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| SOLICITATION ADDENDUM ONE  REMOVAL AND REPLACMENT OF ALL REFERENCES TO NDEE, QUESTIONS AND ANSWERS, REVISED SECTION V.D, REVISED SECTION V.D.2.a, REVISED SECTION V.F, REVISED SECTION VI.A.2, REVISED COST PROPOSAL |

**SOLICITATION NUMBER: 121442 O5**

**DWEE IIS Modernization**

**Opening Date: July 29, 2025, 2:00 PM CST**

**Addendum Effective Date: July 11, 2025**

#### Removal and Replacement of all References to NDEE

Effective July 1, 2025, the Nebraska Department of Natural Resources and the Nebraska Department of Environment and Energy merged to create the Nebraska Department of Water, Energy, and Environment (DWEE). All references to “Nebraska Department of Environment and Energy” or “NDEE” within the solicitation and all related attachments shall be removed and replaced with “Nebraska Department of Water, Energy, and Environment” and “DWEE” respectively.

#### Questions and Answers

Following are the questions submitted and answers provided for the above-mentioned solicitation. The questions and answers are to be considered as part of the solicitation. It is the responsibility of bidders to check the State Purchasing Bureau website for all addenda or amendments.

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| Question Number | RFP Section Reference | RFP Page Number | Question | State Response |
| 1 | V.A. | 24 | What are the primary drivers behind this modernization initiative (e.g., security, usability, performance)? | The pool of qualified RPG developers has steadily declined over time. This presents significant hiring challenges, as few professionals actively pursue or maintain RPG expertise today. |
| 2 | V.A. | 24 | Are there existing reporting tools or dashboards that need to be replicated? | No |
| 3 | V.A. | 24 | Is there a preferred technology stack for the modernized IIS system (e.g. .NET, open-source)? | PHP and/or JavaScript. |
| 4 | V.D.6. | 25 | What integration points must be supported in the new system? | It must still read and write t existing DB2 database files. |
| 5 | V.A. | 24 | Can you provide access to existing documentation, system architecture diagrams, or data schemas to inform our response? | Reference to 121442 O5 Attachment B.xlxs is the best source information that can be provided at this time. |
| 6 | V.C.2. | 24 | Is there documentation related to existing business logic? | No |
| 7 | V.D.5.a. | 25 | Are there any data retention, archival, or cleansing policies that must be applied during migration? | No |
| 8 | V.C.3. | 24 | Should the new system support mobile/responsive use cases? | No |
| 9 | V.A. | 24 | Are there any regulatory reports the new system must generate? | No |
| 10 | V.D.7.a. | 25 | Are there existing automated tests that can be used to verify the existing business logic? | No |
| 11 | V.A. | 24 | Will the vendor be responsible for hosting, or is this expected to remain on the State infrastructure? | This will reside on the agency's existing IBM server. And future additions and modifications will be performed by agency staff. |
| 12 | V.A. | 24 | Is the modernization effort expected to maintain the existing functionality exactly, or is there openness to redesign or reimagining workflows for improved efficiency? | Yes |
| 13 | V.A. | 24 | While RPG ILE and Free-Form RPG for Zend Server compatibility is identified, would you be open to discussing alternative modernization approaches (e.g., re-platforming to a modern language or framework) if they can preserve business logic and improve long-term sustainability? | The modernization approach needs to be compatible with ZendPHP Server that currently resides on agency's IBM server. |
| 14 | V.A. | 24 | Do you envision keeping Zend Server long-term, or is that simply a requirement for the immediate project? | Yes, it is our intension on keeping the Zend Server due to having other applications in that environment. |
| 15 | V.D.4.a. | 25 | How extensive is the existing business logic, and has it been well-documented, or will reverse engineering be required in this effort? | Each program has its own business logic and documentation is within the program itself. |
| 16 | V.D.1.a. | 24 | Will we have access to subject matter experts (SMEs) from NDEE during the project to validate preserved functionality? | Yes |
| 17 | V.A. | 24 | Is improving the end-user interface or adding features part of this engagement, or is the focus solely on the back-end code modernization? | Improving the end-user interface and back-end code modernization. There is no need for added features at this time. |
| 18 | V.A. | 24 | Are you open to proposing an initial discovery/assessment phase as a standalone project to refine requirements and reduce risk for full modernization? | Please see revisions to multiple solicitation sections and the cost proposal below as part of this Solicitation Addendum. |
| 19 | V.A. | 24 | Has a budget range or funding allocation been identified for this modernization effort? If so, can you share that range with bidders to help align proposed solutions appropriately? | No. However, DWEE reserves the right to not move forward with the IIS Modernization project if proposals are not deemed to be financially viable. |
| 20 | V.A. | 24 | Are there specific funding constraints or deadlines we should be aware of that might influence delivery schedules, phasing, or scope decisions? | Deadlines are defined in RFP document. Individual deliverables are not capped. However, DWEE reserves the right to not move forward with the IIS Modernization project if proposals are not deemed to be financially viable. |
