

Engineering/Collections Collaboration

Can You Afford Not To?

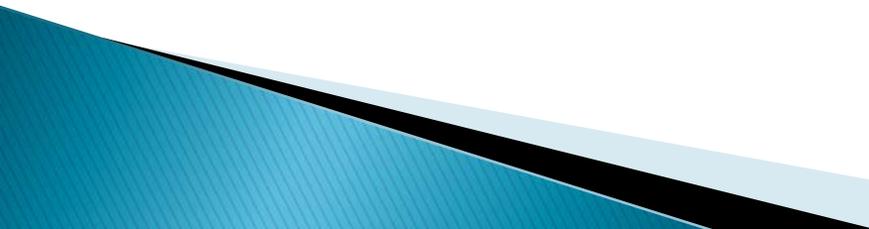
August 13th, 2019

Christopher Brown

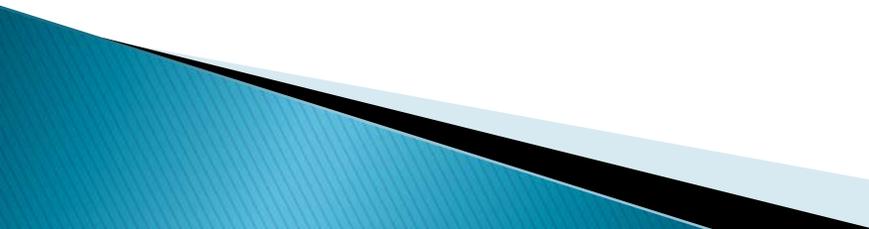
Collection System Manager

Oro Loma Sanitary District

About your Presenter

- ▶ 30 years in construction and plumbing and underground sewer construction.
 - ▶ 1989–1999: Field Superintendent (specializing in high end residential/commercial remodel)
 - ▶ 1999–2003: Plumbing Supervisor (all phases of residential/commercial and underground)
 - ▶ 2003–2015: Collection Worker
 - ▶ 2015–2018: CCTV Lead Worker
 - ▶ 2018–????: Collection System Manger
 - ▶ Past SFBS Collection System Committee Chair
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Collaboration

- ▶ Cooperative arrangement in which two or more parties (which may or may not have any previous relationship) work jointly towards a common goal.
 - ▶ Sounds pretty simple yet there is sometimes a disconnect between the wants and the needs of the different departments.
 - ▶ Both departments have critical information that can lead to a mutual understanding.
 - ▶ Without collaboration/communication both departments can find themselves at odds with each other and the end product is what suffers.
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Areas of Concern

Engineering

- ▶ Budgetary Constraints
- ▶ Property Rights
- ▶ Topography
- ▶ Utility Conflict
- ▶ Jurisdiction
- ▶ Technology
- ▶ Cost Benefit Analysis
(10 year Payback?)

Collections

- ▶ High Traffic Areas
- ▶ Difficulty of Access
- ▶ Traffic Control
- ▶ Easement Access
- ▶ Ingress/Egress
- ▶ High Frequency
- ▶ Difficult Homeowners
- ▶ Manhole Locations

Where Do We Begin?

- ▶ Collaboration begins with both departments understanding the needs of the other.
- ▶ Both departments need to understand the constraints placed on them.
 - ❖ Do we have the funds?
 - ❖ Do we have good condition assessment/CCTV data?
 - ❖ Is the equipment a limiting factor? (Hydro and CCTV)
 - ❖ Can the maintenance be safely performed?
 - ❖ Do we have a right to be there? (clear and recorded easement documents)
 - ❖ What type of access do we have to easements? (gates, roadways, paths, etc.)
 - ❖ Will the work be a responsible expenditure of public funds?
 - ❖ Is it cheaper to maintain it or rehabilitate it?
 - ❖ Is there an alternative solution? (point repair, pipe bursting, lining, etc.)

