



BOARD OF SUPERVISORS AGENDA ITEM REPORT
AWARDS / CONTRACTS / GRANTS

Award Contract Grant

Requested Board Meeting Date: 05/21/2024

* = Mandatory, information must be provided

or Procurement Director Award:

***Contractor/Vendor Name/Grantor (DBA):**

International Business Machines Corporation DBA IBM Corporation

***Project Title/Description:**

Maximo Upgrade and Workday Integration

***Purpose:**

Amendment of Award: Master Agreement No. MA-PO-23-127, Amendment No. 03. This Amendment extends the termination date to 07/26/2024, increases the contract not-to-exceed amount by \$500,000.00 from \$2,200,000.00 to \$2,700,000.00, and revises the Statement of Work to incorporate changes included in Project Change Request 3. Administering Department: Information Technology.

***Procurement Method:**

Pursuant to Pima County Procurement Code 11.12.020, Competitive sealed proposals, on 04/04/2023, the Board of Supervisors approved an award of contract for a term effective April 04, 2023 to June 15, 2024 in the award amount of \$2,200,000.00.

On 01/12/2024, the Procurement Director approved Amendment No. 01, which revised the schedule of the project to begin on 05/15/2023 and adjusted the payment schedule as described in Project Change Request 1.

On 01/23/2024, the Board of Supervisors approved Amendment No. 02, which revised the Statement of Work to incorporate changes included in Project Change Request 2.

This amendment is required to allow more time to complete the Maximo integration and improve integrated functionality between Maximo and Workday.

PRCUID: 425287

Attachment: Contract Amendment No. 03.

***Program Goals/Predicted Outcomes:**

Maximo currently provides Pima County asset and work management tools, and this implementation will update and increase functionality of that software to better integrate with the new ERP System. This will increase County efficiency and interoperability through the implementation of an integrated ERP system.

***Public Benefit:**

As the systems being replaced are vital to the operations of the County, a more fully integrated ERP system will allow County departments to more efficiently perform their duties, thereby permitting the County to better serve its constituents in a more cost-effective environment.

***Metrics Available to Measure Performance:**

Standard project management measurements to track progress of the project and validate implementation success. Analysis of life-long costs and support metrics during the life of the ERP system.

***Retroactive:**

No.

TO: COB 05/06/2024

VERS: 5

PGS: 14

THE APPLICABLE SECTION(S) BELOW MUST BE COMPLETED

Click or tap the boxes to enter text. If not applicable, indicate "N/A". Make sure to complete mandatory (*) fields

Contract / Award Information

Document Type: Department Code: Contract Number (i.e., 15-123):
Commencement Date: Termination Date: Prior Contract Number (Synergen/CMS):
Expense Amount \$ Revenue Amount: \$

*Funding Source(s) required:

Funding from General Fund? Yes No If Yes \$ %
Contract is fully or partially funded with Federal Funds? Yes No
If Yes, is the Contract to a vendor or subrecipient?
Were insurance or indemnity clauses modified? Yes No
If Yes, attach Risk's approval.
Vendor is using a Social Security Number? Yes No
If Yes, attach the required form per Administrative Procedure 22-10.

Amendment / Revised Award Information

Document Type: MA Department Code: PO Contract Number (i.e., 15-123): 23-127
Amendment No.: 03 AMS Version No.: 5
Commencement Date: 05/21/24 New Termination Date: 07/26/24
Prior Contract No. (Synergen/CMS): N/A
Expense Revenue Increase Decrease
Amount This Amendment: \$ 500,000.00

Is there revenue included? Yes No If Yes \$ N/A

*Funding Source(s) required: Non-Bond Projects Fund (Capital Project Funds)

Funding from General Fund? Yes No If Yes \$ N/A % N/A

Grant/Amendment Information (for grants acceptance and awards)

Award Amendment

Document Type: Department Code: Grant Number (i.e., 15-123):
Commencement Date: Termination Date: Amendment Number:
Match Amount: \$ Revenue Amount: \$

*All Funding Source(s) required:

*Match funding from General Fund? Yes No If Yes \$ %

*Match funding from other sources? Yes No If Yes \$ %

*Funding Source:

*If Federal funds are received, is funding coming directly from the Federal government or passed through other organization(s)?

