

## **Work Plan No A.05-01 PPMS Phase 2 - Construction Management and Document Management**

### **Scope:**

#### **DEFINITIONS:**

- A Custom Print Form is a document produced in Ecosys that matches desired template to meet the BART requirement.
- A Report is data extracted from Ecosys to Excel.
- A Screen Layout is a custom Ecosys page that displays data contain within EcoSys.

The scope of services includes the following key tasks:

Note: any requirement to match functionality/ be similar functionality as Wong CMS/BART RE Manual indicates that the most stringent requirement from the two resources shall be used.

### **SECTION 3.1 – CONSTRUCTION MANAGEMENT AND DOCUMENT MANAGEMENT SCOPE / FUNCTIONALITY**

Consultant shall provide system configuration and support for the following items:

- Request for Information (RFI)
  - Be able to create, route, track and approve/reject/provide comment on RFI records similar functionality as Wong CMS/BART RE Manual forms/format/workflow.
  - Create RFI Log similar functionality as Wong CMS/BART RE manual format.
  - Create raw export report from EcoSys to Excel of form and workflow details/fields/data.
  - Assign overall workflow duration.
  - Create Custom Print Form consistent with BART RE Manual requirement
- Meeting Agenda/Minutes
  - Be able to create, route, track, and approve/reject/provide comments on Meeting Agenda/Minutes records similar functionality as Wong CMS/BART RE Manual forms/format/workflow. Minutes will record both open and closed action items.
  - Create Meeting Agenda/Minutes Custom Print form consistent with current Wong CMS
  - Create ball in court report, export to Excel.
  - Create raw export report from EcoSys to Excel of form and workflow details/fields/data.
  - Create new records (agenda) from previous meeting minutes record and carry over previous open action items, not closed items.
- Payment Applications (Progress Payments)
  - Be able to create, route, track, and approve/reject/provide comment on Payment Certification records similar functionality as Wong CMS/BART RE

Manual forms/format/workflow.

- Ability to pull in specific data from previous Payment Certification for current Payment Certification. The specific data includes:
  - Header format including BART's title block information: BART's Invoice email address, Construction Payment Application, To Controller Payment Application for the Attached Invoice.
  - Contractor Name and Address
  - Contractor Title
  - PO Line No.
  - TOTAL PREVIOUS EARNINGS – Previous Base Amount and Previous Total Changes.
  - TOTAL PREVIOUS DEDUCTIONS - BART Retention, Escrow Retention, Liquidated Damages, Stop Notice, Labor Compliance Deficiencies, Other, Escrow Company, Escrow Address, Escrow Account No., Securities on Deposit: Yes: \_ No: \_
  - STATUS REPORT INCLUDING THIS INVOICE
    - Released Deductions information - BART Retention, Escrow Retention, Liquidated Damages, Stop Notice, Labor Compliance Deficiencies, Other
- Ability to pull in specific data from PeopleSoft. The specific data includes:
  - Authorized Base Contract
  - Authorized Change Orders
- Ability to calculate data from previous Payment Certification amounts and hard punched data. The specific data includes:
  - BART Invoice No.
  - CURRENT INVOICE AMOUNT – Amount Due Contractor This Period From BART, Amount Due Contractor This Period from Escrow
  - TOTAL PREVIOUS EARNINGS – Total Previous Earnings, Scheduled Attached.
  - TOTAL PREVIOUS DEDUCTIONS – Total Previous Deductions.
  - STATUS REPORT INCLUDING THIS INVOICE – Total Authorized Contract, Percent Earned to Date, Earned Base Amount, Earned Change Order Amount, Total Earned Amount,
    - Total Deductions information - Total Deductions, BART Retention, Escrow Retention, Liquidated Damages, Stop Notice, Labor Compliance Deficiencies, Other, Percent Retention to Date
- Create Payment Application form per BART RE Manual.
- Create ball in court report, export to Excel.
- Create raw export report from EcoSys to Excel of form and workflow

details/fields/data.

- Submittals
  - Be able to create, route, track, and approve/reject/comment on Submittal records similar functionality as Wong CMS/BART RE Manual forms/format/workflow.
  - Create Submittal records from Vendor Print Transmittal (VPT) and Contractor Data Requirements List (CDRL) business processes.
  - Create VPT (including approval stamp) and Submittal custom print forms per BART RE manual.
  - Create ball in court report, export to Excel.
  - Create raw export report from EcoSys to Excel of form and workflow details/fields/data.
  - Link submittals to CDRL.
- Transmittals
  - Be able to create Transmittal records form similar functionality as Wong CMS forms/format/workflow.
  - Produce cover sheet custom print form/transmittal cover letter.
  - Create raw export report from EcoSys to Excel of form and workflow details/fields/data.
- File Management
  - Create roles and system level access for end users and groups within BricSys.
  - Create folder structure to match BART RE Manual file index.
  - Create Application Programming Interface (API) integration between EcoSys and BricSys to have seamless document management for each project.
- Contractor Data Requirements List (CDRL)
  - Be able to create and manage CDRL records form similar functionality as Wong CMS/BART RE Manual forms/format/workflow.
  - Create CDRL log per BART RE Manual.
  - Create raw export report from EcoSys to Excel of form and workflow details/fields/data.
  - Create ability to import into CDRL.
  - Create linkage functionality to submittals and view submittal status within CDRL.
- Non-conformance Report (NCR)
  - Be able to create, approve/reject, and manage NCR records form similar functionality as Wong CMS/BART RE Manual forms/format/workflow.
  - Create action items, assign, and track associated NCR.

