.

Two approaches may be taken to the survey to ensure statistically valid sampling results:

- Invite a random sample of McKinney businesses and households to participate in the survey using either a paper survey or online link; or
- 2. Allow all McKinney residents and businesses to participate in the survey.

The City may also decide to use both survey methods (random and open) so that the results from each method could be compared to one another. With either method, we will establish a minimum number of survey responses that would be required to have a scientifically valid sample with a margin of error of +/- 5%.

The first step in developing the survey is to develop a Community Engagement Plan that details all messaging, steps, questions, etc. This document is a collaborative effort between HR Green and City staff to have a clear and comprehensive plan for all of the pieces of community engagement.

As part of the Community Engagement Plan, we identify the information that City leaders would like to gather from constituents.

Typically, this survey requests information about phone, television and Internet services: which provider is used, at what costs, what they like and dislike today or would wish in the future, and how broadband services are used.



**Broadband Visioning** 

The survey will also seek to measure attitudes about what, if any, role constituents believe the City should play in improving broadband services where needed.

In addition to gathering statistical data, the survey serves another, very important civic role. Several opportunities are given for citizens to share anecdotal evidence of their experience with broadband services and attitudes about possible solutions. Citizens thus feel that their concerns are being listened to, increasing the chances that they will buy in to any solutions that meet those concerns.

#### 3.2: PUBLIC MEETINGS

During a typical study, one or more public meetings are scheduled to gather direct citizen feedback and helping constituents feel that they are part of the solution. In light of COVID-19 restrictions, however, we propose three "virtual" public meetings utilizing video conferencing platforms. These virtual public meetings will allow citizens to share concerns and provide necessary feedback safely and conveniently. The virtual meetings could consist of a brief presentation outlining the goals of the broadband study followed by a question and answer session. We recommend (a) one meeting at the beginning of the project which will also serve as a way to promote participation in the survey, (b) another meeting focusing on identifying perceived gaps in McKinney, to collect anecdotal evidence, and (c) a public meeting or presentation toward the end of the process to educate citizens and businesses on what was learned.

#### **DELIVERABLES**

- ☐ Survey development and deployment.
- □ Key findings for satisfaction, demand, price sensitivity and overall interest.

- ☐ Raw survey data will be provided for additional analysis as needed.
- Anonymous anecdotal responses from citizens.
- ☐ Public feedback on community ownership and competition.
- ☐ Risk tolerance regarding potential incremental tax, bonding or debt assumption to fund plans.
- Summary feedback on individual and group meetings.
- ☐ Service offering pricing summary.

#### TASK 3.3: PUBLIC SECTOR NEEDS

HR Green and its team members will meet with key stake holders to determine internet service needs and capabilities including key businesses, resident groups, schools, public works, public safety, and other organizations as appropriate. The team will evaluate the current status and cost of commercially available service and assess future needs.

Given current circumstances, these meeting might be held in person or over the internet. As part of the Community Engagement Plan, we will work with staff to finalize a list of organizations, meeting times and locations (if not internet). We will want to have a definitive number of businesses and resident group, with a typical number of meetings being able to be completed in one day.

### **DELIVERABLES**

- ☐ Summarize current government capabilities and cost of service
- ☐ Summarize projected broadband needs for stakeholders
- Provide gap analysis

#### TASK 4: GAP ANALYSIS

The data in Tasks 1-3 will tell a story of either



**Broadband Visioning** 

adequate coverage or gaps. In working with residents, businesses, public sector and emergency management, these gaps could be lack of adequate connectivity, redundancy, lack of security, insufficient capacity, future needs that current infrastructure will not be adequate for, economic development concerns, etc. We will analyze the findings to point out connectivity issues.

