
SE Connector
The Final Segment
September 25, 2025
ACEC-IA + Iowa DOT + FHWA
Iowa Transportation Conference
KIRKHAM MICHAEL


Agenda
Project History and Need
Final Segment Design
Permitting
Final Submittal
Construction Update
Project Flyover
DES MOINES
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Project History and Need
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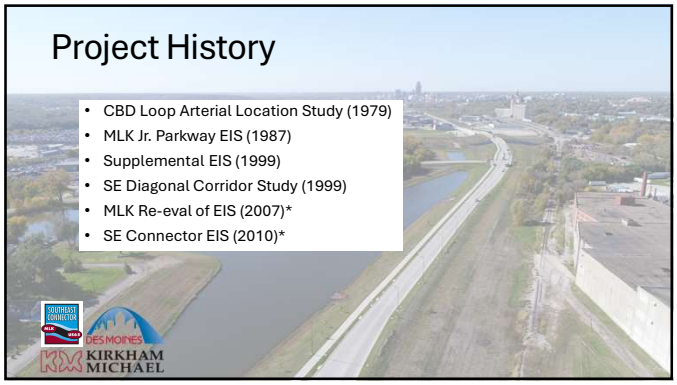
Project History



- CBD Loop Arterial Location Study (1979)
- MLK Jr. Parkway EIS (1987)
- Supplemental EIS (1999)
- SE Diagonal Corridor Study (1999)
- MLK Re-eval of EIS (2007)*
- SE Connector EIS (2010)*

Project Need

Enhanced Mobility, Access And Opportunity

The Southeast Connector will result in an efficient, direct access corridor to address the mobility needs of this quadrant of Des Moines and the broader metropolitan area. Improvements will increase access to existing neighborhoods, business and industry, as well as facilitate future developments, such as the Agrimergent Technology Park.

Roadway Capacity

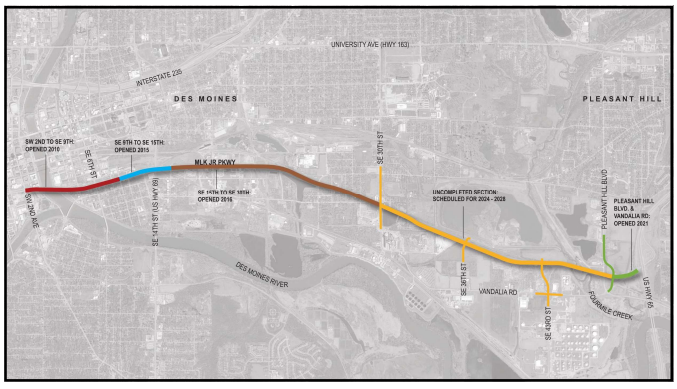
Traffic projections predict that by 2030 the current road network will be unable to accommodate expected traffic levels. Without investment in the corridor, travelers would likely have to divert to a longer and less efficient route that could compromise economic competitiveness.

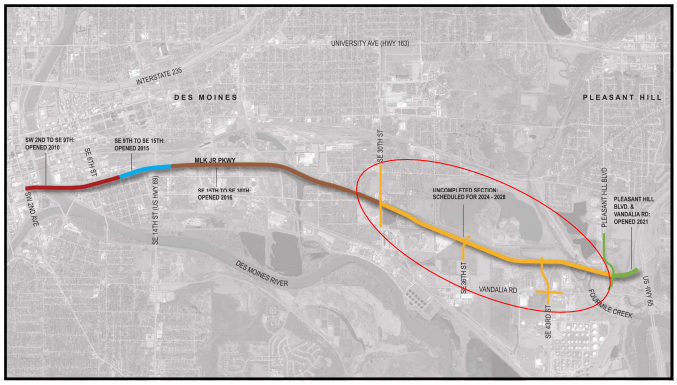
Economic Revitalization And Goods Movement

The SE Connector will provide economic redevelopment opportunities for the area southeast of the Central Business District and will improve goods movement for existing and future truck traffic throughout the City of Des Moines.

System Connectivity Improvements

The Southeast Connector will provide Des Moines' southeast side with a direct, safe and efficient link to the downtown and the broader regional transportation system.




