# Hazen



# CMMS Selection

**John Sorrell, PE 6/4/2024**

| Project Team/ Org Chart |
| --- |

| Functional and Technical Requirements |
| --- |

| Asset Management |
| --- |
| Work Management |
| Inventory Management |
| Fleet Management |
| System Mechanics |
| Vendor Services |
| Interface |

| Implementation Cost and Licensing Fees |
| --- |

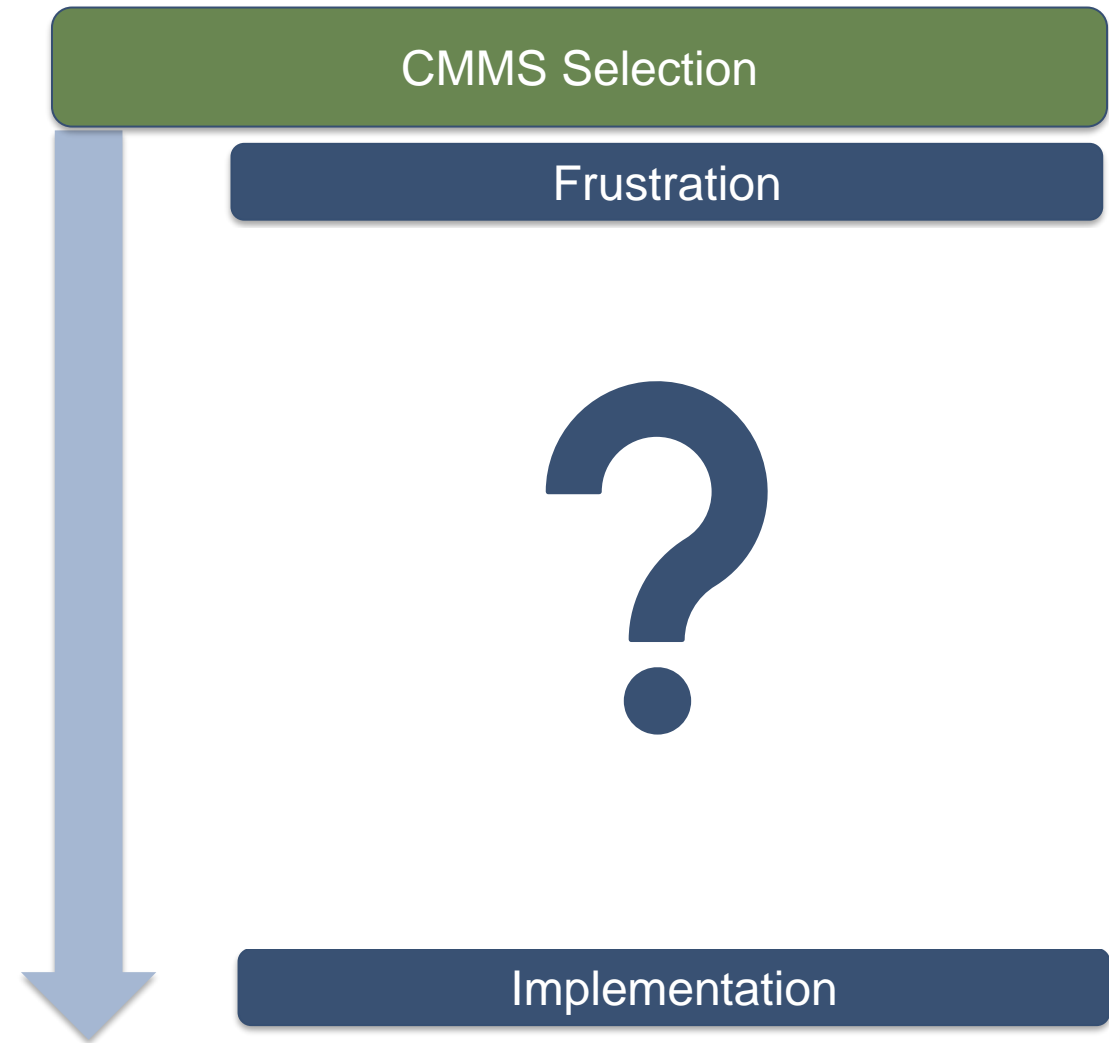| One Time Costs |
| --- |
| Recurring Costs |
| Optional Costs |

