

# County of McHenry Purchasing Department 2200 N Seminary Ave, Woodstock IL 60098



# Request for Proposal 20-51 Information Security Assessment and Penetration Testing

September 30, 2020

This Request for Sealed Proposal (RFP) is for the purpose of contracting with a qualified firm to provide Information Security Assessment and Penetration Testing on existing McHenry County networks. Subject to continuing need, and availability of funds as outlined within this document. All requirements are according to specifications enclosed herein.

Any communication regarding this request for proposal between the date of issue and date of award is required to go through the Buyer listed below (or the Purchasing Administrative Specialist). **Unauthorized contact with other McHenry County staff or officers is strictly forbidden.** 

<u>GENERAL REQUIREMENT</u>: This is a Request for Sealed Proposal (see attached). Proposal will be opened and evaluated in private and proposal information will be kept confidential until an award is made. **One** (1) **electronic version of the complete proposal is to be submitted.** 

Electronic Submissions accepted: PDFs may be uploaded at this link

<u>Contact Person</u>: Djuana M. Leonard, C.P.M., Procurement Specialist dmleonard@mchenrycountyil.gov

# SUBMISSION DATE AND TIME: no later than 9:00 a.m. (CST) October 27, 2020

Proposals received after the submittal time will be rejected and returned unopened to the sender.

#### SCHEDULE OF EVENTS

	SCHEDULE OF EVENTS			
September 30, 2020	RFP Available			
October 9, 2020	Questions due to dmleonard@mchenrycountyil.gov no later than 12:00 p.m. (CST)			
October 16, 2020	Questions answered via addendum and posted on County website no later than 4:00 p.m. (CST)			
October 27, 2020	Proposals due no later than 9:00 a.m. (CST) PDFs may be uploaded at this link			
October 28 – November 30, 2020	Initial County Review; Interviews and Demonstrations with short-listed firms			
December 1-11, 2020	Complete Evaluation			
January 2021	Notice of Award, County Board approval and contract execution			

#### **GENERAL INFORMATION**

#### REQUEST FOR PROPOSALS

#### **DEFINITION**

Request for Proposals (RFP) is a method of procurement permitting discussions with responsible contractor and revisions to proposals prior to award of a contract. Proposals will be opened and evaluated in private. Award will be based on the criteria set forth herein.

#### RECEIPT and HANDLING of PROPOSALS

Proposals shall be opened in private by the Evaluation Committee to avoid disclosure of contents to competing contractors.

# **EVALUATION of PROPOSAL**

The proposals submitted by contractors shall be evaluated solely in accordance with the criteria set forth in the RFP.

#### **DISCUSSION of PROPOSAL**

The Evaluation Committee may conduct discussions with any offeror who submits an acceptable or potentially acceptable proposal. Contractors shall be accorded fair and equal treatment with respect to any opportunity for discussion and revision of proposals. During the course of such discussions, the Evaluation Committee shall not disclose any information derived from one proposal to any other contractor.

# **NEGOTIATIONS**

The County of McHenry reserves the right to negotiate specifications, terms, and conditions, which may be necessary or appropriate to the accomplishment of the purpose of this RFP. The County may require the RFP and the offeror's proposal be incorporated in full or in part as Contract Documents. This implies that this RFP and all responses, supplemental information, and other submissions provided by the contractor during discussions or negotiations may be held by the County of McHenry as contractually binding on the successful Contractor.

### NOTICE of UNACCEPTABLE PROPOSAL

When the Evaluation Committee determines a contractor's proposal to be unacceptable, such contractor shall not be afforded an additional opportunity to supplement its proposal.

# **TERMS AND CONDITIONS**

# **AUTHORITY**

This Request for Proposals is issued pursuant to applicable provisions of the *McHenry County Purchasing Ordinance*, amended August 1, 2019. This ordinance is incorporated by reference into this RFP as if it were contained herein. An updated copy is available <u>at this link.</u>

# **RESERVED RIGHTS**

The County of McHenry reserves the right at any time and for any reason to cancel this Request for Proposal, to reject any or all proposals, or to accept an alternate proposal. The County reserves the right to waive any immaterial defect in any proposal. *Unless otherwise specified by the offeror, the County has no less than one hundred and twenty (120) days to accept.* The County may seek clarification from a contractor at any time and failure to respond promptly is cause for rejection. The County may require submission of best and final offers.