| 21 | V.A. | 24 | What are your requirements or preferences regarding the geographic location of the delivery team (e.g., U.S.-based, hybrid, or offshore)? | A scrutinized company shall not bid on, submit a proposal for, or enter into, directly or indirectly through a third party, any contract or contract renewal with any public entity for any technology-related public product or service, (See Neb. Rev. Stat. §73-904). No public entity shall enter into any contract or renewal that results in state or local government funds being transferred to a scrutinized company in connection with any technology related product or service in performance of the contract or to any company in connection with any technology related product or service that originates with a scrutinized company. (See Neb. Rev. Stat. §73-906).  Scrutinized company means:  (a) Any company organized under the laws of a foreign adversary or having its principal place of business within a foreign adversary, and any subsidiary of any such company; or  (b) Any company owned in whole or in part or operated by the government of a foreign adversary, an entity controlled by the government of a foreign adversary, or any subsidiary or parent of any such company; or 1  (c) Any company that sells to a public entity a final technology-related product or service that originates with a company described in (a) or (b) above, without incorporating that product or service into another final product or service. |
| 22 | I.A. | 1 | Are out of state bidders permitted to bid and to perform the project work from their home city? | Yes |
| 23 | V.B. | 24 | Can some metrics of code and database size be provided?  For example:  - Number of tables in the DB2 database.  - Number of records in each table (or number of records in the largest tables).  - Number of stored procedures, functions, triggers, and views in the DB2 database.  - Number of lines of RPG code.   *Note: we understand from the pre-solicitation conference that this may be difficult. We suggest taking samples of the ~400 RPG programs to be converted. For example, you might select 10 small programs, 10 medium programs, and 10 large programs and provide an average lines of code (LOC) for the small, medium, and large RPG programs.* | Due to the nature and structure of the existing system, an accurate estimate of the total lines of source code is not feasible at this stage. This is because the code base may include D specs, commented lines, blank lines, and cross-program dependencies are not necessary that make a precise line count impractical without a detailed code inventory and analysis.  It has been determined that the largest amount of lines of source code is almost 5000 and the smallest could be approximately 300. Again, either one of the programs could include several to hundreds of lines of code that are not required to be converted. |
| 24 | V.C.1, 2 & 4 | 24 | Will remote access be available to perform the work – specifically remote access to all 3 systems: Zend server, IBM i (RPG code), and DB2 database? | Yes |
| 25 | V.C.1, 2, & 4 | 24 | Will dual environments (e.g., Development & Production) be available for all 3 systems: Zend server, IBM i (RPG code), and DB2 database? | Yes |
| 26 | III.C. | 17 | Does all work have to be performed in the U.S.? | It is not an absolute requirement for all work to be performed in the U.S.  Please refer to the answer to Question #21 above. |
| 27 | V.C. | 24 | Does NDEE currently have any IBM I interops with distributed systems? | No |
| 28 | V.C.1. | 24 | How strict is the requirement that Zend Server be used for deploying code? In the 6/17 conference, it was stated that "other tools besides Zend Server environment can be proposed but must be explained why." Does NDEE have many other applications that are deployed to Zend Server environments and NDEE doesn't want to support multiple deployment processes? Are there some unique features or integration points that Zend Server provides that a different tool would need to support? | DWEE (formerly NDEE) has no intention of acquiring new equipment and/or software for deploying the modernized product. Yes, there are other applications currently deployed and under development on the Zend Server. Two of the main requirements of this project is that the proposed application must interface with existing DB2 database and can be maintained in the future by internal staff. |
| 29 | V.C.1. | 24 | In the 6/17 conference, it was stated that NDEE has development staff that can support .NET applications. How are those .NET applications deployed? We understand that Zend Server doesn't directly support the deployment of .NET applications. | NDEE recently merged with the Department of Natural Resources (DNR) and we now are the Department of Water, Energy, and Environment. The previous DNR staff have .NET experience, but the applications that server the previous DNR agency are deployed in a completely different environment. My intent was to state that we had resources available to us, not that the Zend Server supports .NET. |
| 30 | V.C.5. | 24 | Should the user interface be available 24x7? How many total and concurrent users? | Yes. 50-75 Concurrent users |
| 31 | V.C.5. | 24 | Regarding this statement: "The system should demonstrate performance improvements over the legacy solution," how will "performance" be measured between a distributed app and the legacy mainframe screens? | For the modernized distributed application, we propose to measure performance using a combination of quantitative metrics and user experience indicators, such as: 1. Average response time for key business transactions 2. Concurrent user load handling (scalability) 3. System throughput for critical processes 4. Network latency and impact on distributed components 5. End-user satisfaction through usability testing  We will work with stakeholders to identify a representative set of high-volume and high-importance transactions in the legacy system and establish baseline measurements for them.  The modernized solution will be tested under comparable workloads to ensure equal or improved response times, improved scalability under peak load, and better overall maintainability. |
