# **STIP Project Development Process for Surveys and Mapping**

Project Manager Invites Location & Surveys to Kickoff Scoping Meeting Held With Design Firm

- RW and Let Dates (Production Schedule)
- Schedule for competing the Functional Alternate
- Surrounding Projects
- Establish Mapping Scale
- Photogrammetry Mapping Coordination Required?
  - QL2 Lidar/Statewide Ortho/GIS Property
    - Feasibility Study Area (PDF & DGN)
  - SPS/PS Flight Schedule
    - Leaf Off Required?
    - Photogrammetry Mapping Limits (PDF & DGN)
- Wetland Boundary Identified (Flagged w/Nails)?
  - Location & Surveys to Manage Survey or Managed by Others?
  - WEX File (PLS NOT Required)

<u> TLOC – Project Manager Requests Final Surveys</u>

- Design Survey Limits (PDF & DGN)
- Designation and Location of Flagged Wetland Points (L&S Manages Survey)
- Schedule Delivery Letter When Necessary
- LS Assignment

## FLOC – Delivery of Final Survey Mapping

- > All Deliverables; SharePoint Project Server
  - FS/DTM Files/Etc.
  - o Control Sheets
    - C Series Plan Sheets (Non-Deliverable)
      - ELN Tables; RWTable.ma
      - Datum Description (Tie Not Included)
    - Contract Surveyor (PLS) Standardized Survey/Closure Report
  - Wetlands Surveyed?

- Included in FS File (L&S Managed Only)
  - Wetland Boundaries
    - JS Designations
- Create WLL File (PDF & DGN) (L&S Managed Only)
  - WLL File; Per Standard Format
  - Surveyor (PLS) Seals PDF File (NCDOT or Contract Surveyor)
  - Create WET File (PDF & DGN) (Managed By Others Only)
    - WET File; Per Standard Format
      - Surveyor (PLS) Seals PDF File (NCDOT or Contract Surveyor)
- o Contract Surveyor (PLS) Seals PDF Files
  - Standardized Attestation Statement

## Project Manager Invites Location & Surveys to FDFI/CFI Plan Review Meeting

- LS Assignment
  - Review/Update Survey Files Per Proc 2008-2
    - Contract Surveyor (PLS) Seals PDF Files
  - Preliminary ROW Tables Per Proc 2010-1 (Not a Deliverable)
  - When Necessary, Flag/Mark ROW per 2016-1
- Location & Surveys Attends Meeting
  - o Division Selects IP/Caps or Concrete ROW Monuments
  - Verify ROW Date

## Project Manager Notifies Location & Surveys of ROW Authorization Schedule

- Monthly Board of Transportation Meeting Agenda Reviewed Regarding ROW Authorization (Location & Surveys Assignment Engineer)
- LS Assignment
  - Project Manager Provides ROW Plans
  - o Schedule ROW Staking (IP/Caps) per Proc 2016-1
    - Start Date at Discretion of Group Leader
      - Finish ROW Staking 15 Weeks Before Project Let
  - Manage ROW Revisions When Necessary
  - o All Deliverables; SharePoint Project Server (15 Weeks Before Project Let)
    - Control Sheets (PDF & DGN) Finalized (C Series Plan Sheets)
      - Datum Description Tied to Design Alignment
      - Contract Surveyor (PLS) Seals PDF File
        - o Standardized Attestation Statement
    - Alignment Tables (PDF & DGN) Completed (D Series Plan Sheets)
      - RWTable.ma
      - Contract Surveyor (PLS) Seals PDF File

• Standardized Attestation Statement

- ROW Tables (PDF & DGN) Completed (E Series Plan Sheets)
  - RWTable.ma
  - Surveyor (PLS) Seals PDF File (NCDOT or Contract Surveyor)

     ROW Staking Attestation Statement
- ROW Sheets (PDF & DGN) Completed (RW Series Plan Sheets)
  - RW Plan Sheets; Per Standard Format
  - Property Ties Computed and Included
  - Surveyor (PLS) Seals PDF File (NCDOT or Contract Surveyor)
     ROW Staking Attestation Statement
- Manage Additional Surveys When Requested
  - o LS Assignment
  - Contract Surveyor (PLS) Seals PDF Files

## **RC/PC Project Milestone - Final Plan Sheets to Reproduction**

- Develop Survey Control and ROW Plan Set (PDF) Per Standardized Procedure
  - Final C Series Plan Sheets
  - Final D Series Plan Sheets
  - Final E Series Plan Sheets
    - Surveyor (PLS) Sealed Sheets
  - Final RW Series Plan Sheets
    - Surveyor (PLS) Sealed Sheets

Project (Let) Plans Recorded and Project Construction Begins

Project Manager Notifies Location & Surveys Regarding ROW Revisions

- LS Assignment
  - Revise Field ROW Monuments per Revisions
  - ROW Tables (PDF & DGN) Revised (E Series Plan Sheets)
    - RWTable.ma
    - Surveyor (PLS) Seals Revised PDF File (NCDOT or Contract Surveyor)
      - ROW Staking Attestation Statement
  - ROW Sheets (PDF & DGN) Revised (RW Series Plan Sheets)
    - RW Plan Sheets; Per Standard Format
    - Surveyor (PLS) Seals Revised PDF File (NCDOT or Contract Surveyor)
       ROW Staking Attestation Statement
- Revised ROW Tables (PDF) and Revised ROW Sheets (PDF) Recorded
  - Original Should Remain In Recorded Plans

#### **ROW Monument Replacement**

- Resident Engineer Manages Re-establishment of all IP/Caps destroyed during construction.
  - Contract Surveyor (PLS) Provides Standard Report of Survey per NCDOT Construction Manual through the Resident Engineer or Design Build Project Manager to Location & Surveys
- Resident Engineer Manages RW Monument Replacement with Concrete Monuments
  - Contract Surveyor (PLS) Provides Standard Report of Survey per NCDOT Construction Manual through the Resident Engineer or Design Build Project Manager to L&S.