#### **INCURRED COSTS**

The County of McHenry will not be liable in any way for any costs incurred by respondents in replying to this RFP.

#### **AWARD**

Award shall be made by the McHenry County Board to the most responsive and responsible contractor whose proposal is determined to be the most advantageous to the County, taking into consideration price and the evaluation criteria set forth herein below.

#### **CRITERIA for SELECTION**

The following criteria and point system shall be used by the selection team to determine the firm or individual(s) most qualified and best suited to perform the work:

# 1. Qualifications & Experience (40 points)

Contractor's capability in all respects to perform fully the contract requirements. This includes the contractor's experience for the specific scope of services as set forth herein with projects of similar nature, size, complexity, and requirements as the County.

2. Compliance with RFP (40 points)

This refers to the adherence to all conditions and requirements of the RFP, including the system demonstrations.

- 3. Past Experience (10 points)
- 4. Cost (5 points)

This refers to the proposed price for the products and services listed in the RFP

5. References (5 points)

Total 100 points

#### NON-DISCRIMINATION

Contractor shall comply with the Illinois Human Rights Act, 775 ILCS 5/1-101 et seq., as amended and any rules and regulations promulgated in accordance therewith. Including, but not limited to the Equal Employment Opportunity Clause, Illinois Administrative Code, Title 44, Part 750 (Appendix A), 775 ILCS 5/1-102, which is incorporated herein by reference, and constituting of a written EEO Policy and a workforce profile that demonstrates its EEO practices. Furthermore, the Contractor shall comply the Public Works Employment Discrimination Act, 775 ILCS 10/0.01 et seq., as amended. The Contractor must have a written sexual harassment policy, which meets Illinois State Statutes, 775 ILCS, 15/3.

#### **SECURITY**

The Contractor represents and warrants to the County of McHenry that neither it nor any of its principals, shareholders, members, partners or affiliates, as applicable, is a person or entity named as a Specially Designated National and Blocked Person (as defined in Presidential Executive Order 13224) and that it is not acting, directly or indirectly, for or on behalf of a Specially Designated National and Blocked Person. The Contractor further represents and warrants to the County of McHenry that the Contractor and its principals, shareholders, members, partners, or affiliates, as applicable, are not directly or indirectly, engaged in, and are not facilitating, the transactions contemplated by this Agreement on behalf of any person or entity named as Specially Designated National and Blocked Person. The Contractor hereby agrees to defend, indemnify and hold harmless the County of McHenry, the Corporate Authorities, and all County of McHenry elected or appointed officials, officers, employees, agents, representatives, engineers and attorneys, from and against any and all claims, damages, losses, risks, liabilities, and expenses (including reasonable attorneys' fees and costs) arising from or related to any breach of the foregoing representation and warranties.

#### **OSHA REQUIREMENTS**

The Occupational Safety and Health Act of 1970 (OSHA) "guarantees workers the right to a safe and healthful workplace". Under Section 5(a) (1) of the OSHA Act, the employer must "furnish to each of his employees' employment and a place of employment which are free from recognized hazards that are causing or likely to cause death or serious physical harm to his employees."

There are times when the County must hire entitles and individuals (contractors) to perform services. To this end, contractors hired by the County of McHenry must perform their duties in a manner that is complaint with all state and federal health and safety laws and industry guidelines. It is the responsibility of the contractor to ensure that their personnel and subcontractors comply with all state and federal health and safety laws and regulations and industry guidelines, including, but not limited to those set forth by: OSHA and related regulations, the Safety Inspection and Education Act, the Health and Safety Act, the National Institute of Occupational Safety and Health, the National Fire Protection Association, the Centers for Disease Control, American Industrial Hygiene Association, the American Council of Governmental Industrial Hygienists, the Environmental Protection Agency, and the Department of Transportation.

#### PROCUREMENT OF GREEN PRODUCTS AND TECHNOLOGIES

As approved by the McHenry County Board in April 2008, it is in the interest of public health, safety and welfare and the conservation of energy and natural resources to use and promote environmentally responsible products. The County should strive to influence private purchases through the example of using government specifications and standards that are green or environmentally friendly when making its purchases.

Whenever available and cost-justified, the County should purchase those materials including the purchase of recycled products containing post-consumer materials rather than residual materials resulting from the processing or manufacturing from another product. To the extent practicable, all products standards shall emphasize functional or performance criteria, which do not discriminate against the use of, recycled materials.

