Dos Rios WRC Electrical System Improvements – Phase 1 Project

Jeff Ray, EIT

Project Engineer, Treatment & Recycle Engineering

February 26, 2014

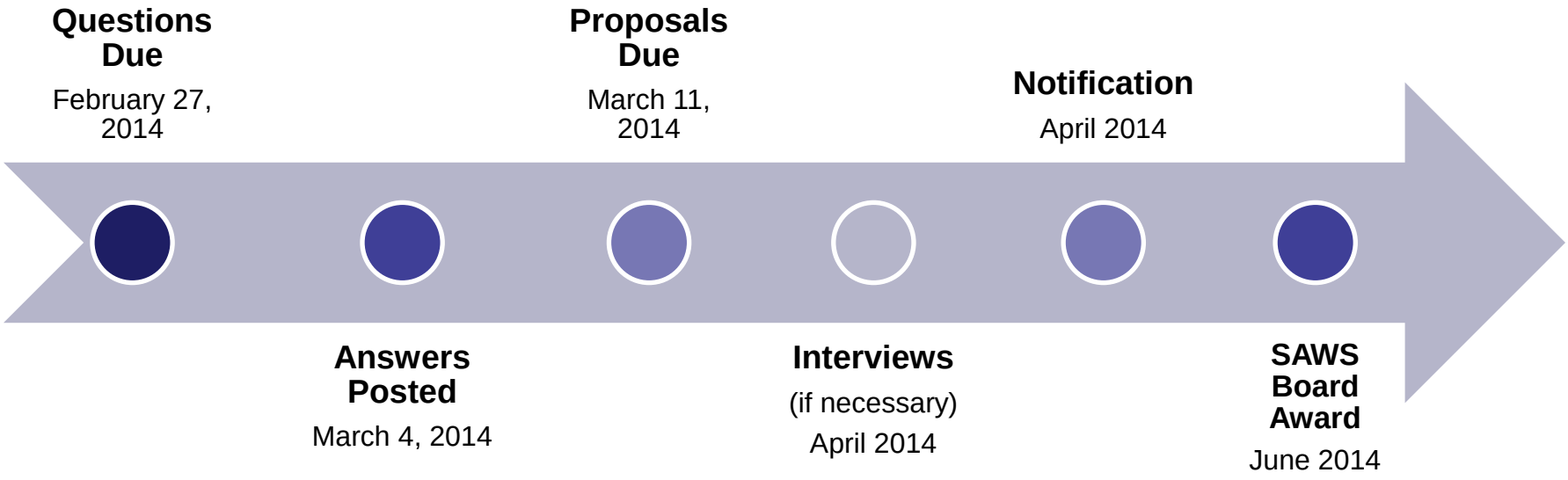
Pre-submittal Conference

San Antonio Water System

Introduction

- Sign attendance sheet
- Owner:
  - Jeff Ray – Project Engineer
    SAWS Treatment & Recycle Engineering
  - Marc Ripley – Contract Administrator
    SAWS Contracting

RFQ Schedule



Point of Contact for Questions

Marc Ripley – Contract Administrator

Fax: 210-233-3136

E-Mail: mripley@saws.org

Contracting Department

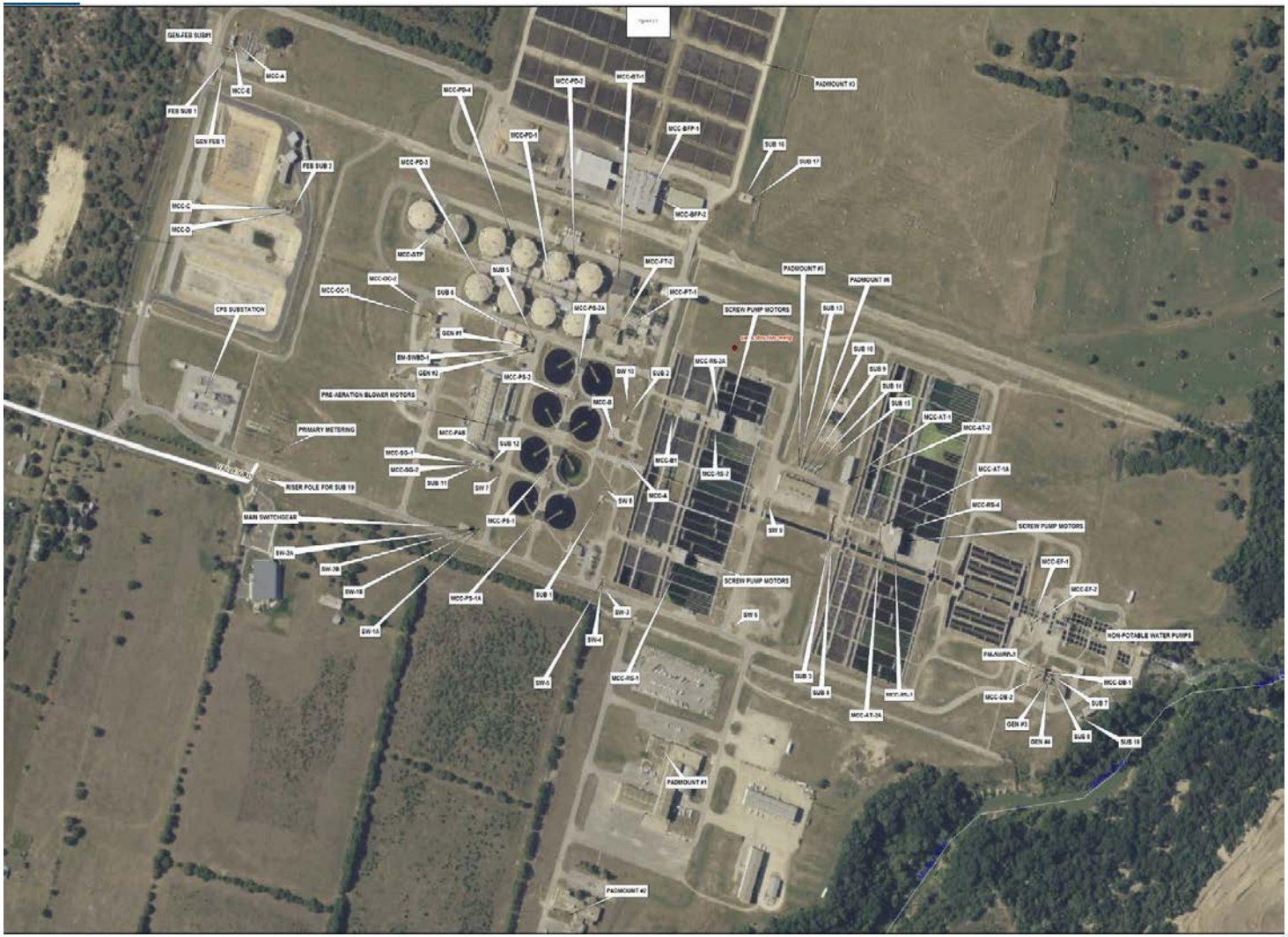
2800 US HWY 281 N. San Antonio, TX 78212