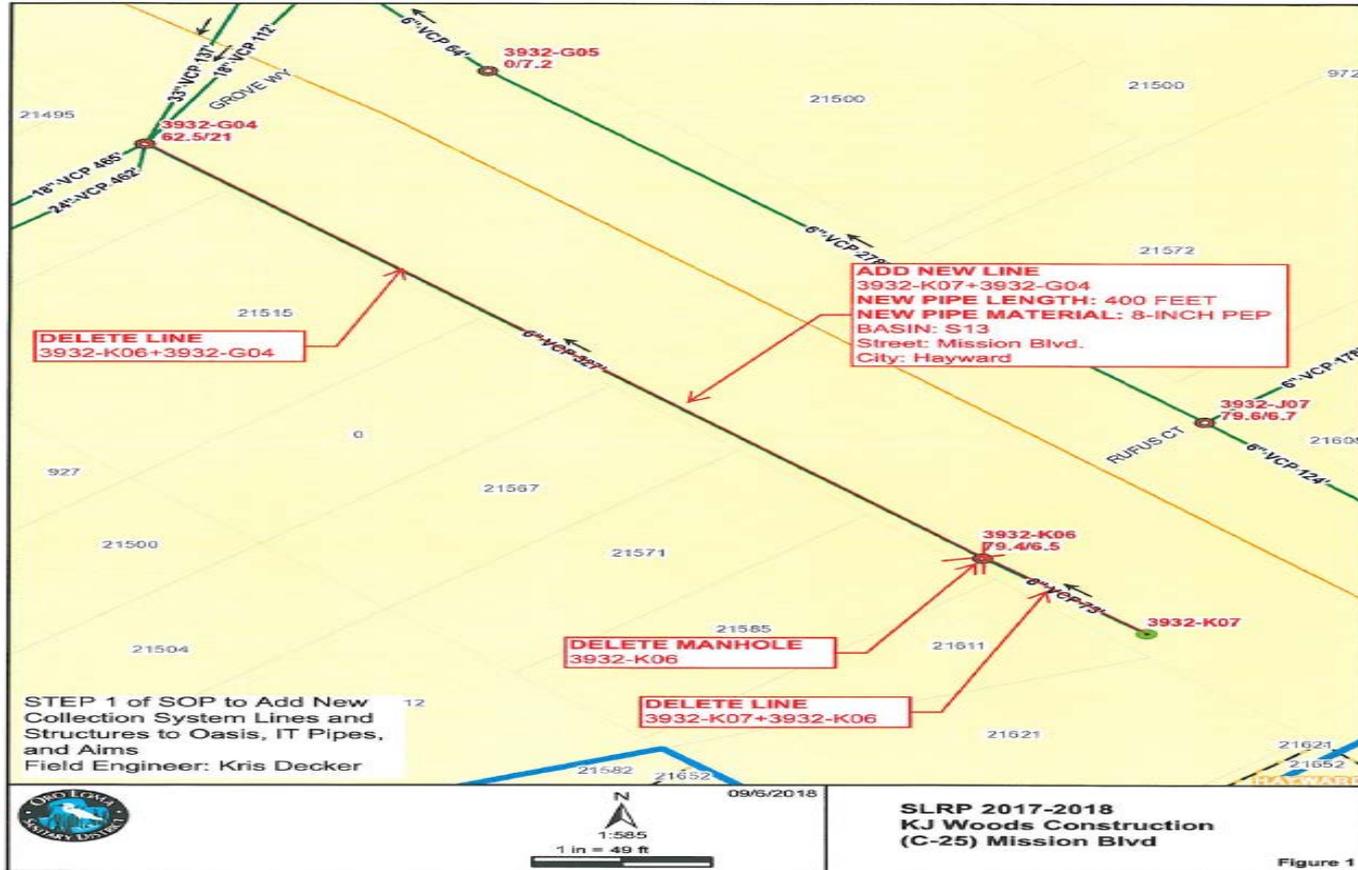
Ask Yourself

- ▶ Do the CCTV crews realize that “junk in is junk out”? Have the crews ever watched the final videos to see the product they are delivering?
- ▶ When documenting defects of a sewer line segment, have the CCTV crews seen the still photos attached to videos? (QAQC)
- ▶ When defects/repairs are submitted by the CCTV crews how long do they sit in the que before they are assigned to a project? Is this known to all?
- ▶ When putting out a point repair or line replacement project when do you solicit weigh in from the field crews? (70%?, 80%?) If you do not , then WHY NOT? Does the weigh in lead to buy in?
- ▶ Is the field crew input taken into consideration? The needs and wants of the field crew may have significant impact.
- ▶ Are you considering that the field crews will have to maintain this for the next 100 years?