| Past Experience and References |
| --- |

# CMMS Selection: OWASA case study

- Orange County, NC

- Water, Sewer, Reclaimed Water

- Previously implemented Cityworks for Horizontal assets
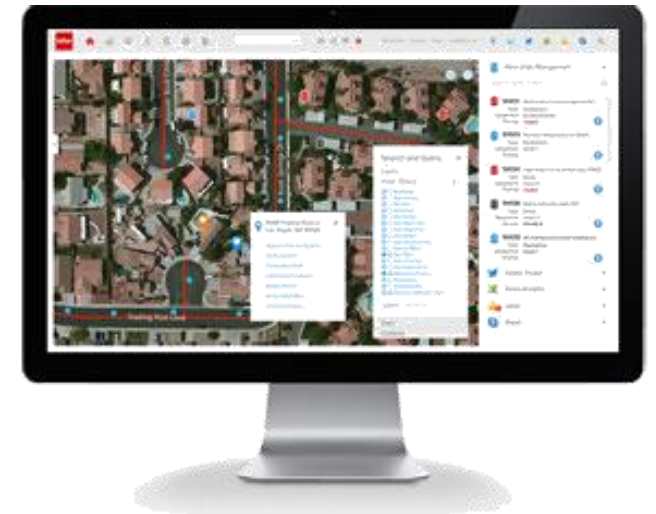
- Aging MP2 system for vertical assets

**CMMS Selection**

**Frustration**

**?**

**Implementation**

## CMMS Selection

### Frustration

### Implementation

### Frustration

- Lack of mobile capabilities

- MP2 no longer supported

- Questionable legacy data

- User interface

- Success of horizontal asset CMMS

- Support asset management initiatives

Challenge: Use pain points to help define a business case.
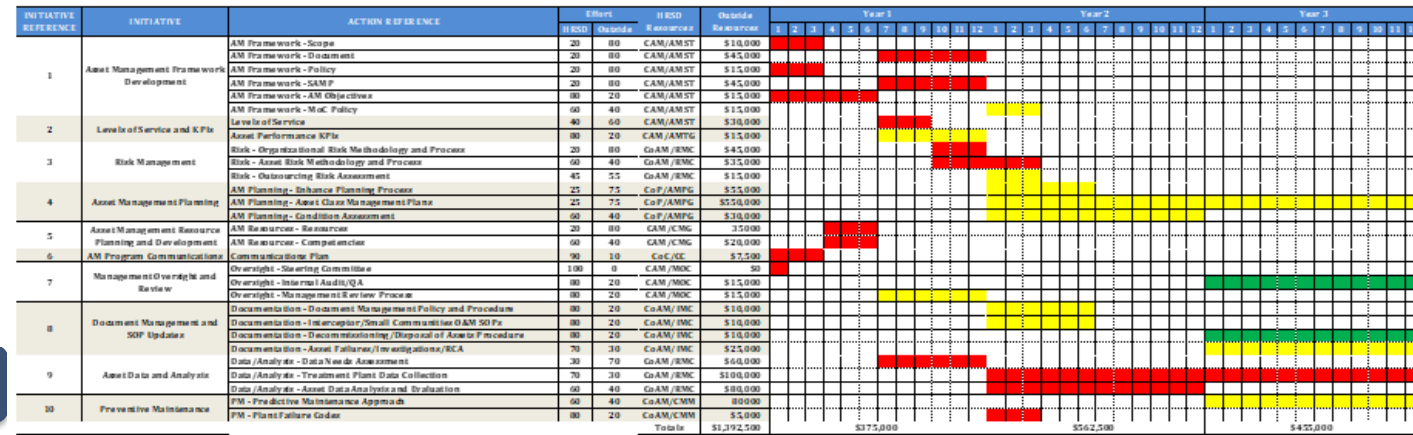
## CMMS Selection

**Frustration**

**Decision to Migrate**

**Implementation**

Challenge: Top to bottom involvement begins early!