Contact: Procurement Officer, Brandon Morgan
Department: Procurement Director, Terri Spencer

Acting Division Manager, Troy McMaster
Telephone: 520.724.8728

Department Director Signature: Javier Baca
Deputy County Administrator Sig
County Administrator Signature:

Date:
Date: 5-3-2024
Date: 5/3/2024

Pima County Procurement Department

Project: Maximo Upgrade and Workday Integration

Contractor: International Business Machines Corporation dba IBM Corporation
1 Orchard Road
Armonk, NY 10504

Contract No.: MA-PO-23-127

Contract Amendment No.: 03

Orig. Contract Term:	04/04/2023 – 06/15/2024	Orig. Amount:	\$ 2,200,000.00
Termination Date Prior Amendment:	06/15/2024	Prior Amendments Amount:	\$ 0.00
Termination Date This Amendment:	07/26/2024	This Amendment Amount:	\$ 500,000.00
		Revised Total Amount:	\$ 2,700,000.00

CONTRACT AMENDMENT

The parties agree to amend the above-referenced contract as follows:

1. Background and Purpose.

- 1.1. Background. On April 4, 2023, County and Contractor entered into the above referenced agreement to provide services to upgrade Maximo software in use by the County and integrate it with the Workday Enterprise Resource Planning (ERP) System.
- 1.2. Purpose. County requires additional integration work to allow the Maximo software the ability to send purchase order revisions to the Workday ERP System.

2. **Term**. The parties agree to extend the contract term to terminate on July 26, 2024. If the commencement date is before the Effective Date of this amendment, the parties will, for all purposes, deem the amendment to have been in effect as of the commencement date.
3. **Maximum Payment Amount**. The maximum amount the County will spend under this Contract, as set forth in Section 5.2, is increased by \$ 500,000.00. County's total payments to Contractor under this contract, including any sales taxes, will not exceed \$ 2,700,000.00.
4. **Scope of Services**. The parties have revised the Statement of Work as described in **Exhibit D: Project Change Request 3** (6 pages). The functionality referenced in **Exhibit D** includes the proposed solution that will allow purchase order revisions created by County users in Maximo to automatically be sent to the related purchase order in the Workday ERP system as described in **Exhibit D-1: Solution Design Document** (6 pages).

All other provisions of the Contract not specifically changed by this Amendment remain in effect and are binding upon the parties.

This contract template has been approved as to form by the Pima County Attorney's Office.

PIMA COUNTY

**INTERNATIONAL BUSINESS
MACHINES CORPORATION DBA IBM
CORPORATION**

Chair, Board of Supervisors

e-Signed by Randall Serak
on 2024-05-02

Authorized Officer Signature

Date

Associate Partner
Randall Serak

Printed Name and Title

2024-05-02 10:29:32 PDT


Date

ATTEST

Clerk of the Board

Date

APPROVED AS TO CONTENT

 Nancy Cole

Department Head

5/2/24

Date

EXHIBIT D

Pima County Contract No. MA-PO-23-127

PROJECT CHANGE REQUEST – Pima County (Pima County Contract No. MA-PO-23-127)

Date Requested: April 15, 2024	Requested By: Ranjan Sarkar IBM	PCR Number: 003 Work Number / IBM Contract: W7Q6Y/ CFT68KS
--	---	---

This Project Change Request (PCR) must be approved by both parties: Pima County and International Business Machines (“IBM Consulting” or “IBM”) and signed before the PCR becomes binding. All other terms in the Pima County and IBM Maximo Implementation SOW signed by the parties (April 15,2023) not affected by this PCR remain in full force and effect. IBM agrees to provide the Services described in this PCR, provided you accept this PCR without modification, by signing in the space below.

This PCR is intended to provide services and support to for the project extension thru July 26th, 2024. This PCR is also to build functionality around the Purchase Order Revision process. This PCR will extend the Master Agreement (MA) to July 26th, 2024. This PCR does include cost additions for the month of May, June, and July 2024. It is designed to provide support from IBM with the identified Technical Lead and Funtional Lead/PM supporting the Upgrade. The functionality to build the Purchase Order Revision process will require an App Connect Developer, a Workday Developer, and a Maximo SME.