| 32 | V.C.6. | 24 | Does the NDEE currently have an existing authentication and authorization system that the modernized IIS solution must integrate with, or is the vendor expected to design and implement a new secure authentication and authorization framework as part of the project? | If possible, DWEE would like to use the existing User Profile system that resides on the IBM Power 10. |
| 33 | V.C. | 24 | Does NDEE use any application development tools like Synon? | No |
| 34 | V.C. | 24 | Is NDEE looking for an enhanced user experience, including process flow improvements and combining screens to make it more efficient, or is NDEE looking to primarily retain the current screen flow? | Retain current screen flow |
| 35 | Glossary of Terms (Platform) | vii | What is the mainframe that is being used? Is it an AS 400? If not, what is it? | It is a IBM Power 10. It is the agency primary database and has many different applications interacting with said database. |
| 36 | I.C. | 3 | Is there an anticipated start date? or possible month? Quarter? | At this time there is not a set start date. Depending on the cost of the project, funds may have to be budgeted for a future fiscal year. |
| 37 | IV.G. | 23 | What funding has been appropriated for this project? | No cap has been set for this project. However, DWEE reserves the right to not move forward with the IIS Modernization project if proposals are not deemed to be financially viable. |
| 38 | V.C. | 24 | Has any third party assisted in developing the specifications of the RFP? If so, can you name the third party? | No |
| 39 | V.C.4. | 24 | What is the source of the data in the database? Is it all in DB2 tables? Is there any external data being queried? | It is all DB2 tables. |
| 40 | V.C.4. | 24 | What is in place to maintain versions? How do you manage version control? | The system is backed-up daily. Otherwise version of program is saved prior to a modification. Open to versioning suggestions. |
| 41 | V.C.4. / Attachment B | 24 | Given the 391 programs identified in the technical documentation, can NDEE provide a prioritization of which modules/programs are most critical for business operations and should be converted first? | Yes, a prioritized list could be provided if the project is awarded. |
| 42 | V.C.4. / Attachment B | 24 | The technical file shows programs with MUR (Menu), IIR (Inquiry), IUR (Update), and MTR (Maintenance) suffixes. Should these different program types be converted using different architectural patterns or frameworks? | Those naming conventions are completely internal. Architectural patterns for program names are not a requirement. |
| 43 | V.C.5. | 24 | Are there any specific regulatory compliance requirements (EPA, state environmental regulations) that affect how certain modules must function or display data? | No |
| 44 | V.B. | 24 | What is the current system's data volume (number of records in key tables) and transaction frequency to help size the modernized system appropriately? | There are too many key tables to give a definitive answer. |
| 45 | V.C.3. | 24 | Are there any batch processing jobs or scheduled tasks associated with these programs that also need to be modernized? | No, those type of jobs and/or programs are not part of the modernization project. |
| 46 | V.C.6. / Attachment B | 25 | Given the interconnected nature of programs shown in the technical file (e.g., IISMUR02 calling multiple sub-programs), how should the converted system handle cross-program navigation and state management? | We do want the proposed product to handle cross-program navigation, but won't define on how that is handled. Service programs and stored procedures could be utilized for state management. There are some service programs residing on the Agency's server that work with logical files, those will need to be left unchanged but could be utilized. |
| 47 | V.D.5.a. | 25 | Are there any specific RPG ILE features (like service programs, procedures, or data structures) that are heavily used in the existing system that require special consideration during conversion? | At present, there are service programs and stored procedures that operate on the DB2 database. These existing service programs interact directly with database files and must remain in place as currently deployed, since they are utilized by stored procedures that fall outside the scope of this modernization initiative. The need for any additional service programs to support the existing database files will be evaluated as part of the project’s ongoing requirements assessment. |
| 48 | V.D.5.b. | 25 | Given the green-screen origins, are there any specific keyboard shortcuts or function key operations (F4=Prompt mentioned in RFP) that users expect to be preserved in the web interface? | Any F4=Prompt should be converted into a dropdown or select list. |
| 49 | V.D.5. | 25 | Would it be possible to provide an average number of lines of code per program? In the conference, the specific question of total numbers of lines of code was asked, which was not possible to answer at that time. Nonetheless, a rough estimate of the number of lines of code per program will assist in making an accurate assessment of the amount of time and effort to deliver. | Due to the nature and structure of the existing system, an accurate estimate of the total lines of source code is not feasible at this stage. This is because the code base may include D specs, commented lines, blank lines, and cross-program dependencies are not necessary that make a precise line count impractical without a detailed code inventory and analysis.  It has been determined that the largest amount of lines of source code is almost 5000 and the smallest could be approximately 300. Again, either one of the programs could include several to hundreds of lines of code that are not required to be converted. |