## Decision to Migrate

- Communication

- Budgeting

- Strategic plan initiative

- Board Awareness

- Stakeholder Awareness

## CMMS Selection

**Frustration**

**Decision to Migrate**
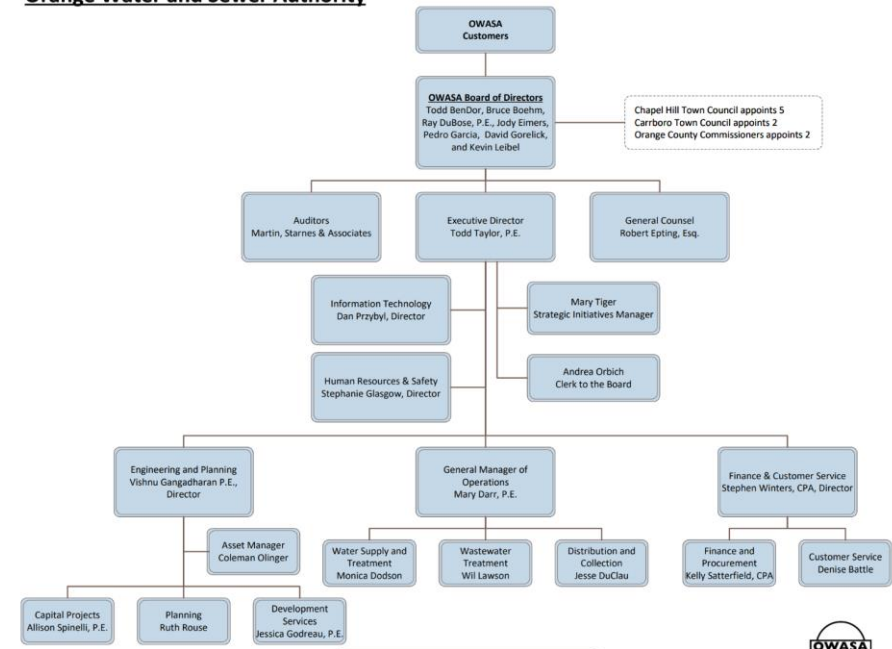
**Forming the Team**

**Implementation**

Challenge: Balance between nimble and including everyone.

## Forming the Team

- Project Champion / Project Manager

- Executive Support

- Operations Stakeholders

- IT Support

- Consultant Support



Orange Water and Sewer Authority organizational chart

## CMMS Selection

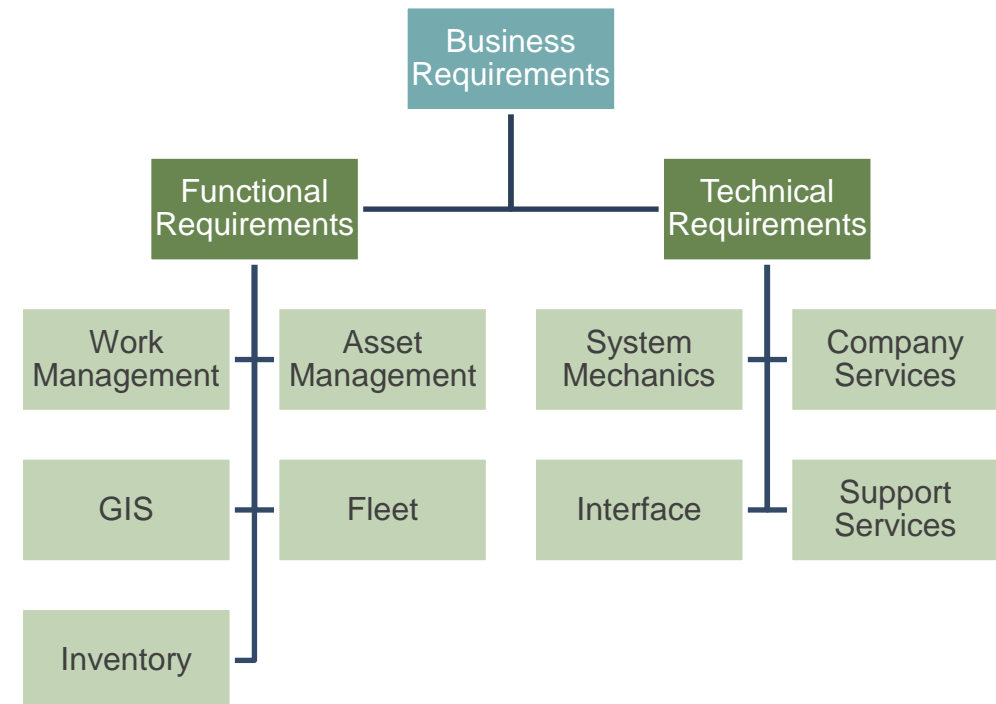- Frustration
- Decision to Migrate
- Forming the Team
- Identify Needs and Requirements

