GMU Team (Level 0)

NOVEC

Third Party Attachment Project Status

10/17/2013

Matt Blanck - John O'Neill - Doug Smith

GEORGE MASON UNIVERSITY

Where Innovation Is Tradition

Overview

- Problem Statement

- Scope

- Approach & Task Description

- NOVEC Meetings Summary – 9/27, 10/4, 10/17, 10/22

- Current Project Snags

Problem Statement

- Dual-use of the utility poles with 3rd party vendors poses challenges sharing costs
  - Tree trimming, pole replacement/upgrade & storm repair
- A system is desired to enable NOVEC to better capture the shared costs
- The objective is to improve cost sharing through improved tracking of 3rd party attachments

GEORGE MASON UNIVERSITY

Scope

- Focus is only on understanding internal process improvements within the NOVEC division

- Provide reports suggesting options for improvements in the current NOVEC system
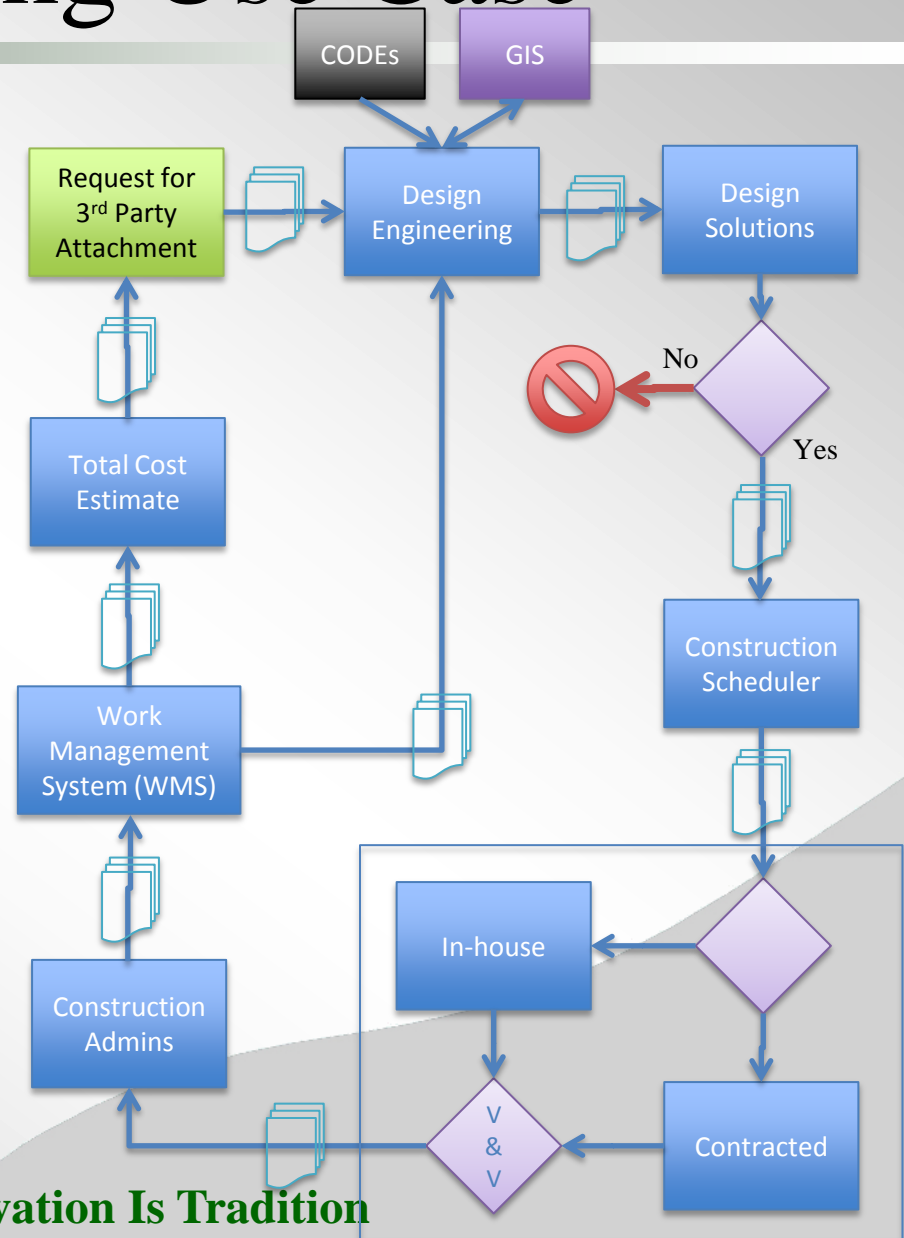
Project Proposal

- Proposal submitted to Dr. Hoffman and Mr. Barfield of NOVEC
- Development of gap analysis
  - Done via on-site interviews with:
    - NOVEC Home Office Personnel (GIS, Planners, Analysts)
    - NOVEC Field Crews
    - NOVEC Tree Trimming Contractors
- Development of a requirements document
- Development of an architecture based upon these requirements
  - Verify and validate architecture with sponsor via uses cases

NOVEC Meetings

- Team met with NOVEC Sponsor on 9/27, 10/4/
  - Developed Current Process Use Cases associated with Make-Ready Work
  - Acquired 2011-2012 Survey Database with Joint Use Pole (JUP) data
  - Acquired Joint Use Notification and Request paperwork
  - Acquired sample Make-Ready Work Request

- Team interview with NOVEC GIS Analysts, 10/17
  - Acquire 10 km^2 GIS sample set with JUP and Non-JUP
  - Analyze GIS tables, ArcFM (Feeder Manager) application

- Team interview with NOVEC Tree Trimming Contractors, 10/22
  - Observe/Collect Joint Use Poles (JUP) and Non-JUP data

GEORGE MASON UNIVERSITY

Where Innovation Is Tradition

Design Engineering Use Case

1. Request for 3rd Party Attachment
   - Includes a route
2. Design Engineering
   - Evaluates the route using GIS & building Codes
   - Conducts a field assessment
3. Design Solutions
   - Approves / Rejects Request
   - Note: NOVEC absorbs costs for rejections
   - Generates work order for installation
   - Generates list of materials
4. Construction Scheduler
   - Generates Job Package
     - Work time estimates
     - Maps & Materials
     - Staking Sheet
       - Inventory & As-built form
   - Note: this doesn't include 3rd party attachment handling requirements
5. Work completed 'In-house' or 'Contracted'
   - Supervisor reviews & signs off
     - As-built list
     - Green Sheet
6. Construction Admins
   - Input units / quantity into WMS
   - Capture deltas from Job Package
   - Note: Time deltas could be attributed to 3rd Party Attachment handling
7. Work Management System
   - Contains final details for Cost Estimate
   - Provides as-built data to Design Engineering
     - Updates GIS
8. Total Cost Estimate
   - Provides bill to 3rd Party Requestor

Request for 3rd Party Attachment → **Design Engineering** → **Design Solutions**

No / Yes decision → Construction Scheduler

Total Cost Estimate ← Work Management System (WMS) ← Construction Admins

In-house / Contracted → V & V

Innovation Is Tradition

Current Project Snags

- NOVEC has initiated a change in scope for the project.
  - Cost data and estimation formulary related to 3rd Party attachments is Customer Sensitive data and will be excluded from project scope
  - Gap Analysis will focus on business process and IT architecture associated with 3rd Party attachments
  - One Week Schedule slip