Overview of the Purchase Order Revision Process:

The objective of this architecture is to allow Maximo to send Purchase Order revisions to Workday. In the process of revising a purchase order, app connect will need to be able to send over the revision information to Workday. Workday will need to process the new revision of the Purchase Order and remove the ability to modify the Purchase Order in Workday. Once Workday has processed the Purchase Order through encumbrance Maximo will pull the revised PO back from Workday through a Cron Task. There are 4 use cases this process needs to support:

- 1. The ability to add and remove new inventory.
- 2. The ability to adjust the inventory amount.
- 3. The ability to adjust the duration of a service.
- 4. The ability to adjust the shipping costs.

Both systems need to remain in sync. When Maximo sends out the Purchase Order to Workday there needs to be a status on the Purchase Order to indicate it’s being processed through Workday. If Workday rejects the Purchase Order, then Maximo would need to have a status sent back and adjust the Purchase Order as rejected. If the Purchase Order was successful in Workday, then the Purchase Order is moved to Approved and a new revision has been added to the Purchase Order.

See additional details in Appendix A below.

Expected responsibilities:

Workday: Workday serves as the system of record for purchasing. The encumbrance process will run through Workday and will be used to drive the Maximo status for the revision. Workday will be responsible for Integration Design, Build, Data Mapping, Testing (Unit Testing, E2E), Integration Security, Integration Deployment.

App Connect: IBM App Connect is utilized as the middleware for integrating Workday with Maximo. It will provide the ability to push a revised Purchase Order to Workday and use Maximo Cron Tasks to pull the data out from Workday. Both using existing Workday API’s. App Connect will be responsible for Development for App Connect Flow (Inbound and Outbound), testing flow, Mapping exercise, and migration.

Maximo: Maximo is the system where Purchase Order revisions originate from. Maximo will revise the Purchase Order and once the Purchase Order is ready the status will be changed to waiting on Workday. Once Workday sends the success or fail for the encumbrance process back to Maximo, Maximo will change the status accordingly. Maximo will be responsible for Endpoint, publish channel, external system development, Testing, Migration, and Mapping Efforts.

Standard Assumptions

The delivery of the Purchase Order Revision process will not be delivered until after Go-Live date to avoid any risks with the Go-Live process.

Charges – Total Additional Charges

The Services will be conducted on a fixed price basis. The fixed price for performing these Services defined in PCR 003 will be **\$ 374,112.48** Spread evenly across A13, A14, and A15 in the Payment Schedule table below. See the table below for the cost breakdown. The Fees are exclusive of any travel and living expenses, other reasonable expenses incurred in connection with the Services, and any applicable taxes. IBM will invoice Client for the Services performed on a milestone basis as set forth in the Payment Schedule defined in PCR 001 and PCR 002, plus applicable taxes and subject to Pima County’s acceptance approval of the Maximo Implementation Billing Milestone Table below.

Description	Value
May Extension	\$149,408.32
June Extension (IBM Investment)	\$149,408.32 (\$149,408.32)
July Extension (IBM Investment)	\$149,408.32 (74,704.16)
PO Revision	\$150,000
Sum	\$374,112.48

PCR 001 + PCR 002 + PCR 003 Payment Schedule

Ref #	Milestone/Phase	Target Delivery Date	Completion Criteria	Amount (USD)
A1	Project Initiation & Planning	05/2023	Project Kick-off Meeting and Initial Project Plan and support and alignment to ongoing Workday implementation project	\$169215.53
A2	Upgrade/Conversion	6/2023	Start Dev Environment Upgrade to 7.6.1.3 Dev Database Conversion	\$169215.53
A3	Design & Build	7/2023	IT Checkout, Start MAS checkout for SRE upgrade to Mas 8.x. Begin Integration Adapter Design verification. Inventory Functional Design & Build	\$169215.53
A4	Design & Build	8/2023	Complete Integration adapter design. Start build activities. Complete Inventory Functional Design & Build. Start Purchasing Functional Design and Build	\$169215.53
A5	Design & Build	9/2023	Continue Integration adapter build & Unit Test. Complete Purchasing Functional Design and Build	\$169215.53

