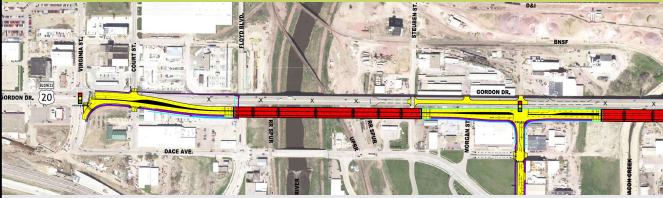


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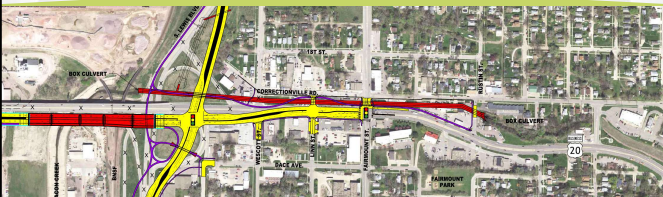


Gordon Drive

- New Gordon Drive shifted to south
- No longer continuous viaduct – 2 bridges separated by a gap
- New Floyd River Bridge
- New Cunningham Drive intersection
- Existing 1930s era viaduct completely removed

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Gordon Drive

- New Bacon Creek bridge
- Bridge pier utility conflicts
- Existing interchange removed
- New at-grade Lewis Blvd intersection with traffic signal
- High fills over existing utilities

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Bacon Creek Conduit

- New, larger triple 10' wide x 11' tall concrete box culvert
- Between Gordon Dr & Correctionville Rd
- Deep excavations, extensive shoring
- Direct conflicts with utilities over the conduit

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Overall Project Schedule

Construction slated to begin in Fall 2027. Construction sequencing is still being refined but work will on Gordon Drive and Bacon Creek will be concurrent.

1	2	3	4
Preliminary Plans	ROW Acquisition	1st Project Letting	Begin Construction
DD2 plans in June 2024 DD5 plans in December 2024 Utility plan sheets included	2026 & 2027. Significant effort to acquire ROW, physically clear parcels, and relocate utilities	July 2027. Bacon Creek and Gordon Drive probably let concurrently	Fall 2027. Gordon Drive and Bacon Creek Conduit Concurrent Construction


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Utility Coordination Issues

What are the barriers during project development?



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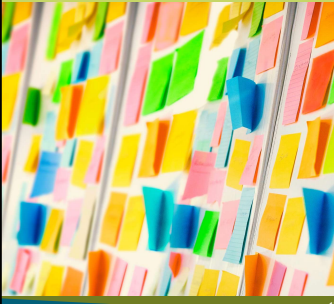


Uncovering the issues

- We don't know where underground utility facilities are in the project area.
- Coordination begins too late to affect the department's design.
- Relocation of utility facilities happens too late.

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Utility Task Force

- Created in response to issues.
- Capture, evaluate & prioritize ideas and potential solutions.
- Emphasis on finding ways to better identify and avoid utility conflicts during the design phase.

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Searching for Solutions

- Ask for location information from utility owners earlier.
- Acquire SUE services when necessary.
- Adopt and avoidance mind-set.
- Start coordination process earlier so we can include needs in ROW design for unavoidable impacts.

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Goal 1:

Improve awareness and compliance with utility policy and permit requirements

Objectives

- Update the Utility Accommodation and Coordination Policy.
- Work with Iowa One Call to improve utility locates.
- Develop a utility construction conflict resolution process.

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Goal 2:

Implement a more proactive project development process to avoid, minimize and mitigate the impacts on utility facilities

Objectives

- Develop pilot projects identification, conflict analysis and resolution of utility impacts.
- Pilot the use of multi-duct installations in congested areas.
- Pilot digital utility as-builts on a few contracts for installation of DOT-owned utility facilities.

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Pilot Projects

Identification, conflict analysis and resolution of utility impacts

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Pilot Project Goals

- Identify utility facilities early in the project development process.
- Conduct notifications much earlier
- Identify project utility corridors.
- By D2 (20%) have a VERY draft relocation plan.
- By D5 (85%) have a semi-final relocation plan.
- Include known property needs in ROW design.

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Gordon Drive Pilot Process

More utilities than a typical project means more time needed for relocation and higher need for enhanced coordination.

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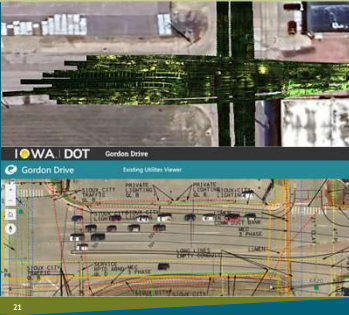
Impacts to both Utility Owners and Iowa DOT

- Late coordination reduces opportunities for utility avoidance and conflict minimization.
- Late coordination reduces time for utilities to respond.
- Density of utilities take more time.

