

## OUTLINE

### 1. Introduction

- a. The WHY
- b. Team Members
- c. Plan Topics and over-all objectives

### 2. Causes of NDT Anomaly Readings

- a. Typical Causes
- b. How to mitigate pre-bid for typical Causes

### 3. Non-Destructive Testing

- a. CSL, GGL, TIP:
  - i. Use 2-methods when possible to verify.
- b. Bottom Inspection Devices
  - i. SID/Mini-SID
  - ii. SQUID
  - iii. DID
- c. Verticality Inspection Devices
  - i. Sonic Caliper
  - ii. SHAFT

### 4. Concrete Mix Designs

- a. Mix design ingredients
- b. Requirements for a corrosive environment including difficulties.
- c. Mass Concrete requirements including difficulties
- d. Dry Concrete Mixes
- e. Rebar spacing and minimum concrete cover requirements and how they affect concrete flow.
- f. Use of mechanical clips for cage stability
- g. Couplers vs Lap Splices

### 5. Placing Concrete

- a. Review rebar spacing and minimum cover requirements
- b. NDT Tube protection
- c. 5" tube connected to Concrete Pump versus 10" Gravity Feed.
- d. Definition of a Dry Shaft.

### 6. Pile Mitigation

- a. Is repair required?
  - i. Consider Anomaly deduct calculations.
- b. Not all anomalies are defects
- c. Review all documents, not just NDT results.
- d. ADSC-IAFD Mitigation Plan

### 7. Summary/ Conclusions

- a. NDT Recommendations
- b. Concrete Mix Designs