- Implementation

Challenge: Focus on core functions first, make sure capabilities meet long term goals.

## Identify Needs and Requirements

- Kickoff

- Needs, Wants, Nice to Have

- As-Is Business Process Mapping

- Software integrations

- IT requirements

```
                    Business
                    Requirements
                         |
        +----------------+----------------+
   Functional                        Technical
   Requirements                      Requirements
        |                                 |
   +----+----+                      +------+------+
 Work      Asset                  System      Company
 Management Management            Mechanics   Services
        |                                 |
   GIS      Fleet                 Interface    Support
        |                                      Services
 Inventory
```

## CMMS Selection

- Frustration
- Decision to Migrate
- Forming the Team
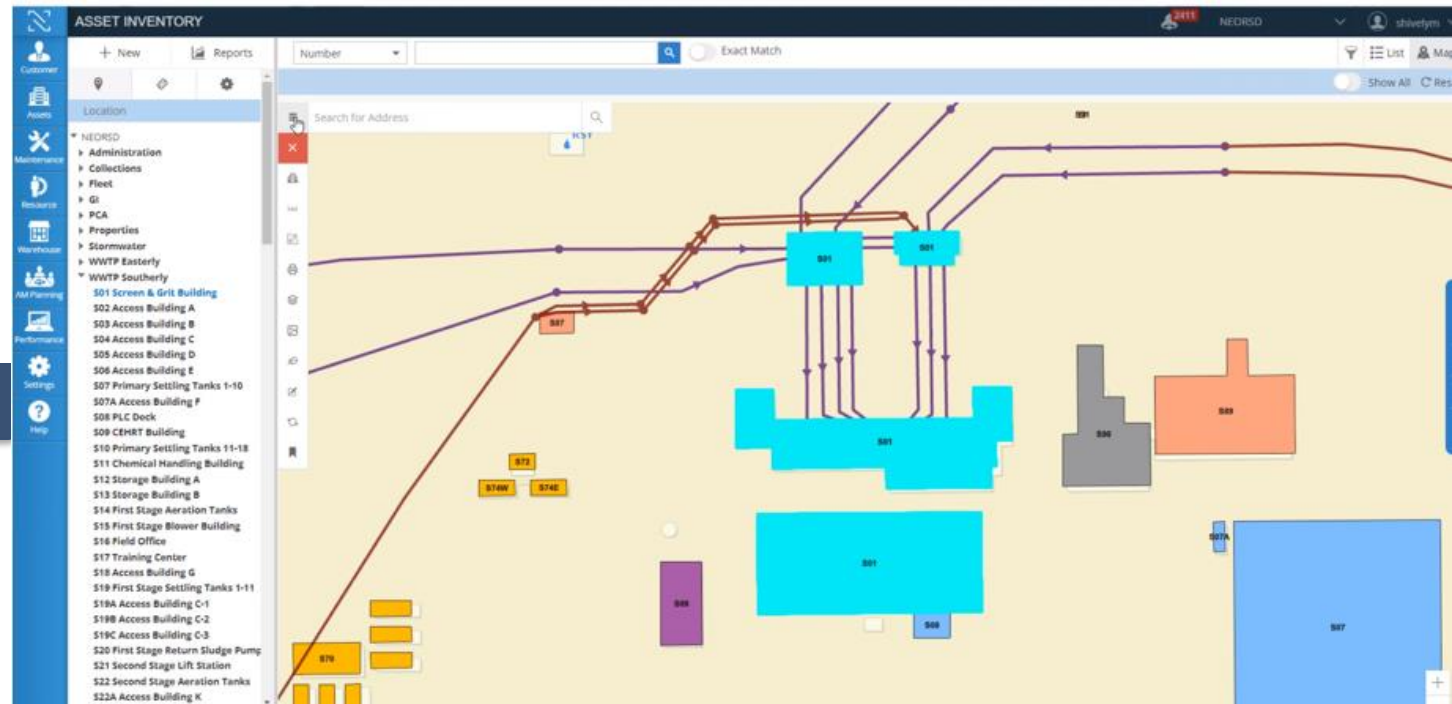- Identify Needs and Requirements
- Vendor Research and Demos