UNIVERSITY AVE (HWY 163)
INTERSTATE 235
DES MOINES
PLEASANT HILL
SW 2ND TO SE 9TH: OPENED 2019
SE 6TH TO SE 15TH: OPENED 2015
MLK JR PKWY
SE 6TH ST
SW 2ND AVE
SE 14TH ST (US HWY 69)
SE 14TH TO SE 16TH: OPENED 2016
SE 30TH ST
UNCOMPLETED SECTION: SCHEDULED FOR 2024 - 2028
PLEASANT HILL BLVD
PLEASANT HILL BLVD & VANDALIA RD: OPENED 2021
DES MOINES RIVER
SE 56TH ST
VANDALIA RD
SE 42ND ST
FOUR MILE CREEK
US HWY 65


Final Segment Design
SOUTHEAST CONNECTOR
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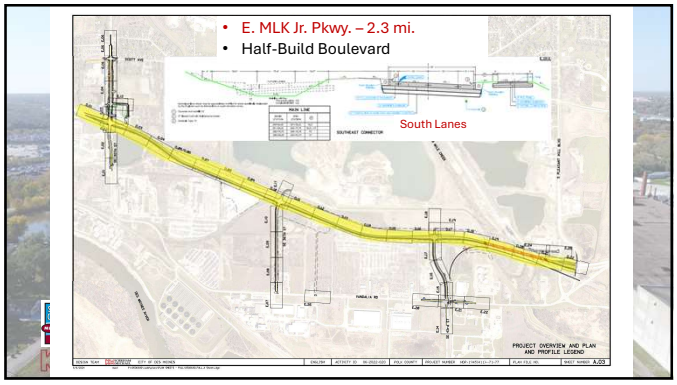
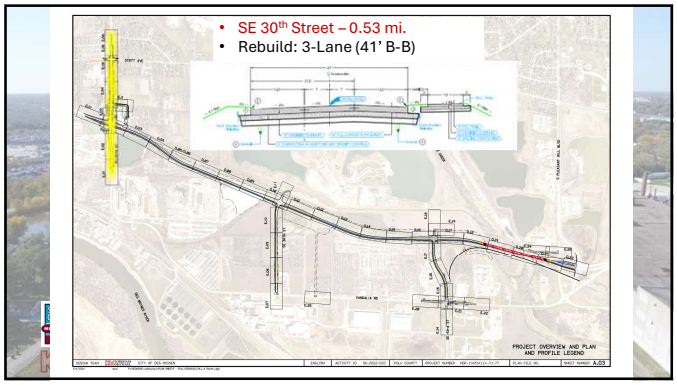
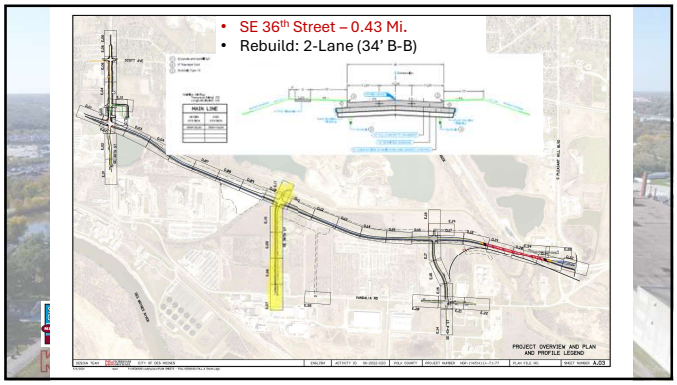
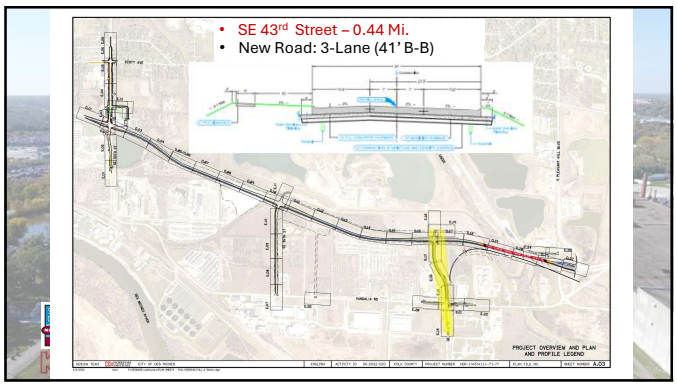
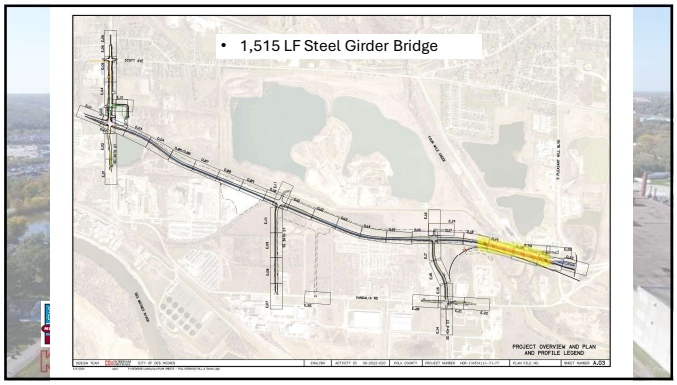