McHenry County should cooperate to the greatest extent feasible with other governments and organizations to develop a comprehensive, consistent, and effective procurement effort intended to stimulate the market for recycled products, reusable products, products designed to be recycled, and other environmentally responsible products.

McHenry County shall continue to participate in and shall encourage other public jurisdictions to participate with the County in the purchase of products containing recycled content. Participation in such cooperative systems shall be aimed at obtaining maximum practical recycled content in County purchases, to obtain best available price for products with recycled content, to facilitate or encourage lower prices industry-wide and to encourage development of industries and markets dealing with recycled content products.

# PROCUREMENT OF PRODUCTS THAT ARE ENERGY STAR QUALIFIED

McHenry County shall select, where life cycle and cost-effective, ENERGY STAR and other energy efficient products, when acquiring energy-using products. This information will be required by the bidder in their bid submittal.

# COOPERATIVE PURCHASING

This contract shall be offered for purchases to be made by other counties and governmental units within the State of Illinois as authorized by the Government Joint Purchasing Act. All purchases and payments made under this authority shall be made directly by the governmental unit to the Contractor. The County of McHenry shall not be responsible in any way for such purchase orders or payments. All terms and conditions of this contract shall apply to all orders placed by another governmental unit.

#### RIGHT TO PROTEST

Any actual or prospective bidder or Contractor who is aggrieved in connection with the solicitation or award of a Contract may protest to the Director of Purchasing. Any protest must be submitted in writing within ten (10) calendar days from the issuance of the solicitation, addendum, and notice of award or other decision by the Purchasing Department.

# <u>ADDENDUM</u>

Should the Contractor require any additional information about this RFP, please email Purchasing at <a href="mailto:purchasing@mchenrycountyil.gov">purchasing@mchenrycountyil.gov</a> with any questions by the deadline as outlined in the schedule of events. ANY AND ALL changes to these specifications are valid only if they are included by Written Addendum to All Bidders. NO interpretation of the meaning of the plans, specifications, or other contract documents will be made orally. If required, all addenda will be faxed to bidder if a Notice of Intent to Bid has been completed and submitted to the Purchasing Office. In addition, all addenda are posted on the County of McHenry's website. Failure of the bidder to receive any such addendum or interpretation shall not relieve the bidder from obligation under this RFP as submitted. All addenda so issued shall become part of the bid documents. Failure to request an interpretation constitutes a waiver to later claim that ambiguities or misunderstandings caused by a bidder to improperly submit a proposal.

Response to these questions will be made by means of an addendum. Only the Director of Purchasing has the authority to issue an addendum.

Addenda are written instruments issued by the County prior to the date for receipt of proposals, which modify or interpret the RFP by addition, deletions, clarifications or corrections.

Prior to the receipt of proposals, addenda will be emailed to all who are known to have received an RFP Notice. Each contractor shall ascertain prior to submitting a proposal that all addenda issued have been received and, by submission of a proposal, such act shall be taken to mean that such contractor has received all addenda and that the contractor is familiar with the terms thereof and understands fully the contents of the addenda.

# **TAXES**

The County of McHenry is exempt from paying Illinois Use Tax, Illinois Retailers Occupation Tax, and Federal Excise Tax.

#### **PAYMENTS**

The Contractor shall furnish the County with an itemized invoice. Payment shall be made in accordance with applicable provisions of the "Local Government Prompt Payment Act."

# CONTRACTOR RESPONSIBILITIES

The selected Contractor will be required to assume responsibility for all services offered in this proposal. The County will consider the selected Contractor to be the sole point of contact with regard to contractual matters, including payment of any and all charges resulting from the contract.

Any contract resulting from this RFP may not be assigned, in whole or in part without written consent of the County. If the Contractor attempts to make such an assignment without the written consent of the County, the Contractor shall nevertheless remain legally responsible for all obligations under the Contract.

# INTERPRETATION or CORRECTION of REQUEST for PROPOSALS

Contractors shall promptly notify the Director of Purchasing of any ambiguity, inconsistency, or error, which they may discover upon examination of the Requests for Proposals.

Interpretations, corrections, and changes to the Request for Proposals will be made by addendum. Interpretations, corrections, or changes made in any other manner will not be binding.