Implementation

Opportunity: Involve O&M staff in demos

## Vendor Research and Demos

- Understand the possibilities
- Scripted vs Unscripted
- Refine requirements

## CMMS Selection

- **Frustration**
- **Decision to Migrate**
- **Forming the Team**
- **Identify Needs and Requirements**
- **Vendor Research and Demos**
- **Developing the RFP**

- **Implementation**

Challenge:  Balance detail & flexibility

## Developing the RFP

- Finalize Requirements

- Draft RFP

- Set Evaluation Criteria

- Set Evaluation Timeline

- Purchasing & Legal Review

**REQUEST FOR PROPOSAL**

**Orange Water and Sewer Authority**
**CMMS Software and Services**
**Issue Date: Thursday March 30, 2023**

**Submittal Deadline: Friday, April 28th 2023 at 2PM**

**1. INTRODUCTION & OBJECTIVE**

Orange Water and Sewer Authority (OWASA) is soliciting proposals from qualified software consultants (Vendors) to provide a Computerized Maintenance Management System (CMMS) for Asset and Work Order Management for their vertical asset facilities as well as fleet management purposes. OWASA will conduct a Proposal-Based Selection process to identify the best overall proposal and select a vendor with which to negotiate a contract. All vendors submitting Proposals shall have demonstrated experience and expertise in provision of CMMS software, CMMS integration, implementation, and support.

*To be considered by OWASA, responses to this RFP must be received by 2:00 p.m. Eastern Time on Friday, April 28th, 2023. Refer to Section 5 – Submittal Requirements for details.*

**2. BACKGROUND AND DESCRIPTION**

Orange Water and Sewer Authority (OWASA) provides water, wastewater, and reclaimed water services to around 85,000 people within the 35 square mile Carrboro-Chapel Hill area. The water system is comprised of the three raw water pump stations, Jones Ferry Road Water Treatment Plant, 390 miles of distribution pipes, six drinking water storage tanks, and four drinking water booster pump stations. The wastewater system has 350 miles of wastewater pipes, 21 pump stations, two remote biosolids storage tanks and Mason Farm Wastewater Treatment Plant. The reclaimed water system is made up of a reclaimed water storage tank, a reclaimed water pump station and six miles of distribution pipes. OWASA's systems contain approximately 6,500 vertical assets, 1,800 for water supply and treatment facilities, 4,000 for wastewater treatment and reclaimed water facilities, and approximately 700 for support and operational facilities.

OWASA has been utilizing Infor's MP2 CMMS for facility and fleet maintenance functions at its water treatment plant, wastewater treatment plant, operations center and administration building for 20-years and has identified the need for assessing and implementing an updated modern CMMS solution for vertical facility management. OWASA's distribution and collection systems linear assets are currently managed with Cityworks as their CMMS solution, which does not currently require replacement.

This Request for Proposal's intent is to select an alternative CMMS System (System) for OWASA vertical facilities and fleet maintenance, with potential for an organization-wide CMMS solution for vertical facilities, distribution, and collection in the future.

1

## CMMS Selection

- Frustration
- Decision to Migrate
- Forming the Team
- Identify Needs and Requirements
- Vendor Research and Demos
- Developing the RFP
- Review

- Implementation

Challenge: Set aside the time.