• E. MLK Jr. Pkwy. – 2.3 mi.
• Half-Build Boulevard
South Lanes
PROJECT OVERVIEW AND PLAN AND PROFILE LEGEND


• SE 30th Street – 0.53 mi.
• Rebuild: 3-Lane (41' B-B)
PROJECT OVERVIEW AND PLAN AND PROFILE LEGEND


• SE 36th Street – 0.43 Mi.
• Rebuild: 2-Lane (34' B-B)
PROJECT OVERVIEW AND PLAN AND PROFILE LEGEND

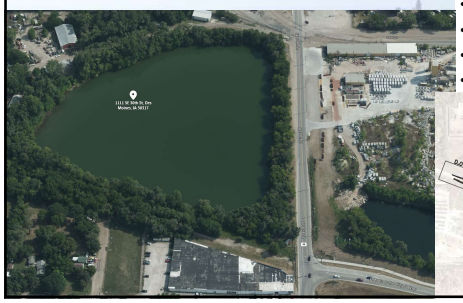

• SE 43rd Street – 0.44 Mi.
• New Road: 3-Lane (41' B-B)
PROJECT OVERVIEW AND PLAN AND PROFILE LEGEND

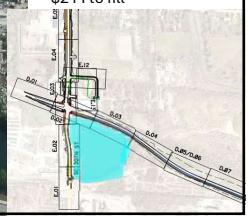


Final Design Challenges & Solutions

- **Sunset Beach Lake**
- Lime Pile (Mountain)
- Mulch/Plastic Stockpile
- Rubble Relocation
- USACE Levee Relocation
- Railroad Stoplog Closure
- Bridge over Fourmile Creek & Rail Spur

Sunset Beach Lake



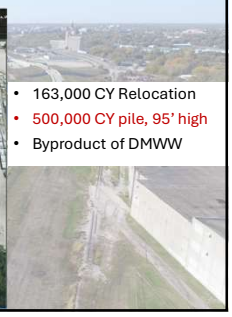


- Former Sand Quarry
- 22’ deep in the middle
- Former Swimming Area
- $2 M to fill

Sunset Beach Lake - Solution

- Saved $2M by building the north lanes instead of the south lanes through this section of the project.
- Pond is city-owned and can be filled by other future projects with excess soil.
- Full-Build not needed until 2050 based on Traffic Study

Lime Pile (Mountain) Relocation

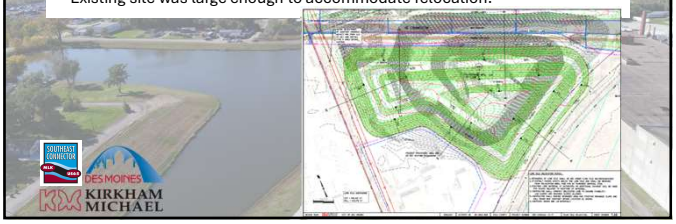


- 163,000 CY Relocation
- 500,000 CY pile, 95’ high
- Byproduct of DMWW

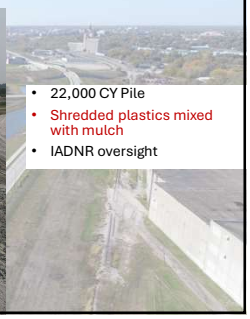
Lime Pile Relocation

Lime Pile Relocation- Solution

- Contractor required to relocate material on-site. ($6.20/CY) ($1M)
- Existing material 80-90% moisture content – Contractor required to air-dry to 50% or less prior to recompaction.
- Existing site was large enough to accommodate relocation.