#### **DELIVERABLES**

Report of current and future connectivity concerns

### TASK 5: Visioning Meeting/Work Session

The data, gaps and gap analysis will tell a story. We have found it important to stop at this point and make sure City leadership see and understand the data and are clear on what gaps and concerns exist. In a work session to go through this information, we facilitate the development of broadband related goals as they flow from the real data and clear understanding of gaps. These goals can consist of what broadband coverage the City leaders want residents, businesses and public sector entities to have; what forms of solutions they want to explore to fill gaps and address present and future concerns, the role they think the City should have in solutions, etc. These are important to understand as options for solutions are explored.

#### **DELIVERABLES**

 One work session to present data and develop goals

## **PLAN**

With the data and analysis from work that has been done to date and results and goals from Visioning, the next step is to use that information to define McKinney's options for improving connectivity (where shortcomings were found) and preparing for future action.

# TASK 1: OPTIONS TO IMPROVE FIBER AND BROADBAND CONNECTIVITY

Using GIS tools, we will identify concerns in fiber optic and other forms of connectedness to city assets. We will define potential options to improve those connectivity issues and discuss those with the City. We will provide a preliminary design for a network expansion to meet the City's internal operational needs and a second preliminary design to improve community broadband.

The design for broadband expansion will be informed by City leadership and policy decisions that were made in the Vision phase of the project. At this point, we will provide industry level costing for the options to improve those connectivity concerns. It is important to note that we can provide analysis on more options and can also provide a high-level desktop design for those options – these both just require more hours. We wanted a way to clearly quantify what is included in this Scope and Fee, but please know that we can explore what options McKinney needs (if more gaps or more detailed costing) and modify this Scope and Fee.

#### **DELIVERABLES**

- □ High level design and costing to meet City operational needs (examples being conduit to the curb or a full network to see order of magnitude
- □ A later high-level design and costing of an option to collaborate with a potential partner (Task 5)

### TASK 2: FIBER AND BROADBAND MASTER PLAN

With broadband goals, a map that contains current city operations and community broadband concerns, future needs and options to address those needs, the City will be able to prioritize, strategize and budget (when appropriate) next steps. These maps,



**Broadband Visioning** 

high level designs, costs and plans form a Fiber and Broadband Master Plan. This is a combination of maps, spreadsheets and a report of strategies and staging recommendations to address community needs.

#### **DELIVERABLES**

 One draft of a McKinney Fiber and Broadband Master Plan and one revision based on city feedback.

# TASK 3: EVALUATE OPPORTUNITIES FOR PUBLIC-PRIVATE PARTNERSHIPS

Having the City goals, data, the most impactful options to organize broadband next steps and meet broadband concerns and a Master Plan, the City can decide to either build your own assets or approach partners. We will provide examples of the most common partnerships (including what is being done within Texas laws) and help you identify potential partners. This Task does not include a partner engagement process – that is covered in Task 5.

#### **DELIVERABLES**

- □ Up to 16 hours of meetings with Providers to explore interest in partnership models.
- □ Report of current partnership model and list of possible partners and interview findings.

# TASK 4: CONSENSUS BUILDING OF NEXT STEPS – SUMMARY REPORT, WORKSHOP, PRESENTATION

This Task likely includes the other Tasks in this Phase as we bring all of this data and analysis to discussions and presentations to find consensus. Every community is different, but we often find that a workshop or work session format is useful as we (in conjunction with staff) present the data and findings and discuss options. This is often a dynamic and energizing time as we work towards steps the City can take to futureproof McKinney, while

also improving connectivity for the entire City.

## **DELIVERABLES**

- ☐ Facilitate Review of Fiber and Broadband Master Plan
- □ One Community presentation
- ☐ One leadership work session (we would prefer these be on the same day).

# TASK 5: REQUEST FOR EXPRESSIONS OF INTEREST DEVELOPMENT AND ADVISING

Establishing McKinney as the City of Innovation in North Texas. We will work with City stakeholders to develop a comprehensive Request for Expressions of Interest for a City-wide broadband network. The RfEOI document will at minimum meet the Fiber and Broadband Master Plan outlined in Task 2, and will request that providers service priority areas, homes, and businesses alike with reliable and affordable services at speeds in excess of 500 Mbps.