### **COMPLIANCE WITH LAWS**

The contractor hereto covenants and agrees to comply with all applicable federal, state, and local laws, codes, ordinances, rules and regulations. Failure to comply with the terms of this provision shall constitute a breach of contract and permit the County to terminate this (Request for Sealed Proposal) in accordance with the termination provisions stated herein.

#### RECOURSE for UNSATISFACTORY MATERIALS

Payment shall be contingent upon the County's inspection of and satisfaction with completed work. Any defective work or materials, non-conformance to specifications, damaged materials, or unsatisfactory installation shall be corrected to the County's satisfaction by the successful contractor at no additional charge.

#### **TERMINATION**

Failure to comply with the terms and conditions as herein stated shall be cause for cancellation of the contract. The County will give written notice of unsatisfactory performance and the Contractor will be allowed thirty (30) days to take corrective action and accomplish satisfactory control. If at the end of the thirty days, the County deems the Contractor's performance still unsatisfactory, the contract shall be canceled. The exercise of its right of cancellations shall not limit the County's right to seek any other remedies allowed by law.

The successful contractor will agree that the resulting contract is made subject to available budgetary appropriations and shall not create any obligation on behalf of the County in excess of such appropriations. In the event that no funds or insufficient funds are appropriated and budgeted, this Contract shall terminate without penalty or expense to the County thirty (30) days after written notification of termination from the County.

The successful contractor will agree that pursuant to requirements imposed under Illinois law, the County shall have 120 days after each election of county board members to terminate this Contract, without cause and without penalty.

#### REJECTION of BIDS, WAIVER of IRREGULARITIES

McHenry County reserves the right to reject any or all proposals, to waive irregularities, and to accept that proposal which is considered to be in the best interest of the County. Any such decision shall be considered final.

#### **DELIVERY**

Delivery will be considered in making the award and the contractors shall state, in the spaces provided expected delivery after receipt of order. Failure to meet said delivery promises without prior consent of the Director of Purchasing will be considered a breach of faith.

#### WORKMANSHIP

Items shall be manufactured according to the highest traditions of the industry and shall meet all commercial standards of quality. The County shall be the sole judge of acceptable products. Unacceptable products will be rejected and suitable price adjustments made.

#### QUALIFICATIONS

Each firm submitting a proposal for this project shall submit detailed information concerning the professional qualifications of the individual(s) assigned to carry out this project. Relevant project experience, logistical capabilities and other relevant support data regarding the firm and assigned personnel must be included.

Each firm submitting a proposal for this project must provide at least three (3) references where projects of a similar nature have been successfully completed and implemented. These references should provide the name and address of the entity where the project was completed as well as a contact person.

#### **INSURANCE**

<u>General</u> The successful bidder shall maintain for the duration of the contract and any extensions thereof, at bidder's expense, insurance that includes "Occurrence" basis wording and is issued by a company or companies qualified to do business in the State of Illinois that are acceptable to the County, which generally requires that the company(ies) be assigned a Best's Rating of A or higher with a Best's financial size category of Class XIV or higher, in the following types and amounts:

a) Commercial General Liability in a broad form, to include, but not limited to, coverage for the following where exposure exists: Bodily Injury and Property Damage, Premises/Operations, Independent Contractors, Products/Completed Operations, Personal Injury and Contractual Liability; limits of liability not less than:

\$1,000,000 per occurrence and \$2,000,000 in the aggregate;

b) Business Auto Liability to include, but not be limited to, coverage for the following where exposure exists: Owned Vehicles, Hired and Non-Owned Vehicles and Employee Non-Ownership; limits of liability not less than:

\$1,000,000 per occurrence combined single limit for: Bodily Injury Liability and Property Damage Liability;

- c) Workers' Compensation Insurance to cover all employees and meet statutory limits in compliance with applicable state and federal laws. The coverage must also include Employer's Liability with minimum limits of \$100,000 for each incident.
- d) Professional Liability Insurance with \$1,000,000 per occurrence and \$1,000,000 in aggregate.