Mulch/Plastic Pile Removal



- 22,000 CY Pile
- Shredded plastics mixed with mulch
- IADNR oversight

Mulch/Plastic Pile- Solution

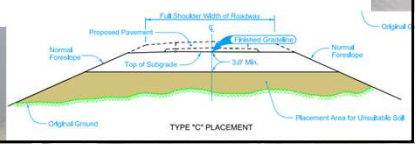
- Material was being tracked by the Iowa DNR.
- No option was available other than hauling to Metro East Landfill
- Progress updates, daily reports, and photos required to Iowa DNR.
- Removal cost is $350,000 by contractor plus tipping fees.

Rubble Relocation

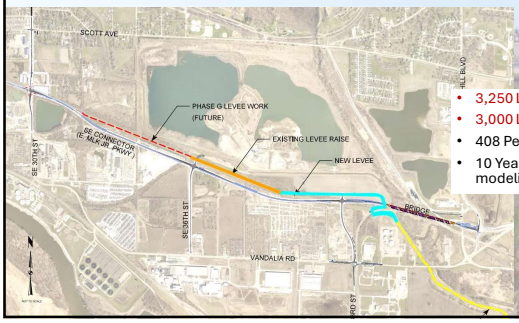
- 13,000 CY Estimated
- Used as stable base for auto salvage yards

Rubble Relocation- Solution

- All removed material to be used as unsuitable fill beneath deeper fill zones
- Complies with Std. Road Plan EW-102 placement
- Material required to be free of all debris/trash
- Saved estimated $500,000 by not hauling off-site and finding more borrow material.



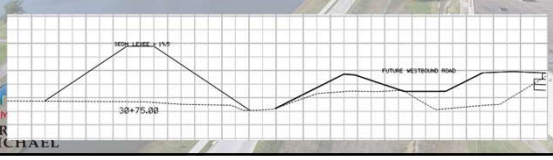
USACE Levee Relocation



- 3,250 LF Raise
- 3,000 LF New Levee
- 408 Permit
- 10 Years of design & modeling

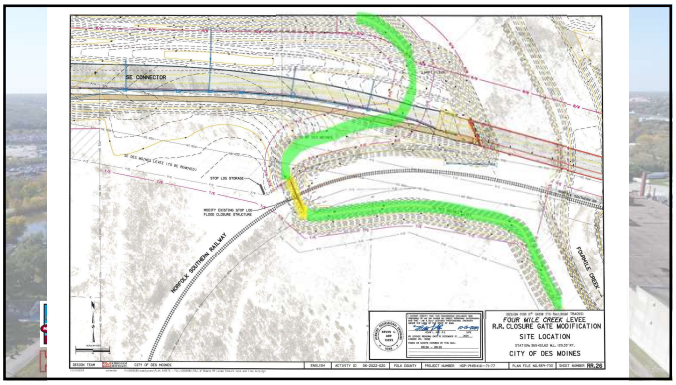
New Levee Solution

- Included in project to take advantage of mass earthwork pricing
- Set separately from roadway so USACE can be owner / operator
- Separate levee can be raised independently of roadway
- Saved estimated $400,000 by including in the project.