- Create raw export report from EcoSys to Excel of form and workflow details/fields/data.
- Create NCR report per BART RE Manual.
- Inspector Daily Report (IDR)
  - Be able to create, route, track, and approve/reject/comment on IDR records similar functionality as Wong CMS/BART RE Manual forms/format/workflow.
  - Create IDR report per Wong CMS/ BART RE Manual
  - Create raw export report from EcoSys to Excel of form and workflow details/fields/data.
  - Create new records from previous IDR records.
- Change Notice/Order (CN/CO)
  - Be able to create, route, track, and approve/reject/comment on multi-step Change Notice/Order records similar functionality as Wong CMS/BART RE Manual forms/format/workflow.
  - Create custom print forms to include the following: Contract Change Order, Change Notice, Finding of Fact, Pre-Negotiation Plan, Record of Negotiations, Engineers Estimate, Financial Summary for the Contract, and the Change Order Justification Summary, Certification of Proposed CO, Index Sheet PDF.
  - Create raw export from EcoSys to Excel of forms and workflow details/fields/data.

## **SECTION 3.2 – INTEGRATION AND PERFORMANCE TESTING**

### **SCOPE / FUNCTIONALITY**

- Consultant shall integrate all software, in accordance with the approved integration process document, to provide a system that is ready for Functionality Integration Testing (FIT) as well as System Integration Testing (SIT).
- Consultant shall perform SIT verification, in accordance with the approved verification process document, to identify software defects before handing over the system to the BART for Internal SIT and validation of the system per the verification process document.
- Consultant shall prepare software, in accordance with the approved integration process document, to provide a system that has been SIT/FIT tested by the SI and ready for SIT/FIT by BART Users.
- Consultant shall support BART to conduct a system verification testing, in accordance with the approved verification process document, to verify that all software components work properly together and do not interfere with each other, and to exercise the interfaces and verify they are implemented according to the approved integration process document.
- Consultant shall coordinate as needed with third parties to facilitate testing of interfaces to other systems.
- Consultant shall submit system verification test results and repeat system verification testing to ensure each new software release fixed outlined bugs, added features that work, and do

not break features that used to work.

- Consultant shall provide knowledge transfer on interfaces with OCIO support team.
- Consultant shall configure Ecosys, in accordance with the approved integration process document, to provide a system that has been SIT/FIT tested and ready for User Acceptance Testing (UAT).

## **4. PILOT MIGRATION and TRAINING**

### **4.1 Pilot Migration**

The Consultant shall test the configured functionality on the Pilot Projects identified by the BART team.

### **4.2 Train-the-Trainer (End-User)**

The Consultant shall prepare a Train-the-Trainer Training Plan that describes how BART personnel will be trained on the use and administration of the PPMS.

The Train-the-Trainer training shall cover all features and functionality of the system and use examples from the installed system that are local, realistic, and relevant to the BART Users.

Training materials for each course shall include, as a minimum, a course outline, material describing the course, operation and maintenance manuals customized for the BART end user, and any additional information needed to adequately describe the subject being trained. The training materials shall also include quick reference guides. An electronic set of training materials shall be given to each trainee. All training materials shall also be available on the live Portfolio Management System.

System Administration training materials shall include information needed to support all integration points, scripts that have been created, nightly processing for refreshing the environment and how to log issues for system support.

### **4.3 Knowledge Transfer to Technical Team**

The Consultant shall provide knowledge transfer to the BART Technical team to understand the features and functionality of the system that have been updated.

Knowledge Management deliverables will be a minimum of sessions needed with the technical team and update of System Administration Guides or Runbooks to support the system updates.

## **5. WORKFLOW PROCESS**

It is assumed that Consultant shall, on an as-needed basis, perform portions of or all of the following phases and activities to accomplish the scope as laid out in section 3.0 above.

### **5.1 Requirements Phase**

- 5.1.1 Conduct requirements workshops to confirm requirements before starting configuration

- 5.1.2 Document business, functional, and technical requirements.
- 5.1.3 Assess functionality and performance in each module to determine whether BART business requirements and/or objectives can be met and, if not, what steps should be taken to accomplish them.
- 5.1.4 Provide level of effort if additional work is needed

**5.2 Design Phase**

- 5.2.1 Develop Use Case
- 5.2.2 Develop Detailed Design documentation, including Wireframes/Mockups where deemed necessary

**5.3 Development Phase**

- 5.3.1 Configure EcoSys per Uses Cases and Detailed Design.
- 5.3.2 Perform Unit Testing
- 5.3.3 Conduct periodic reviews of iterative progress with key stakeholders
- 5.3.4 Migrate configuration from Development environment to Test environment

**5.4 Testing Phase**

- 5.4.1 Perform Functional Integration Testing (FIT)
- 5.4.2 Perform System Integration Testing (SIT)
- 5.4.3 Perform User Acceptance Testing (UAT)

**5.5 Deployment Phase**

- 5.5.1 Migrate configuration from Test environment to Production environment
- 5.5.2 Perform Smoke Testing of Production environment
- 5.5.3 Perform Post Go-Live support activities

**Prime: JACOBS**

<b>Subconsultant</b>	<b>Amount</b>	<b>DBE (Y/N)</b>	<b>SBE (Y/N)</b>
Hexagon ALI	\$ 249,900	N	N

**Total Work Plan Value: \$ 498,030**