#### **EVIDENCE of INSURANCE**

The successful bidder agrees that with respect to the above-required insurance that:

- (a) The County of McHenry shall be provided with Certificates of Insurance evidencing the above required insurance, prior to commencement of the contract and thereafter with certificates evidencing renewals or replacements of said policies of insurance at least fifteen (15) days prior to the expiration or cancellation of any such policies;
- (b) The contractual liability arising out of the contract shall be acknowledged on the Certificate of Insurance by the insurance company;
- (c) The County of McHenry shall be provided with thirty (30) days prior notice, in writing, of Notice of Cancellation or material change and said notification requirement shall be stated on the Certificate of Insurance;
- (d) Subcontractors, if any, comply with the same insurance requirements. In addition to being named as an additional insured on the Certificate of Insurance, each liability policy shall contain an endorsement naming the County of McHenry as an additional

- insured. A copy of the endorsement shall be provided to McHenry County along with the Certificate of Insurance; and
- (e) have McHenry County named as an additional insured and the address for certificate holder must read exactly as:

County of McHenry, a body politic 2200 N. Seminary Avenue Woodstock, IL 60098

(f) Insurance Notices and Certificates of Insurance shall be provided to:

McHenry County, Purchasing Department
2200 N. Seminary Avenue, Room 200

Woodstock, Illinois 60098

The County shall be provided with Certificates of Insurance evidencing the above required insurance prior to the commencement of this Agreement and thereafter with the certificated evidencing renewals or changes to said policies of insurance at least fifteen (15) days prior to the expiration or cancellation of any such policies.

The County shall be named as additional insured on all liability policies, and the parties acknowledge that any insurance maintained by the County shall apply in excess of, and not contribute to, insurance provided by successful bidder.

The contractual liability arising out of the Agreement shall be acknowledged on the Certificate of Insurance by the insurance company. The County shall be provided with thirty (30) days prior notice, in writing, of Notice of Cancellation or material change, and said notification requirements shall be stated on the Certificate of Insurance.

Acceptance or approval of insurance shall in no way modify or change the indemnity or hold harmless clauses in this agreement, which shall continue in full force and effect.

#### HOLD HARMLESS CLAUSE

The Contractor agrees to indemnify, save harmless and defend the County of McHenry, their agents, servants, and employees, and each of them against and hold them harmless from any and all lawsuits, claims, demands, liabilities, losses and expenses, including court costs and attorney's fees, for or on account of any injury to any person, or any death at any time resulting from such injury, or any damage to property, which may arise or which may be alleged to have arisen out of or in connection with the work covered by this contract. The foregoing indemnity shall apply except if such injury, death or damage is caused directly by the willful and wanton conduct of the County of McHenry, their agents, servants, or employees or any other person indemnified hereunder.

#### CHOICE OF LAW AND VENUE

The contractor agrees that this proposal has been executed and delivered in Illinois and that their relationship and any and all disputes, controversies or claims arising under this bid or any resulting contract shall be governed by the laws of the State of Illinois, without regard to conflicts of laws principles. The bidder further agrees that the exclusive venue for all such disputes shall be the Circuit Court of the 22<sup>nd</sup> Judicial Circuit of McHenry County, Illinois, and the bidder hereby consent to the personal jurisdiction thereof.

#### **EVALUATION**

Evaluation of proposals will be done by the Director of Purchasing and associated County staff. Proposals will be evaluated on experience in doing projects of a similar nature and adherence to specifications.

#### **DIRECTIONS FOR SUBMISSION**

Qualified individuals or firms are to submit **one** (1) **electronic version** of the completed proposal along with any support documentation.

All data and documentation submitted as part of this RFP shall become the property of McHenry County, Illinois. After award of this contract, all responses, documents, and materials contained in the RFP shall be considered public information and will be made available for inspection in accordance with the Illinois Freedom of Information Act.

All proposals must be received no later than **9:00 a.m.** (CST) on October **27, 2020**. Absolutely no proposal will be accepted after the time specified. Late proposals shall be rejected and returned unopened to the sender. The County of McHenry does not prescribe the method by which proposals are to be transmitted; therefore, it cannot be held responsible for any delay, regardless of reason, in the transmission of proposals.

PDFs may be uploaded at this link

#### **SUBMITTAL**

Submit one (1) proposal, multiple proposals will not be accepted.

#### **PRICING**

Price offered shall be firm for at least 120 days after the latest time specified for submission of proposals and thereafter until written notice is received from bidder.

#### **FREIGHT**

Freight is all inclusive unless otherwise stated.

#### **FUEL SURCHARGE**

The County of McHenry does NOT accept any fuel surcharges.

## EXPECTATION FOR EQUIPMENT/HARDWARE

It is the County's expectation equipment and/or hardware installed as part of this RFP will be in new, un-used condition unless otherwise noted in bid submission.