| 50 | V.D.6.a. | 25 | Are there any DB2-specific features (stored procedures, triggers, user-defined functions) currently in use that need to be preserved or converted as part of this modernization? | Any stored procedures should be preserved. |
| 51 | V.D.7.a. | 25 | For the 15 functional areas identified (Air, Chemigation, Environmental Safety, etc.), should integration testing be performed separately for each area or as an integrated system? | Each program will have to be tested separately due to each having unique business logic. |
| 52 | V.D.9.a. | 25 | Should the training plan include role-based training for different functional areas (e.g., separate training for Livestock operators vs. Water Quality staff)? | For the training plan, two training sessions would be ideal…one for internal IT staff and one that include identified program section staff to demonstrate the functional areas. |
| 53 | V.E. | 25 | The work plan indicates that the implementation of the project to be achieved within one (1) year, however, the term of the contract is two (2) years with the option to renew for one (1) additional one (1) year period. Can you explain the difference between the two timelines? | The intention of the workplan is to have the project completed within one year. But DWEE understands that there may be unforeseen circumstances for either party. |
| 54 | V.F.4. | 26 | Can you confirm that training (Task 9) is part of Deliverable 4. Use of the "\*" in "\*\*Training shall be provided in accordance with Task 9\*\*" is creating some ambiguity. | The intent was that Task 8 for documentation is in accordance with the training requested in Task 9. |
| 55 | Contractual Agreement Form | 30 | How should the bidder sign the Contractual Agreement Form if it is not: a Nebraska Vendor; a Resident disabled veteran or business located in a designated enterprise zone; a blind person licensed by the Commission for the Blind & Visually Impaired? | The boxed portion at the top half of the Contractual Agreement Form is for statistical purposes only and should only be filled if applicable. All prospective bidders must still fill out the bottom half of the Contractual Agreement Form found directly below the words "THIS FORM MUST BE SIGNED MANUALLY IN INK OR BY DOCUSIGN". |
| 56 | Attachment B | N/A | The technical file shows extensive use of display files (e.g., AIRMUD02, IISIID02). Are there standard screen layouts or UI patterns that should be maintained in the web-based interface? | If there are separate files, one for the interface and one for the source logic that relate to each other, yes, naming conventions recognizing that relationship should be utilized. |
| 57 | Attachment B | N/A | Several programs appear to handle fiscal operations (FSI/FSM prefix). Are there specific accounting standards or audit trail requirements that must be maintained in the converted system? | All current business logic in any given program needs to be maintained regardless of its prefix. |
| 58 | Attachment B | N/A | The naming convention shows program relationships (e.g., AIRIIR02/AIRIID02). Should the modernized system maintain similar naming conventions for traceability? | If there are separate files, one for the interface and one for the source logic that relate to each other, yes, naming conventions recognizing that relationship should be utilized. |
| 59 | Attachment B | N/A | The technical file suggests a hierarchical menu structure. Should the modernized system maintain this exact menu hierarchy or can UX improvements be suggested? | Modernized system should main current hierarchy. |
| 60 | I.U. | 8 | We surmised that things may have changed for the State, as alluded to in the Solicitation Conference Call (new budget constraints, etc.) If true: a. what has changed, and b. what is the percentage likelihood that an award will ultimately be made, and if so, c. what criteria would need to be met, including any new parameters? | The Department reviews its fiscal standing each year, and has to adhere to State budget constraints. The percentage of likelihood to award will depend on the submitted project costs. |
| 61 | I.U. | 8 | If the State of Nebraska decides not to award a contract at this time (potentially due to budget constraints, as mentioned), which may necessitate postponing the project for several years, we would like to understand the procurement process moving forward. Specifically: a. would any future award for this project, once budget becomes available, be based on the results and vendor selections from the current RFP process, or would the State initiate an entirely new RFP process at that time? b. we seek clarification on whether the successful bidders of this current RFP would maintain their status for a future award under such circumstances, or if the entire bidding process would be restarted. | If the State withdraws this Solicitation with no awarded bidder, the State would be required to release a new solicitation. |
| 62 | V.A. | 24 | Are there other drivers that would make this a more urgent or time sensitive project for the state? | No |
| 63 | V.D. / Appendix A | 24 / 1 | The current RFP requests an inventory of CLs but does not specify any requirements for their modification. Given that system modernization projects typically necessitate changes to CLs for proper functionality (e.g., calling new PHP programs instead of existing RPG programs), are vendors expected to: a. include CL modification as part of their proposed solution(s)? If so, b. will the RFP be amended to clearly outline these expectations for all vendors? | During the creation of Attachment B, it was determined that converting CLPs is not necessary, so were not included in the spreadsheet. But Appendix A was not modified to reflect this change. |
| 64 | V.D. | 25 | How many lines of code exist by code type? | DWEE is unable to provide an answer for this question. |