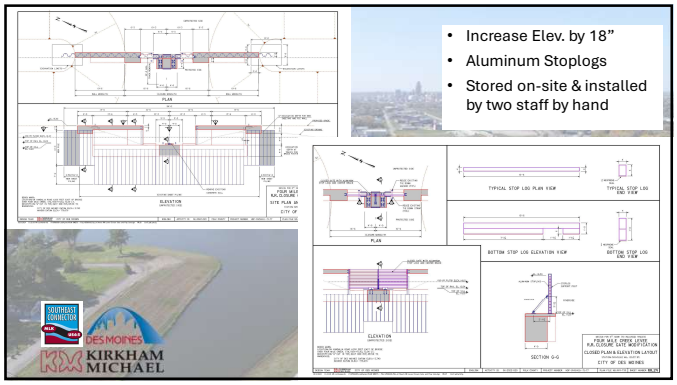
Railroad Stoplog Closure

- Existing Structure Constructed in 2010
- Concrete Stoplogs
- Requires train car & crane
- Major Liability for Flash-Flooding
- Line of protection raised by 18-inches

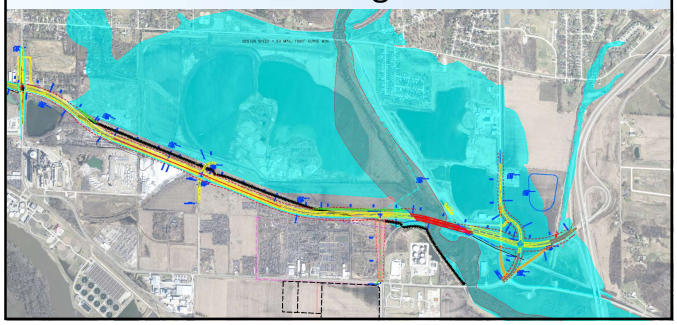


Stoplog Closure- Solution

- Retrofit of existing structure to raise to new elevation.
- Stop-Logs redesign to aluminum logs with center brace.
- Storage wall designed on-site to decrease response time.
- Requires 24-hour removal of tracks.



Fourmile Creek - Bridge



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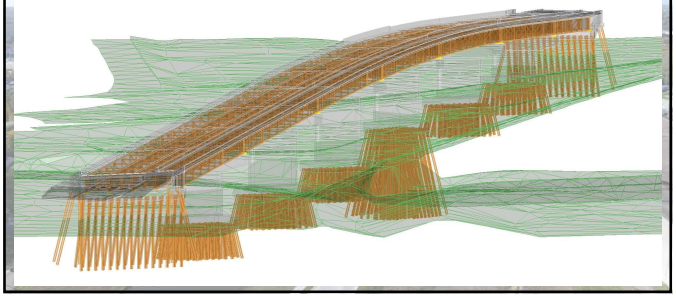

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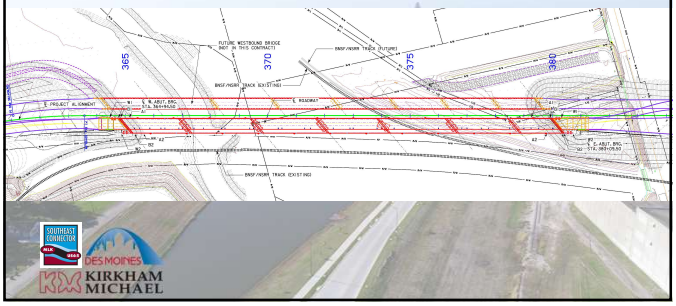

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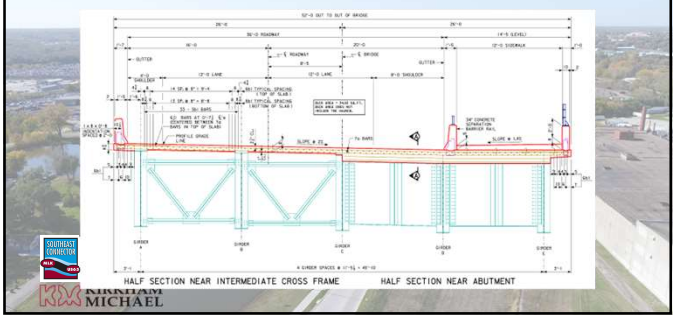

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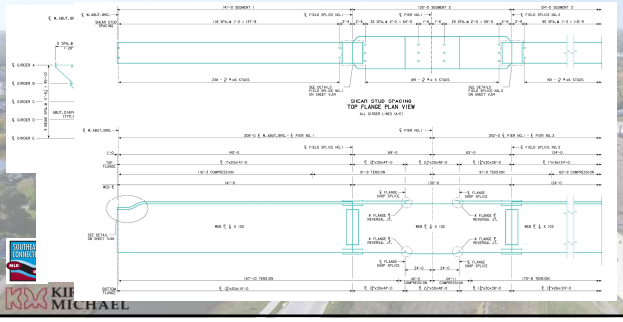