#### **SPECIFICATIONS**

McHenry County is seeking a qualified vendor to provide Information Security Assessment and Penetration Testing on existing County networks, as a service to the County of McHenry. Base Year I will begin on execution of contract in early 2021 through November 30, 2021, Base Year II will begin December 1, 2021 through November 30, 2022, Year III (optional) will begin December 1, 2022 through November 30, 2023, and Year IV (optional) will begin December 1, 2023 through November 30, 2024. All requirements are according to specifications enclosed herein.

This assessment will allow the County to gain a better understanding of potential network vulnerabilities that maybe visible from both outside and inside the county's network. The Scope of Work is setup in five (5) sections. Bidders are requested to bid on these sections separately as the County <u>may not select all Five</u> (5). The testing should focus on four (4) main areas:

- 1) Network Penetration Testing
- 2) Wireless Network Penetration testing
- 3) Employee/Client testing
- 4) Server and Application Penetration testing

#### **Objectives**

McHenry County's overall objective is to ensure that appropriate information security controls are implemented within its Networks, Servers, Applications and Computing platforms to preserve integrity, confidentiality, and availability of its information and computing resources. Effective implementation of these security controls will aid in the prevention of unauthorized, accidental, or deliberate disruption of McHenry County's information technology resources. At a minimum, the following objectives must be met to achieve McHenry County's overall requirements:

- Investigate whether or not an attacker could penetrate the system to be evaluated, internally or externally, without McHenry County providing any more information than would naturally be available to an anonymous attacker.
- Provide evidence that verifies the possibility of exploiting the vulnerabilities found, as well as the scope of these vulnerabilities, and their remediation.
- Investigate whether or not there exist any known vulnerabilities on the network and applications that are to be evaluated, which an attacker could take advantage of, without the organization providing any more information than would naturally be available to legitimate users.

# Scope of Work

The Penetration testing shall provide a practical approximation of the weak points in McHenry County's network infrastructure and selected applications, describing the risks of such vulnerabilities, and facilitating the design of a plan for implementing remediation.

**Section I -** External Network Vulnerability Assessment and Penetration Testing.

Conduct an External Network Penetration Test on 50 live external IP's. This test should be comprised of a series of assessments that should include the following tasks (at a minimum):

- Information gathering: Identify live hosts, operating systems, services provided, access control mechanisms, access servers and any exposed interactions between systems.
- Generic vulnerability testing: Determine the presence of known vulnerabilities and document how they could be exploited. This includes vulnerabilities related to legitimately provided services such as HTTP, HTTPS, DNS, SMTP mail exchangers, Remote Access, and etc.
- Network characteristics and topology tests: Determine the presence and exploit vulnerabilities related to network topology, network components configuration and design principles and protocol specific characteristics. These include tests that consider spoofing techniques, protocol specific tests such as usage of IP options, fragmentation, exploit of trust relationships, protocol encapsulation, routing tricks, design and implementation flaws in several network protocols and related services, etc.
- Miss-configuration tests: Identify and exploit typical miss-configuration problems.
- Authentication and access control schemes tests: Attempt to subvert authentication and access control mechanisms based on common attacks that exploit the lack of a strict security policy or enforcement.

# **Section II -** Internal Network Vulnerability Assessment and Penetration Testing.

Conduct an Internal Network Penetration test on internal Servers and services provided. This test should be comprised of a series of assessments that should include the following tasks (at a minimum).

- Acquire network access: locate and connect to network connections to access local networks.
- Information gathering tests: Identify live hosts, map network topology, identify operating system, services provided, access control mechanisms, and perform port scans on local networks.
- Generic vulnerability tests: Determine the presence of known vulnerabilities and how to exploit them. This includes vulnerabilities related to legitimately provided services such as HTTP, HTTPS, SMB, ARP, FTP, SMTP mail exchangers and gateways, DNS, and print sharing services, etc.
- Network characteristics and topology tests: Determine the presence and exploitable vulnerabilities relate to network topology, network components configuration and design principles and protocol specific characteristics.
- Miss-configuration tests: Identify and how to exploit typical misconfiguration problems.
   Authentication and access control schemes tests: Attempt to subvert authentication and access control mechanisms based on common attacks that exploit the lack of a strict security policy or the enforcement of such. This includes dictionary and brute force attacks on reusable passwords, exploit of weak authentication schemes, social engineering, exploit of contingency plan procedures, etc.
- Data Security: Evaluate and assess current enterprise database security controls for mission critical applications located within the Finance, Health, Sheriff, Human Resources, and Courts Departments. Assessment should focus on controls for both regulatory and legal compliance (HIPAA, CJIS, PCI, PII) as well as controls protecting Restricted County Information (RCI)

- Security Operations: Evaluate McHenry County Security Operations Security Information and Event Management (SIEM) controls with regard to active monitoring, event correlation, threat response, resource capacity, and staff support.
- Review Security related emergency response documents.
- Review current security related policies and procedures.