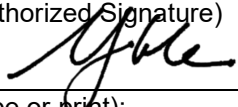
A6	Upgrade/Conversion	10/2023	Complete Integration adapter build & Unit Test. QA/Test Environment Upgrade to 7.6.1.3. QA/Test Database Conversion IT Checkout, MAS checkout for SRE upgrade to Mas 8.x. Start Test and Validation of ESRI integration	\$149408.32
A7	Testing	11/2023	Start System Integration Testing (SIT)	\$149408.32
A8	Testing	12/2023	Continue System Integration Testing (SIT). Defect Resolutions/ Retest.	\$149408.32
A9	Testing	1/2024	System Integration Testing (SIT). Defect Resolutions/ Retest.	\$207838.50
A10	Testing	2/2024	Complete System Integration Testing (SIT). Defect Resolutions/ Retest.	\$207838.50
A11	Upgrade/Conversion	3/2024	Upgrade to 7.6.1.3. User Acceptance testing (UAT) Database, Database Conversion. IT Checkout, MAS checkout for SRE upgrade to Mas 8.x. Start User Acceptance testing (UAT)	\$207838.50

A12	Testing	4/2024	Complete User Acceptance testing (UAT)	\$91181.89
A13	Testing	5/2024	Complete User Acceptance testing (UAT)	\$124,704.16
A14	UPGRADE/Conversion, Development of PO Revision	6/2024	Upgrade to 7.6.1.3. Production Database, Database Conversion IT Checkout, MAS checkout for SRE upgrade to Mas 8.x. Development of PO Revision	\$124,704.16
A15	Go-Live Hypercare Support Project Complete	7/2024	Go-Live and Hypercare Support. Project Completion	\$124,704.16

Comments:

PCR Approval

In entering into this PCR, you are not relying upon any representation made by or on behalf of IBM that is not specified in the Agreement or the Statement of Work, including, without limitation, the actual or estimated completion date, number of hours to provide any of the Services, charges to be paid, or the results of any of the Services to be provided under the Statement of Work. Each of us agrees that the complete agreement between us about these Services consists of 1) this Project Change Request, 2) the referenced Statement of Work including any previous mutually-approved PCRs, and 3) the IBM Customer Agreement or any equivalent agreement in effect between us as identified below (the Agreement.)

Agreed to: Pima County	Agreed to: International Business Machines Corporation ("IBM")
By: (Authorized Signature) 	By: (Authorized Signature) Signed by Randall Serak Associate Partner on 2024-05-02
Title (type or print): ERP Executive Project Manager	Title (type or print):
Name (type or print): Nancy Cole	Name (type or print): Randall Serak
Date: 5/2/24	Date: 2024-05-02 10:29:38 PDT
IBM Customer Number: 7195827	Agreement: Contract No. MA-PO-23-127
SOW Name: Maximo Upgrade and Workday Integration	Project Name: Maximo Upgrade and Workday Integration

Solution Design Document - Purchase Order Revisions from Maximo to Workday

INTEGRATION OVERVIEW

The objective of this architecture is to allow Maximo to send Purchase Order revisions to Workday. In the process of revising a purchase order, app connect will need to be able to send over the revision information to Workday. Workday will need to process the new revision of the Purchase Order and remove the ability to modify the Purchase Order in Workday. Once Workday has processed the Purchase Order through encumbrance Maximo will pull the revised PO back from Workday through a Cron Task. There are 4 use cases this process needs to support:

5. The ability to add and remove new inventory.
6. The ability to adjust the inventory amount.
7. The ability to adjust the duration of a service.
8. The ability to adjust the shipping costs.

Both systems need to remain in sync. When Maximo sends out the Purchase Order to Workday there needs to be a status on the Purchase Order to indicate it's being processed through Workday. If Workday rejects the Purchase Order, then Maximo would need to have a status sent back and adjust the Purchase Order as rejected. If the Purchase Order was successful in Workday, then the Purchase Order is moved to Approved and a new revision has been added to the Purchase Order.