## Review… Review… Review

- Adequate time
- Individual Evaluations
- Group Review
- Short List

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| F1: Management of Assets | 23% | 3.4 | 4.1 | 4.3 | 4.6 | 4.3 | 4.2 |
| F2: Work Management | 22% | 3.2 | 4.4 | 4.2 | 4.6 | 4.2 | 4.0 |
| F3: Manage Inventory/Registry | 19% | 3.3 | 4.0 | 4.0 | 4.2 | 4.0 | 4.0 |
| F4: Procurement | 13% | 4.0 | 2.8 | 2.6 | 4.2 | 4.4 | 2.4 |
| F5: Fleet | 11% | 3.8 | 3.9 | 4.0 | 4.3 | 4.4 | 3.9 |
| F6: Accounting | 13% | 3.6 | 2.1 | 2.1 | 2.4 | 2.3 | 2.1 |
| **Functional Average Score** | | 3.5 | 3.7 | 3.7 | 4.2 | 4.0 | 3.6 |
| **Functional Ranking** | | 6 | 3 | 4 | 1 | 2 | 5 |
| T1: System Mechanics | 35% | 3.9 | 4.3 | 4.0 | 4.3 | 4.1 | 3.5 |
| T2: Company Services | 23% | 3.5 | 4.7 | 4.2 | 4.5 | 3.5 | 4.3 |
| T3: Interface | 23% | 2.7 | 4.3 | 3.7 | 5.0 | 4.7 | 3.8 |
| T4: Support Services | 20% | 4.0 | 4.4 | 4.2 | 4.0 | 4.0 | 4.0 |
| **Technical Average Score** | | 3.6 | 4.4 | 4.0 | 4.5 | 4.1 | 3.9 |
| **Technical Ranking** | | 6 | 2 | 4 | 1 | 3 | 5 |

## CMMS Selection

- Frustration
- Decision to Migrate
- Forming the Team
- Identify Needs and Requirements
- Vendor Research and Demos
- Developing the RFP
- Review
- Interviews & References

- Implementation

Opportunity:  Address the fears and validate the hopes.

## Interviews and References

- Reference Scripts

- Interview Time Requirements

- Scripted vs Unscripted

| | Met expectation | Did not meet expectation | Need additional clarification | Vendor did not demo |
|---|---|---|---|---|
| **SCENARIO 1** | | | | |
| Item 1 - Service request creation | ☐ | ☐ | ☐ | ☐ |
| Item 2 - Service request attachments | ☐ | ☐ | ☐ | ☐ |
| Item 3 - Service request assignment | ☐ | ☐ | ☐ | ☐ |
| Item 4 - Asset assignment in service request | ☐ | ☐ | ☐ | ☐ |
| Item 4 - Asset creation | ☐ | ☐ | ☐ | ☐ |
| Item 5 - Work order creation | ☐ | ☐ | ☐ | ☐ |
| Item 5 - Work order resource and cost tracking | ☐ | ☐ | ☐ | ☐ |
| Item 6 - Labor rate selection | ☐ | ☐ | ☐ | ☐ |
| Item 6 - Overtime tracking | ☐ | ☐ | ☐ | ☐ |
| Item 7 - Work order query | ☐ | ☐ | ☐ | ☐ |
| Item 8 - Combine multiple service requests | ☐ | ☐ | ☐ | ☐ |
| Item 9 - Geographical query and reporting roll up | ☐ | ☐ | ☐ | ☐ |
| Item 10 - Reporting | ☐ | ☐ | ☐ | ☐ |

**CMMS Selection**

- Frustration
- Decision to Migrate
- Forming the Team
- Identify Needs and Requirements
- Vendor Research and Demos
- Developing the RFP
- Review
- Interviews & References
- Selection
- Implementation

Challenge:  Balance rigid requirements with flexibility for unknowns

**Selection**

- Contract Negotiation
- Project Timelines

# Takeaways and Questions

- Seek stakeholder engagement

- Demos are critical

- Document your requirements

- Don't shortchange the review process

- No one perfect solution.

**Process**

**Technology**

**People**