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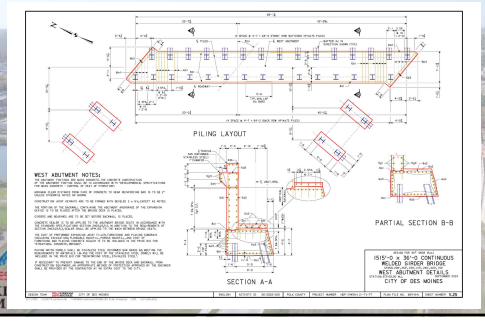

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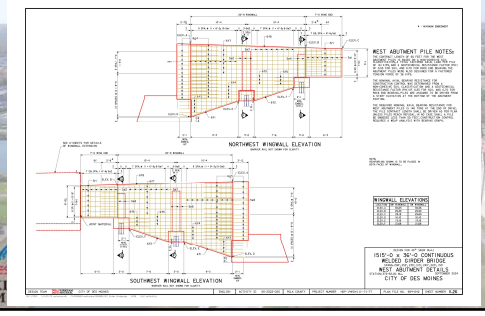

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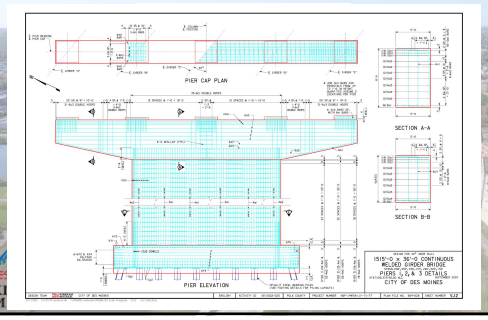

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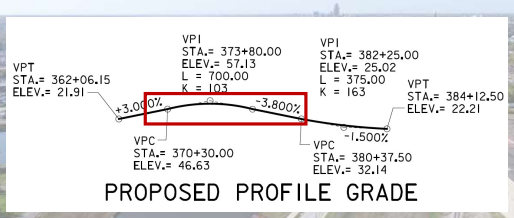

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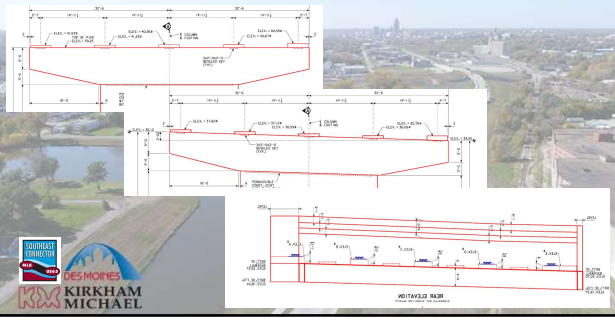

Fourmile Creek - Bridge

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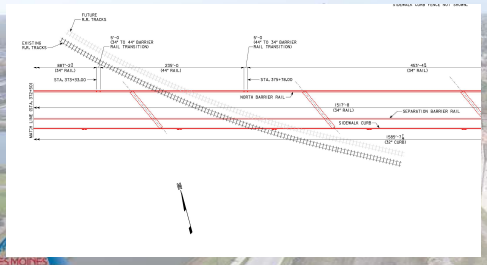

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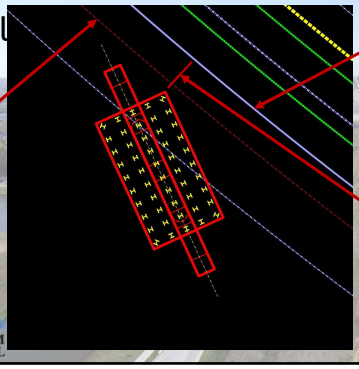