COMPONENTS

Workday: Workday serves as the system of record for purchasing. The encumbrance process will run through Workday and will be used to drive the Maximo status for the revision. Workday will be responsible for Integration Design, Build, Data Mapping, Testing (Unit Testing, E2E), Integration Security, Integration Deployment.

App Connect: IBM App Connect is utilized as the middleware for integrating Workday with Maximo. It will provide the ability to push a revised Purchase Order to Workday and use Maximo Cron Tasks to pull the data out from Workday. Both using existing Workday API's. App Connect will be responsible for Development for App Connect Flow (Inbound and Outbound), testing flow, Mapping exercise, and migration.

Maximo: Maximo is the system where Purchase Order revisions originate from. Maximo will revise the Purchase Order and once the Purchase Order is ready the status will be changed to waiting on Workday. Once Workday sends the success or fail for the encumbrance process back to Maximo, Maximo will change the status accordingly. Maximo will be responsible for Endpoint, publish channel, external system development, Testing, Migration, and Mapping Efforts.

INTEGRATION WORKFLOW

Purchase Order revision process in Maximo:

The Purchase Order (PO) revision process will start by creating a Purchase Requisition (PR) in Maximo. This process sends the PR from Maximo to App Connect, doing data transformation, and creating a PR in Workday. Once the PR has completed its encumbrance process and all conditions are met a PO is created and Approved in Workday. Once the PO is issued, it will be brought back to Maximo. This is the current process as of today.

The new process will be to change the status of the PO to revised to make changes. One or more of the following scenarios will be done to the PO:

1. The ability to add and remove new inventory.
2. The ability to adjust the inventory amount.
3. The ability to adjust the duration of a service.
4. The ability to adjust the shipping costs.

Once one or more of these scenarios is applied to the PO, the user will change the status of the PO to Waiting on Workday.

If the PO fails to make it to Workday due to custom validations, this process will follow the OOTB design. This would be an error in Message Tracking and an email to the Admins detailing the error.

Data Transformation – Maximo to Workday:

Upon sending data from Maximo, App Connect will perform the necessary transformations to map the PO specific fields to the corresponding fields in Workday. This flow will support the previously defined scenarios to allow Workday to drive the revision and encumbrance process forward. Transformation rules will be defined to ensure the integrity and consistency of data during the migration process.

To get around a known process in Workday, to remove a line item the quantity would be adjusted to 0 and App Connect will transform this by setting the line removal flag in Workday. There are no known issues with any of the other defined use cases.

Workday – Purchase Order Process:

Once the PO payload reaches Workday, it will trigger a PO revision process. A new PO revision will be created. Once a PO revision has been created using this process, Workday will not allow PO's to be modified. This process will take the previously defined use cases and process them through the Workday encumbrance process. 2 things will happen during this process:

Scenario 1: The PO will fail the encumbrance process, which it will sit in a failed status in Workday.

Scenario 2: The PO will pass the encumbrance process, which will move the PO to a status of approved.

In Scenario 1, once Workday has failed the PO the status is then picked up by the App Connect flow and Maximo will be updated with a status of "Failed in Workday".

In Scenario 2, once Workday has approved the PO the status is then picked up by App Connect flow and Maximo will be updated with a status of Approved.

Data Transformation – Workday to Maximo:

Upon retrieving the data from Workday, App Connect will perform necessary transformations and adjusts the status of the PO depending on the results of the Workday encumbrance process. Transformation rules will be defined to ensure the integrity and consistency of data during the migration process.

Maximo Purchase Order Adjustment Rules:

Once Maximo receives the response back from Workday the following scenarios occur:

Scenario 1: if Workday rejected the PO due to the encumbrance process the end user would need to manually adjust the PO by changing the status back to revised. Maximo will not be sending over an error or rejection reason; users will need to contact procurement to receive the failed reason. Users will have the ability to revise the PO or cancel the PO revision request and still use the existing approved PO.

Scenario 2: if Workday approved the PO due to the encumbrance process the end user will have the ability to revise another PO if they so choose. The process above will be repeated for any amount of revisions Pima will have for the PO.