Ask Yourself Continued

- ▶ Have you actively listened to the safety concerns, access issues, travel times, difficult homeowners, and pets or pest issues?
 - ▶ Are there limitations to the equipment used for maintenance? How far will the CCTV camera go? How steep of a grade will the Hydro-Jetter climb?
 - ▶ Are the utility access covers in the correct locations depicted on your current mapping system? Can they or should they be moved?
 - ▶ How can we make this a better product? Can we change something to improve or upgrade the existing situation.
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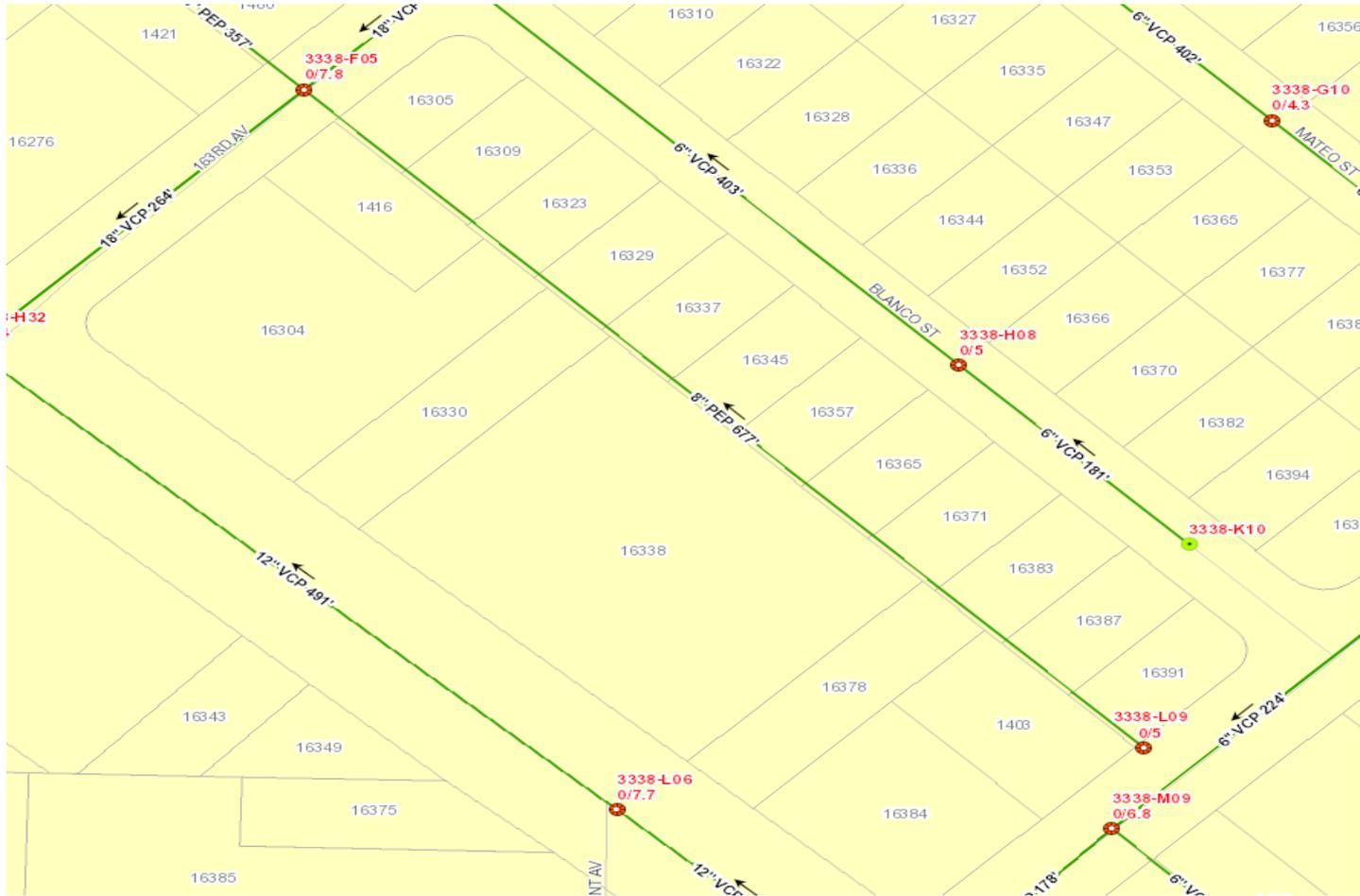
Improvement Example