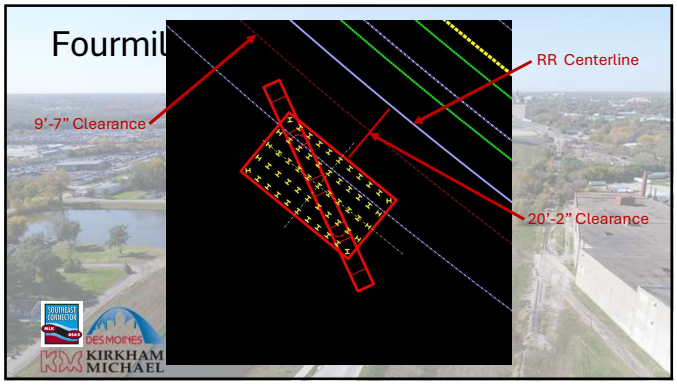
Fourmil
RR Centerline
9'-7" Clearance
20'-2" Clearance
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Permitting


Permitting
USACE 408
Model of No-Rise
USACE 404
IADNR 401
IADNR Floodplain Permit
Norfolk Southern RR
Burlington Northern SF RR
Bald Eagle Nest Taking
Wetland Mitigation Credits
Creek Relocation Permit & Credits
DES MOINES
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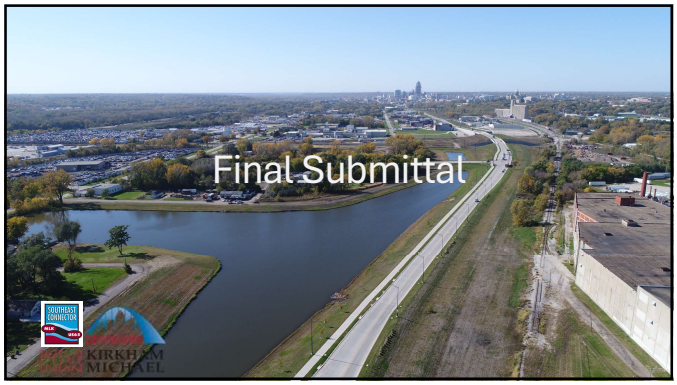

Project Quantities

• Clearing & Grubbing:	57 Acres
• Earthwork:	465,000 CY
• Modified Subbase:	37,000 CY
• Storm Sewer:	4.3 Miles
• **10" PCC Paving:**	**87,000 SY**
• Sidewalk/Trail:	3.6 Miles
• Lime Pile Relocation:	163,000 CY
• Trash Pile Removal:	22,000 CY
• Fencing:	5.03 Miles
• **Bridge Length:**	**1,515 LF**
• **Total Bid Items:**	**255**

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Special Provisions (16)


IOWADOT

Special Provisions:

- Levee Closeout Procedures
- Sluice Gates (Gatewell)
- Flood Contingency Plan
- Landus Railroad
- Levee Construction
- Manhole Epoxy Liner
- NPDES
- Roadway Electrical
- Roadway Lighting
- Roadway Electrical
- Stoplog Closure
- Traffic Signs
- Traffic Signalization
- Tree Protection
- Water Mains
- Norfolk Southern Railway

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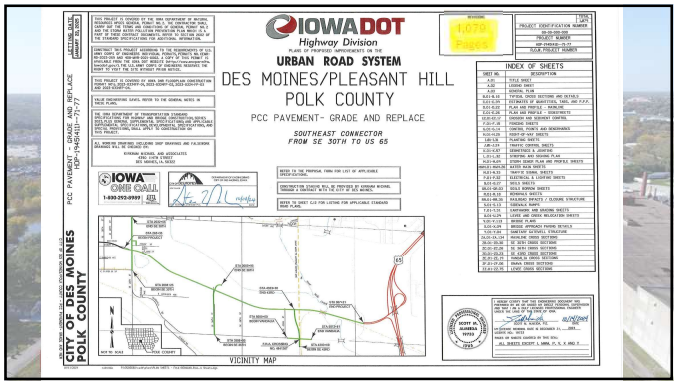
Developmental Specs (10)