# Section III - Wireless Network Assessment and Penetration Testing

Conduct a Wireless Network Penetration test on available internal Wireless Networks and services provided. This test should be comprised of a series of assessments that should include the following tasks (at a minimum).

- Information gathering: Identify all wireless networks that are available, map out public and private networks.
- Access Control tests: Determine if it is possible for a public user to connect to private network, identification bypass.
- Vulnerability and packet capturing: Determine the presence of known vulnerabilities and their exploitation as well as packet captures.
- Miss-Configuration tests: Identify and how to exploit typical misconfiguration problems with controllers and vlans issues.

#### **Section IV -** Application Penetration Testing

Conduct Penetration testing on selected applications to test the effectiveness of the built-in security controls by exposing and exploiting weaknesses. The following systems are to be tested.

- Microsoft SharePoint
- Microsoft Dynamics Great Plains
- Microsoft Azure
- Email and Archiving
- JustWare
- Custom Applications, (iJustice and Performance Series)

Testing will be conducted with and without an ID. This usually includes a login page for users to authenticate against the application and, upon successful authentication, users gain access to more application functionality. Testing will be focused on the application in general.

Tests will look for the following issues, among others:

- Information leakage intended at determining if confidential information or information that might otherwise aid an attacker is disclosed by the application or its environment.
- Input validation, verifies that all user input is correctly validated, and sanitized if necessary, to ensure that the application behaves as expected independently of the submitted input.
- Filtering layers, focused on verifying that the necessary filtering mechanisms are in place to proactively defend against common web application attacks.
- Parameter passing, testing that all parameter handling is performed in a secure manner. For example, looking for authorization information mishandled by the application, which instead of being stored server-side is sent by the user.

- Cross-site scripting, aimed at identifying cross-site scripting vulnerabilities through the application due to improper encoding of user supplied input.
- SQL injections, focused on determining when user input is used to construct database queries and testing the possibility of specially crafting input to control the queries, beyond the programmer's intention.
- Identify weaknesses in web applications, web servers and associated databases
- Dynamically generate exploits that can compromise security weaknesses
- Demonstrate the potential consequences of a successful attack
- Get information necessary for addressing security issues and preventing data incidents
- Others that could be present on the application reviewed.

# Section V - Client-Side Penetration Testing

Perform a Client-Side Penetration Test to determine the susceptibility of users to social engineering attacks. These tests should assess the overall security of end-user systems and depicts how individual client-side exposures can be linked to data an information leakage.

The methodology used for the client-side attacks should involve the following:

- Information gathering
  - Gather information from public sources (website, Google, newsgroups, mailing lists, etc.) for e-mail addresses of the customer and employee.
  - Use phone and e-mail (spear phishing) tactics targeting select users to gather additional information about the user or Government Center.
- Attack and gain access
  - Attempt to gain access to an employee's machine via e-mail, phone, or other means.
  - Install a remote agent on the comprised machine and be able to interact with the computer and then point out attack vectors a would-be attacker could achieve including;
    - → View the local file system and mapped drives
    - → Upload and download files to and from the end-user system
    - → Open and interact with files on the compromised system
    - **→** Gather usernames and passwords from endpoint applications
    - → Take a screenshot of current activity on end-user's desktop
    - → Harvest email addresses from client's email.
    - → Deploy a key logger that tracks the user's keystrokes
    - → Perform a password dump from the user's web browser
    - → Harvest addresses from public resources, while limiting the testing pool to 50 email addresses.