Improvement Example



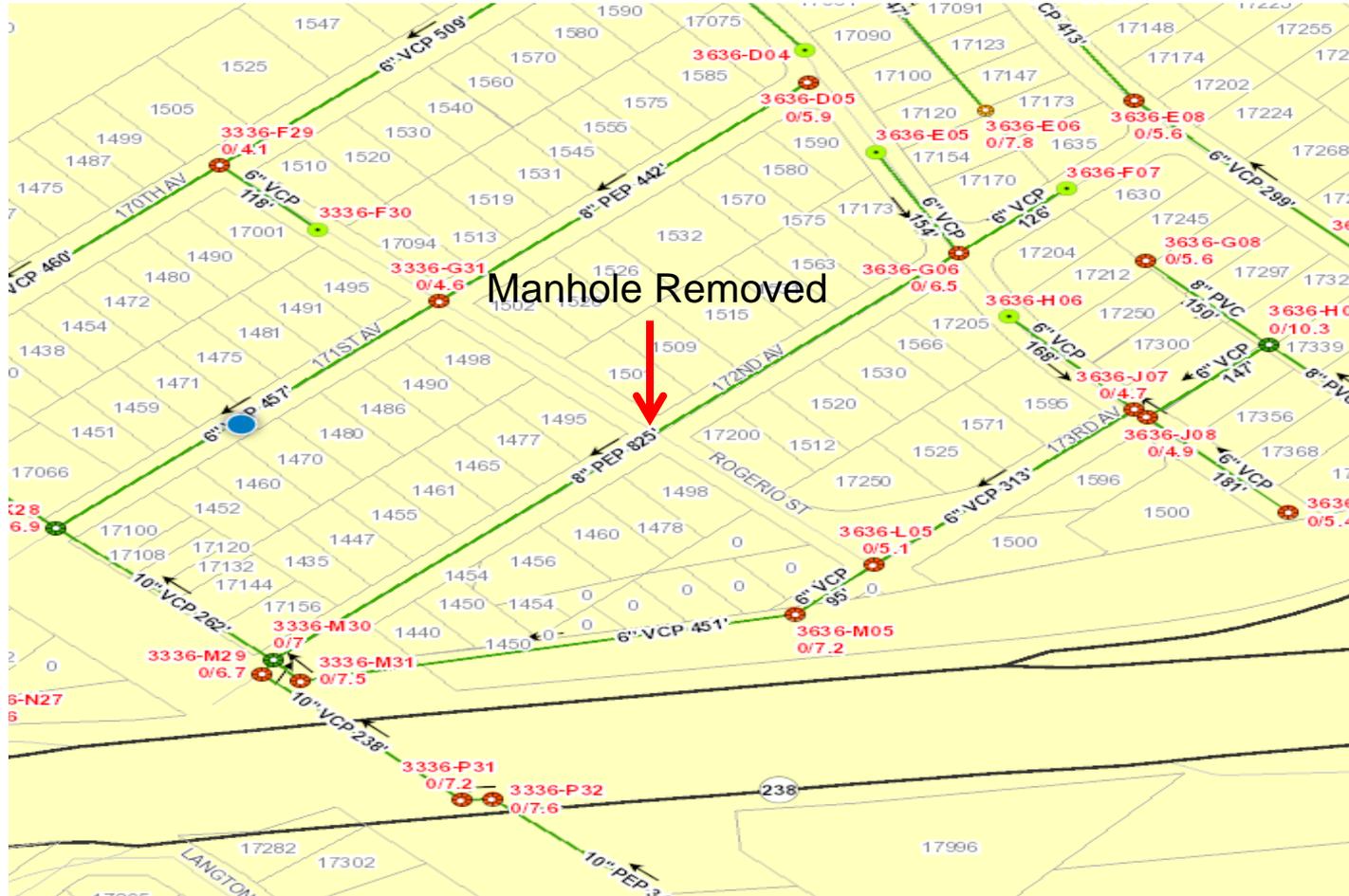
Improvement Example



Improvement Example



No Collaboration



No Collaboration cont.



Collaboration is Communication

- ▶ How do you communicate with each other?
- ▶ How often do you meet?
- ▶ What level of involvement would you like?
- ▶ Does everyone understand WHY?
- ▶ Do you take the time to ensure everyone involved understands?
- ▶ Do you work together or in opposition to each other?

ASK YOURSELVES THESE QUESTIONS