Security Considerations:

Authentication mechanisms will be implemented to ensure secure access to Workday APIs.

Data encryption protocols will be employed during data transmission between systems to prevent unauthorized access or data breaches.

Monitoring and Error Handling:

Logging mechanisms will be implemented within App Connect to track the integration process and monitor for any errors or anomalies.

Error handling routines will be established to handle exceptions gracefully and ensure minimal disruption to the integration workflow.

Scheduling:

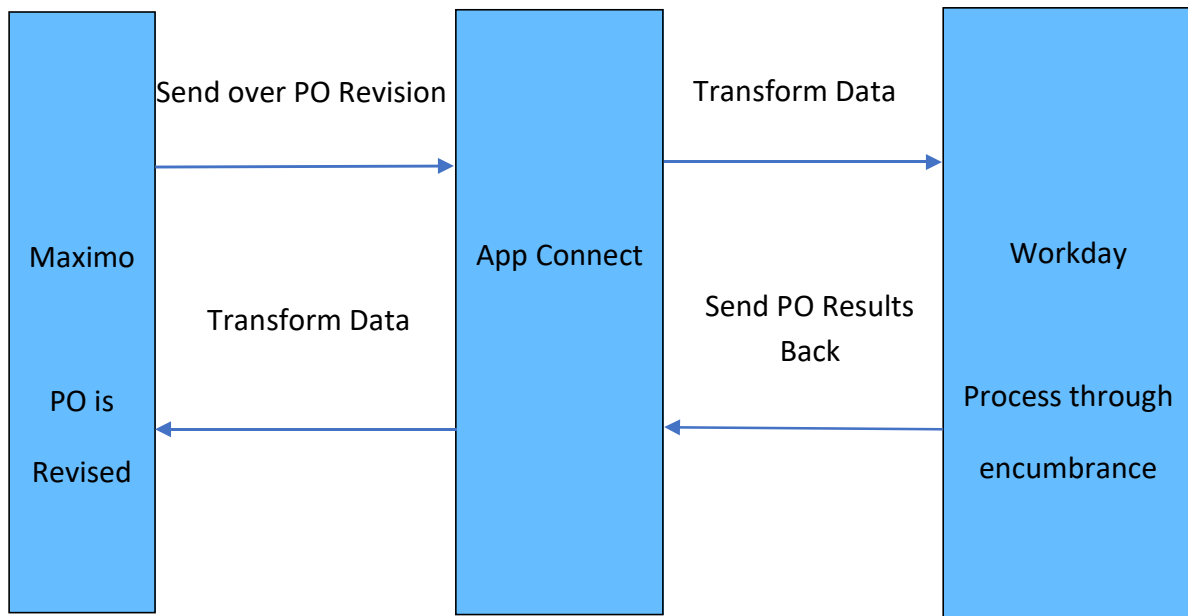
Maximo will set the Cron Task to pull PO's from Workday every minute, based on their previous requirements for PO scheduling.



The screenshot shows a table with one row of data. The table has three columns: 'Cron Task Instance Name', 'Schedule', and 'Run as User'. The row contains the values 'PLUSWGetPurchOrder', '1m,* * * * *', and 'MAXADMIN'. There are also some icons and a 'Duplicate' button in the top right corner of the table area.

Cron Task Instance Name	Schedule	Run as User
PLUSWGetPurchOrder	1m,* * * * *	MAXADMIN

High Level Flow Diagram:



ASSUMPTIONS

- Workday is system of record for the Procurement and Encumbrance process.
- No adjustments to the error reporting process, will use out of the box process when reporting errors.
- Workday will not be sending the error or failed reason from the encumbrance process. The user will need to reach out to the procurement team to determine the encumbrance failure.
- Workday custom Validations will not be brought back to Maximo. Instead, the current process of running a Workday report for Draft status PR/PO's will be used to track issues on the Workday side.
- If the Integration fails to send to workday due to an integration error, the Maximo record will not be modified to indicate an integration error.
- Workday will need to send Maximo a rejection from the encumbrance process to update Maximo with a rejection from Workday.