

# Quality Improvement of Project Deliverables / Right of Way

Development/Operations Partnering  
May 28, 2008



# Problems Identified

- Lack of timely, complete information & comments
- Too many areas waiting until 60%
- Lack of key information needed
- Late involvement of key functions needed to complete stage deliverables
- A second taking is costly and delays project



# Problems Identified (cont'd)

- Excessive time/labor spent by C & S to complete deliverables at the back end to meet bid date
- **Construction is not satisfied with the plans, specs and estimates**
- Post-design services rendered that could have been avoided
- **Too many conditional clearances**



# Target → Major Projects

## Criteria:

- **New Construction/Reconstruction**
- Number of technical areas needing involvement
- **EA, EIS**
- Significant earthwork – One million dollars or more
- **R/W acquisition**
- Project funded and supported for bid



# Interim Recommendation Overview

- Three immediate improvements
  - Stage Deliverable Submittal Checklist procedure
  - In-Process and Outcome measurements
  - Engineering Survey ready for design kick-off
- Three long-term improvements to be piloted
  - Survey consolidation
  - DCR thru 30% for SPMG
  - New TO BE stages checklist across ITD
  - Geotech investigation to begin prior to design kick-off



# Recommendation #1

Deploy the Stage Deliverables Submittal Checklist Procedure to all major projects within ITD beginning in FY09



# Benefits

- Increased accountability of Design PM or designer
- Visible management of the Stage Deliverables process
- Higher quality deliverables
- More complete, accurate information for downstream technical functions
- Less rework/delay



# Recommendation #2

Engineering Survey ready before Design  
Kick-Off meeting



# Consolidation Steps

- Long-term actions:

Consolidate Survey data collection & services

- Create a R/W survey unit in R/W Group
- Create a Geodetic unit in Engineering Survey
- Integrate Engineering Survey and R/W Survey as one Survey Group



# Benefits

- Early, more complete deliverables = accurate information is ready for downstream operations
- Allows analysis and decisions to be made earlier
- Reduces rework/duplications
- Reduces project cost and time
- ADOT design, construction and R/W will be performed from the same basis
- Centralizes survey data



# Recommendation #3

Pilot new TO BE Stages  
Checklists to align and accelerate  
stage deliverables across ITD



# Benefits

- Better early deliverables so that complete, accurate information ready for many dependent functions
- Allows needed info to get to Environmental and others, decreasing current delays
- Allows for the footprint to be final for Stage III/60%
- Enables clearances to be complete by Stage IV
- Provides Construction better plans, specs and estimates
- Reduces addenda and design error & omission supplemental agreements
- Estimated over \$3 million dollars in R/W cost avoidance annually
- Reduces risk and causes less citizen angst with R/W takes



# Recommendation #4

Pilot DCR thru Stage II (30%) for  
SPMG major projects “likely to go”



# Benefits

- Shortens the time for the completion of the final design
- **More detailed look at the design and a better review**
- Delays in final design are much less likely
- **Helps Geotech start investigation**
- Enables footprint at Stage III as needed
- **Gets info to Environment and others early, so less delay**
- No time for rework (which is done too often)...
- **Better information at the right time**



# Recommendation #5

- Install both in-process and outcome metrics that show how submittal delivery is performing
- Actively use these measures to manage the Stage Deliverables process



# Three Key Measures

- In Process - Development
  - % Submittals Delivered complete, on time and accurate the first time
  - Decrease in Addenda
- Outcome - Construction
  - Decrease in Design Error and Omission



# Measures Benefits

- Helps measure Stage Deliverables process efficiency and effectiveness
- **Acts as accountability tool with staff and consultants**
- Can bring recognition to deserving areas
- **Can identify improvements →thus drive improvement efforts**
- Can set performance expectations and be a factor in performance evaluation



# Recommendation #6

Geotech Field Investigation will begin in Scoping phase.



# Benefit

- Geotech Report complete by Stage II (30%)
- Unlocks obstacles for others to deliver early, decreasing delays



# Next Steps.....

- Final review of TO BE Stages Checklist
- Select pilots in May
- Stage Deliverable Checklist procedure executed
- Action plans/implementation strategies being finalized in May
- Team to present progress at July Quality Management Review



# Questions