**REVISED SECTION V.D**

Section V.D. of the Solicitation will be updated as follows:

1. SCOPE OF WORK

The Vendor will be responsible for the following tasks. Tasks 1 - 3 must be completed successfully in order for the Vendor to be considered for performance of Tasks 4 – 12. DWEE reserves the right to move forward with or discontinue the project following performance of Tasks 1 – 3.

**REVISED SECTION V.D.2.a**

Section V.D.2.a of the Solicitation will be updated as follows:

* + - 1. Conduct a thorough analysis and discovery of all display screens, ~~CLP,~~ RPG-ILE, free-form RPG programs and modules. Provide within the analysis and discovery report the number of lines of source code for each program and identify the lines of code that will require conversion for modernization.

**REVISED SECTION V.F**

Section V.F of the Solicitation will be updated as follows:

1. DELIVERABLES

The ~~Selected~~ Vendor will provide the following deliverables. Deliverable 1 must be provided successfully in order for the Vendor to be considered for delivery of Deliverables 2-6. Costs for Deliverables 2-6 may be negotiated between DWEE and the awarded Vendor upon successful delivery of Deliverable 1. DWEE reserves the right to move forward with or discontinue the project following delivery of Deliverable 1.

**REVISED SECTION VI.A.2**

Section VI.A.2 of the Solicitation will be updated as follows:

* + 1. **TECHNICAL RESPONSE**

The Technical Response section of the solicitation response should consist of the following subsections:

* + - 1. **Understanding of the Project Requirements**

Demonstrate understanding of project requirements as listed in Section V, subsection ~~B~~ C.