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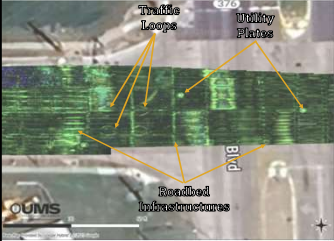
Goals

- Begin sooner
- Better information
- Regular interaction
- Leverage technology
- Emphasize Avoidance & Minimization
- Finish sooner with more plan detail



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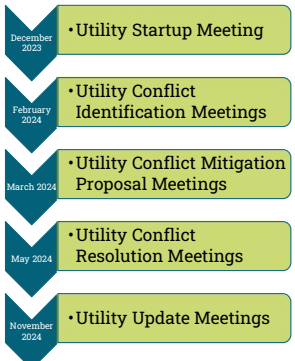
Comprehensive Survey

- DOT Photo Survey
- Foth Ground Survey
- Utility Mapping Services
 - Complete Locates
 - Ground Penetrating Radar Supplementation
 - Quality Level Designation
 - Size/Quantity information
- Detail facilitates prioritization

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Planned Utility Coordination Process

Accelerated & Proactive. Regularly scheduled meetings, with concurrent development and utility owner review.



- December 2023 • Utility Startup Meeting
- February 2024 • Utility Conflict Identification Meetings
- March 2024 • Utility Conflict Mitigation Proposal Meetings
- May 2024 • Utility Conflict Resolution Meetings
- November 2024 • Utility Update Meetings

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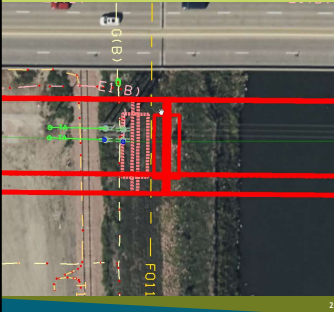
Utility Conflict ID	Utility Label	Utility Owner	Alignment Type	Utility Function	Utility Type	Utility Sub
2118B	FO11 CATV	Sparklight	Pole	Private	Communications	Cable Telev
2130C	FO11 CATV	Sparklight	Pole	Private	Communications	Cable Telev
2011	FO33	Verizon/NOJ	Crossing	Private	Communications	Fiber Opt
2018A	FO33	Verizon/NOJ	Crossing	Private	Communications	Fiber Opt
2020C	FO33	Verizon/NOJ	Crossing	Private	Communications	Fiber Opt
2010D	FO33	Verizon/NOJ	Crossing	Private	Communications	Fiber Opt
2022	FO33	Verizon/NOJ	Crossing	Private	Communications	Fiber Opt
2020B	FO33	Verizon/NOJ	Crossing	Private	Communications	Fiber Opt
2020C	FO33	Verizon/NOJ	Crossing	Private	Communications	Fiber Opt

Differences from planned process

- Number of Conflicts
- Very collaborative
 - Efficient Meetings
 - More phone calls & emails
 - Utilities came with ideas
- Limited GIS engagement

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Benefits of the Process

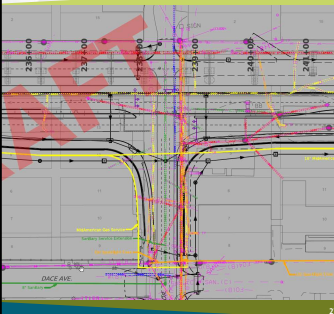
- West Bridge Pier Adjustments
 - MidAm 16" Steel Gas
 - Sparklight Fiber
- East Bridge Pier Adjustments
 - 48" sanitary sewer
 - 24" water main
- Other benefits
 - Scheduling
 - Long lead-time item identification

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Lessons Learned
Opportunities for Improvement



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Gordon Drive, Specifically

- Well-received by utilities.
- Benefit of dedicated staff.
- Issues identified early on better addressed immediately.
- Design with an eye toward avoidance.
- Better estimates of effort.
- GIS adoption.

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Overall Program

- Underestimated the number of conflicts.
- Close communication between utility engineer & design team allowed for design changes to avoid most costly relocations.
 - 16" gas main
- Utility engineer well informed about design efforts in progress.
 - Discussing relocation alternatives with utilities.

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Overall Program

- Utility corridors identified.
 - Proposed joint communications duct bank.
- Bridge pier deterioration may lead to accelerating that work.
 - Looking for strategies to allow relocations to occur earlier in overall schedule.

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Thank you!

Questions?