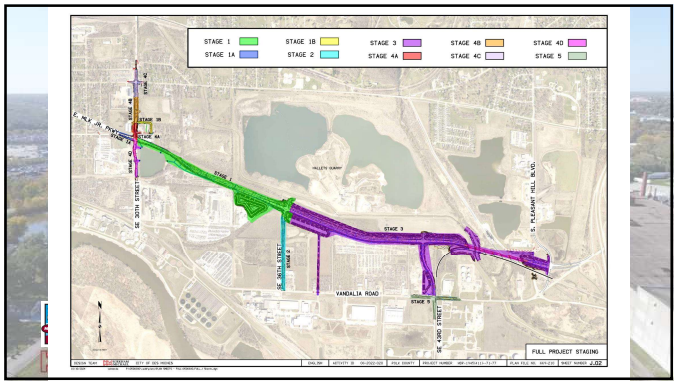
Special Provisions:

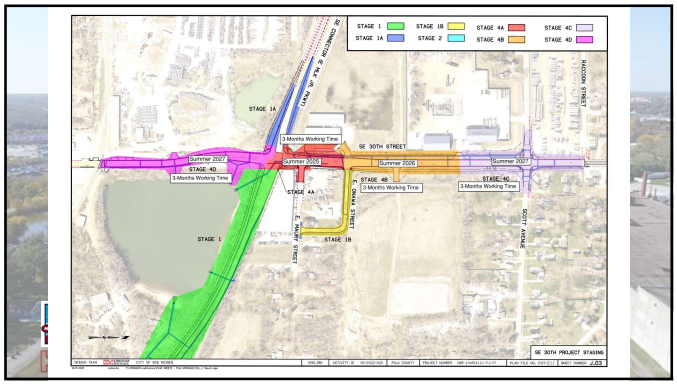
- Progress Schedule
- Modular Expansion Joint Assembly
- Girder Erection Plan
- Mass Concrete
- Electronic Ticketing
- BNSF Railway
- PCC Pavement Non-Destructive Thickness Determination
- High Performance Concrete for Structures
- Fiber Reinforcement for Structural Concrete
- DBE Trucking



Project Staging

- **10 Project Stages**
  - 6 Stages for SE 30th
- 8 Completion Provision Sites w/ penalties:
  - E. MLK & SE 36th Street – as detour
  - SE 36th Street – DART bus barn
  - Railroad Track – Stoplog Closure
  - SE 30th Street - Four sites





Funding

Applied for multiple Grants to fund $60M budget

- Submitted for several years to RAISE Grant
- $34.0M Infrastructure for Rebuilding America (INRFA) Grant
- $11.3M Federal Surface Transportation Program (STP)
- $13.7M City Funds

Project Award

- **Bid Date:** **January 22, 2025**
- Bidders: 6
- Engineers Estimate: $62,027,257.92
- **Low Bid:** **$58,999,314.12**
- High Bid: $64,121,834.83
- **Low Bidder:** **C.J. Moyna & Sons**
- Completion date: December 18, 2027

Progress to Date:

- Precon. Meeting: March 13, 2025
- Start Date: March 13, 2025
- Payments to Date: $6,320,452.54
- Subcontractors: 18
- Schedule Status: Behind due to rain

Clearing & Grubbing

Clearing & Grubbing

Grading

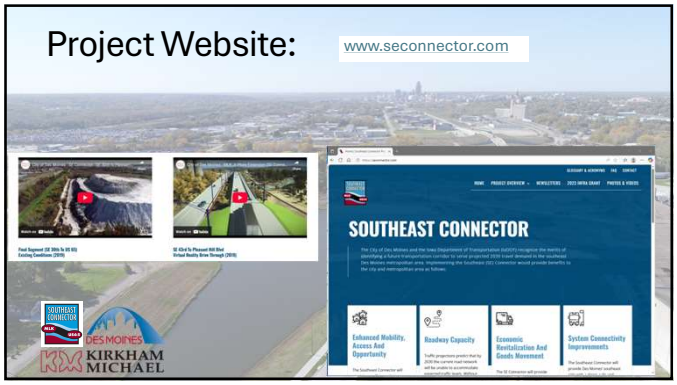

Grading


Storm


Levee Inspection Trench

Project Website:

www.seconnector.com



Questions?

Contact:
Scott Almeida, P.E., Vice President
Kirkham Michael & Associates
salmeida@Kirkham.com