Note: SAWS Project Managers and Engineers will not respond to any questions submitted by phone and / or email directly to them

Evaluation Criteria

- Project Team Resumes and Experience in Similar Projects – 40 Points
- Project Approach – 30 Points
- QA / QC and Risk Management – 15 Points
- SMWB Participation – 15 Points

Dos Rios WRC Facility – Location Map



Motor Control Center – Outdoor

480 V, 1,000 A (NEMA 1 Enclosure)

Motor Control Center – Outdoor, Cont.

480 V, 1,000 A (NEMA 1 Enclosure)

Motor Control Center – Indoors (Typ.)

480 V, 600 A

Generator / Switchboard (Typ.)

Generator #1

480 V, 762 KVA

Standby Switchboard #1

480 V, 2,000 A

Generator / Switchboard (Typ.), Cont.

Generators #3 & #4

480 V, 500 KVA

Standby Switchboard #2

480 V, 2,000 A

Substation (Typ.)

Substations #11 & #12

(2) 13.2 KV / 4,160 V, 1,000 KVA

Substation #1

13.2 KV / 480 V, 1,000 KVA

Pad Mount Transformer (Typ.)

(2) 13.2 KV / 480 V, 500 KVA

13.2 KV / 480 V, 1,000 KVA

Overhead Feeders

Dual 13.2 KV Overhead Feeder Circuits

Dual 13.2 KV Overhead Feeder / Metering Circuits

- Not part of Consultant's 2012 evaluation project

Dos Rios WRC Facility

Scope Items

- Replace 480 V MCCs
  - Some housed in NEMA 1 enclosures only and will require new buildings
  - MCCs at Primary Clarifiers to be replaced
  - Approximately (16) MCC lineups for replacement
- Replace 480 V generators and associated switchboards
  - Approximately (4) generators / (2) Switchboards for replacement

Dos Rios WRC Facility

Scope Items, Cont.

- Replace plant substations – 13.2 KV-4.16 KV and 13.2 KV-480 V transformers and associated switches and/or breakers
  - Approximately (3) substations for replacement
- Replace plant 13.2 KV-480 V pad mounted transformers and associated switches and/or breakers
  - Approximately (2) pad mount transformers for replacement

Dos Rios WRC Facility

Scope Items, Cont.

- Replace SAWS owned 13.2 KV overhead service feeders including poles and pole mounted appurtenances downstream of plant CPS Energy substation, and add air switch to one overhead circuit
- Replace power, control and instrumentation cable as related to these electrical equipment replacements

Dos Rios WRC Facility

Scope Items, Cont.

- Replace RIO controllers for DCS as related to these electrical equipment replacements
- Evaluate/investigate controls, vibration monitoring system, electrical gear, and associated RIOs for three 4,106 V, 3,000 Hp and two 4,160 V, 1,500 Hp blowers
- Miscellaneous civil site and improvements work may be required

Dos Rios WRC Facility

Scope Items, Cont.

- Coordination critical in design and construction sequencing to maintain continuous plant operations

Dos Rios WRC Facility

Additional Information

- Dos Rios WRC Electrical System Assessment Project
  - Report finalized 2012
  - Volumes I & V posted on SAWS website
    - Volume I: Electrical / I&C condition evaluation
    - Volume V: Plant one-line diagrams

Questions

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