* + - 1. **Project Timeline**

Provide a detailed project timeline for satisfying ~~each task~~ tasks 1 – 3, described in Section V, subsection ~~C~~ D and presenting ~~each~~ deliverable 1 listed in Section V, subsection ~~E~~ F.

* + - 1. **Proposed Development Approach and Workplan**

Describe the approach for ~~assessing, modernizing, and migrating RPG-ILE and RPG Free Format programs to a language supported by Zend Server.~~ performance of Tasks 1 – 3 and composition of a report detailing findings from performance of Tasks 1 – 3.

* + - 1. **Equipment and Software Description**

Provide details on equipment and software needed to complete ~~the~~ tasks 1 – 3 and present ~~the deliverables~~ deliverable 1 as listed in Section V, subsection ~~E~~ F.

* + - 1. **~~Training Plan~~**

~~Provide a plan and approach to training DWEE personnel on usage of the final product~~

* + - 1. **~~Quality Assurance and Post- Project Support Commitment~~**

~~Provide and detail commitment for post-deployment support and maintenance~~

**REVISED COST PROPOSAL**

NDWEE IIS Modernization Cost Proposal will be updated as follows:

**~~NDEE~~ DWEE IIS Modernization Cost Proposal**

Request for Proposal Number 121442 O5

Bidder Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Bidder must provide a fixed cost for ~~each~~ Deliverable 1 ~~listed~~ below. Deliverable 1 is comprised of Tasks 1-3 as identified in Section V.D.1-3 in Solicitation 121442 O5 and must be completed successfully for the Vendor to be considered for performance of the remainder of the project.

Costs for Deliverables 2-6 may be negotiated between DWEE and the Vendor upon successful delivery of Deliverable 1. DWEE reserves the right to move forward with or discontinue the project following delivery of Deliverable 1.

All prices, costs, and terms and conditions submitted in the proposal shall remain fixed and valid commencing on the opening date of the proposal until the contract terminates or expires.

A completed Cost Proposal must be submitted with the proposal response.

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| **Deliverable** | **RFP Section Reference** | **Proposed Cost** |
| **1:** Pre-project consultation findings, system assessment and discovery findings, and a detailed approach and methodology for the modernization plan | V.F.1 |  |
| **2: P**roof of concept or prototype that demonstrates business logic preservation, code conversion, and integration with existing infrastructure | V.F.2 | COST TO BE NEGOTIATED AFTER COMPLETION OF DELIVERABLE 1 |
| **3:** System testing, provision of test plans and test cases, unit integration and user acceptance testing reports, bug tracking and resolution logs, and performance and security testing results | V.F.3 | COST TO BE NEGOTIATED AFTER COMPLETION OF DELIVERABLE 1 |
| **4:** Comprehensive technical documentation for the newly developed system, including all business logic and processes, system features, operating procedures, and regular user maintenance protocols. Conduct Training sessions for both developers and end-users. | V.F.4 | COST TO BE NEGOTIATED AFTER COMPLETION OF DELIVERABLE 1 |
| **5: D**elivery of a fully functional conversion of ~~NDEE’s~~ DWEE’s Legacy RPG ILE and RPG Free Format applications into modern languages and frameworks, supported by Zend Server | V.F.5 | COST TO BE NEGOTIATED AFTER COMPLETION OF DELIVERABLE 1 |
| **6:** Provide complete project files, provide written warranty or post-implementation support commitment, conduct final hand-off presentation, complete final sign-off, and conduct future post-deployment support in accordance with the post-implementation support commitment. | V.F.6 | COST TO BE NEGOTIATED AFTER COMPLETION OF DELIVERABLE 1 |

**Optional/Value-Added Services**

Bidder may list optional and/or value-added services within the chart below or in bidder’s preferred format along with corresponding prices and/or rates. Prices and/or rates submitted as part of this section will not be evaluated, but will be considered binding upon Contract Award. Bidder may add more rows to the chart below if needed.

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| Service/Labor Category | Unit of Measure | $ Amount |
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This addendum will be incorporated into the solicitation.