HR green will work with City staff to publish the RfEOI, proactively reach out to vendors (building on the relationships developed in Task 3), and advise staff through the RfEOI process.

The timing of this Task will be important. HR Green will work with staff to have the second high-level design option in Task 1 correspond with this RfEOI. This will provide the City the opportunity to explore a high-level design option and high-level costing based on the requests of the potential partners who express interest.

#### **DELIVERABLES**

- □ Develop RfEOI for private partner
- Manage RfEOI process (submission to potential partners, advising the City).



**Broadband Visioning** 

# **Timeline**

These are dynamic tasks, but we have identified the below rough schedule to complete all of the tasks in this proposal.

BROADBAND VISION & PLANNING SERVICES										
SCOPE	2021									
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG		
VISION										
Task 1 - Verify Existing City Assets										
Task 2 - Industry Market Assessment										
Task 3 - Community Engagement										
Task 4 - Gap Analysis										
Task 5 – Visioning Meeting/Work Session										
PLAN										
Task 1 - Options to Improve Broadband										
Task 2 – Fiber and Broadband Master Plan										
Task 3 – P3 Options										
Task 4 - Consensus Meetings										
Task 5 – RfEOI Development, Management, Advising										

# Fees

BROADBAND VISION & PLANNING SERVICES	
SCOPE	FEE
PROJECT MANAGEMENT	
Project Management	\$8,250
VISION	
Task 0 – Kickoff Meeting	\$2,650
Task 1 - Verify Existing City Assets	\$4,940
Task 2 - Industry Market Assessment	\$7,320
Task 3 - Community Engagement	\$19,035
Task 4 - Gap Analysis	\$8,140
Task 5 – Visioning Meeting/Work Session	\$7,810
PLAN	
Task 1 - Options to Improve Broadband	\$18.060
Task 2 – Fiber and Broadband Master Plan	\$13,760
Task 3 – P3 Options	\$7,350
Task 4 - Consensus Meetings	\$10,585
Task 5 – RfEOI Development, Management and Advising	\$9,250
TOTAL FEE	\$117,150



# HR GREEN, INC. PROFESSIONAL SERVICES AGREEMENT AMENDMENT NO. 1

THIS AMENDMENT, made this sixteenth day of February 16, 2021 by and between, the City of McKinney, TX the CLIENT, and HR GREEN, INC. (hereafter "COMPANY"), for professional services concerning:

Fiber and Broadband Master Plan

hereby amends the original Professional Services Agreement dated December 6, 2019 as follows:

The CLIENT and COMPANY agree to amend the Scope of Services of the original Professional Services Agreement and previous amendments as follows:

COMPANY shall develop a Fiber and Broadband Master Plan for CLIENT. Scope of services of this project are attached to this Amendment and deliverables and timeline are included by reference as part of this Amendment

COMPANY Project Number: 181202

In consideration for these services, the CLIENT AGREES to adjust the payment for services performed by COMPANY on the following basis:

- Lump Sum to be increase by one hundred seventeen thousand one hundred fifty dollars (\$117,150).
- Travel and ancillary expenses, if any, to be billed at actual cost not to exceed \$6,000.

The total authorized compensation after this Amendment, including the original Professional Services Agreement and all previous Amendments, is one hundred seventy six thousand, one hundred twenty-two Dollars (\$176,122.00)

THIS AMENDMENT is subject to all provisions of the original Professional Services Agreement.

THIS AMENDMENT, together with the original Professional Services Agreement and all previous amendments represents the entire and integrated AGREEMENT between the CLIENT and COMPANY.

THIS AMENDMENT executed the day and year written above

ППІЗ	AMENDIVIENT executed the day and year white	ten abt	ove.	
	CITY OF MCKINNEY, TX		HR GREEN, INC.	
By:	Paul Grimes, City Manager	By:	Edward K. Barrett, Vice President	