#### **Deliverables**

For each category, deliverables should include at a minimum:

• Executive summary report - A summary report of all completed penetration test activities and their results. Reported data includes:

- 1. Summary of exploited vulnerabilities
- 2. Summary of discovered hosts
- 3. Most exploited vulnerabilities (overall and by operating system)
- Host report A detailed report about the hosts tested grouped by host IP address. Reported data should include:
  - 1. Number of compromised hosts
  - 2. Services and applications found on each host
  - 3. Average number of exploited vulnerabilities on those hosts
  - 4. The CVE numbers and names of the vulnerabilities found on each compromised host
  - 5. How to uninstall the agent from comprised systems.
- Vulnerability report Provides a detailed report about the vulnerabilities that were successfully
  exploited on each host (versus potential vulnerabilities). The report should provide details for each
  of the exploited vulnerabilities listed for the compromised hosts in the Host Report. For each of
  the vulnerabilities found, a vulnerability record will be presented using the following format:
  - Category of vulnerability
  - o Information disclosure Configuration
  - o Remote Code Execution Industry standard vulnerability identifier
  - o CVE
  - o BugTrackiD Microsoft MS advisory o Vulnerable system identification IP address o Hostname (if available) Operating system
- General conclusions and recommendations interpret the results and provide information-based vendor security expertise as to what these results mean in an easy to understand format. Recommendations will include remediation and configuration suggestions.

# THIS PAGE IS MANDATORY PROPOSAL FORM

We,					
Description	Base Year 1 Execution – 11/30/21	Base Year 2 12/1/21-11/30/22	Year 3, optional, 12/1/22-11/30/23	Year 4, optional, 12/1/23-11/30/24	
External Network Vulnerability Assessment and Penetration					
Testing	\$	\$	\$	\$	
Internal Network Vulnerability Assessment and Penetration	7	7	7		
Testing	\$	\$	\$	\$	
Wireless Network Assessment and Penetration					
Testing Application Penetration	\$	\$	\$	\$	
Testing	\$	\$	\$	\$	
Client-side Penetration					
Testing	\$	\$	\$	\$	
Grand Total	\$	\$	\$	\$	
List any Exceptions	to this RFP:				

# THIS PAGE IS MANDATORY

# **Authorized Negotiators:**

Name:
Phone #:
Title:
Name:
Phone #:
Title:

# THIS PAGE IS MANDATORY

**COMPANY REFERENCES:** List three (3) references for projects of similar size and nature, other than McHenry County. Governmental references are preferred over others. Use additional pages if necessary.

Entity: Address: City, State, Zip Code: Telephone Number: Contact Person & Email Address: Entity: Address: City, State, Zip Code: Telephone Number: Contact Person & Email Address: Entity: Address: City, State, Zip Code: Telephone Number: Contact Person & Email Address:

# THIS PAGE IS MANDATORY Certifications & SIGNATURE PAGE

•	Vendor certifies that it has not been barred from contracting with a unit of State or local government as a result of a violation of Section 33E-3 or 33E-4 of the Criminal Code of 1961, as amended. Yes:
	No:
•	Vendor certifies that it is aware that all contracts for the Construction of Public Works are subject to the Illinois Prevailing Wage Act (820 ILCS 130/1-12). Yes: No:
-	Under penalties of perjury, I certify that my correct Federal Taxpayer Identification Number is:
-	I am doing business as a (please check one):
L	Sole Proprietorship Partnership Corporation (State of Incorporation:) Other  State full names, titles and addresses of all responsible principles and/or partners below:
	Zame in in in particle and addresses of an iosponator printiples and of particle content
	Name:Title:
	Address:
	Name:Title:
	Address:
•	I have carefully examined the Bid, Scope of Work, Specifications, and any other documents accompanying or made a part of this Bid. I hereby propose to furnish the goods or services specified in the Bid. I agree that my proposal will remain firm for a period of up to 120 days in order to allow the County adequate time to evaluate the qualifications submitted.  I verify that all information contained in this proposal is truthful to the best of my knowledge and belief. I further certify that I am duly authorized to submit this Bid on behalf of the firm as its act and deed, and that the firm is ready, willing, and able to perform if awarded the contract. I further certify, under oath, that this proposal is made without prior understanding, agreement, connection, discussion, or collusion with any other person, firm or corporation submitting a proposal for the same product or service. No officer, employee or agent of the County of McHenry or any other proposer is interested in said proposal and that the undersigned executed this Proposer's Certification with full knowledge and understanding of the matters therein contained and was duly authorized to do so.
	Individual/Company/Corporation:
	Business Address:
	City, State and Zip Code:
	Printed Name: Title:
	Signature:
	Telephone Number: Email:
	Witness Signature: Title:
	Date:

**End of Document**