

# US 63 Rehabilitation Project

## Public Information Meeting

June 26, 2012

# DOT Staff

Mark Callahan

Dave Little

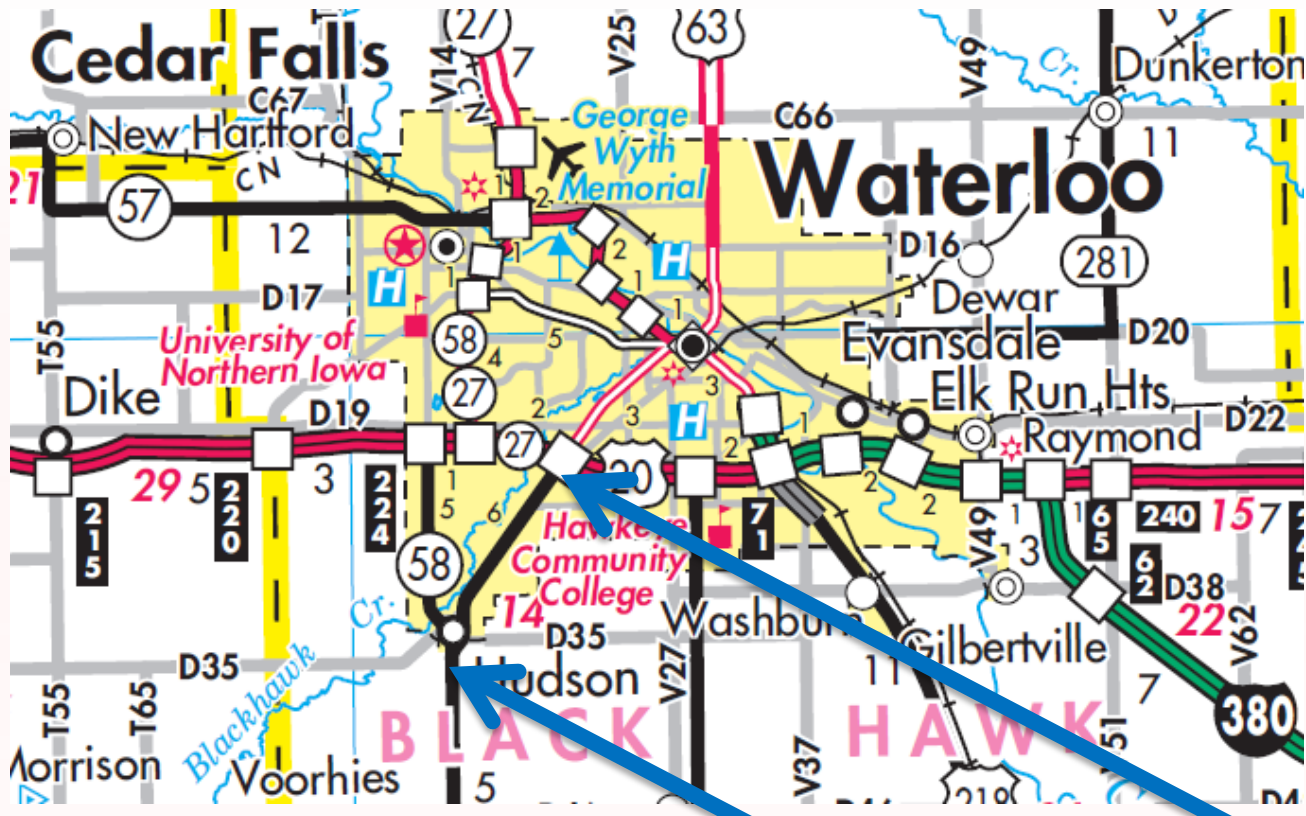
Dave Roeber

Ron Loecher

Pete Hjelmstad

Lu Funnell

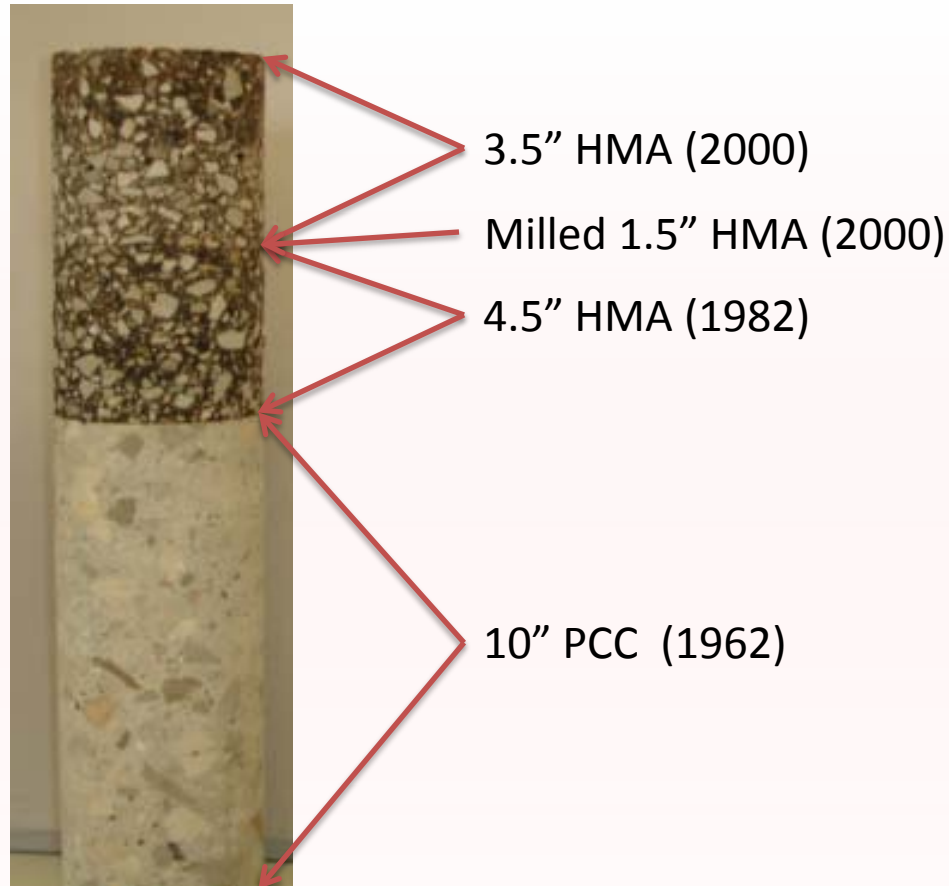
# Project Location



Start Project

End Project

# Existing Pavement Conditions



# PCC Deterioration

University Avenue  
Waterloo

# Joint Deterioration





# Joint Deterioration



# Pavement Deterioration at Joint





# Selected Rehabilitation Method

## Rubblization with Resurfacing

- Remove existing HMA
- Rubblize Underlying PCC
- Resurface with 8 inches of HMA

# Rubblization

A process that breaks concrete  
into small – 4 inch – pieces

- Rubblized pavement functions as a drainable base that can support a new pavement structure
- Rubblization Methods
  - Resonant Breaker
  - Drop Hammer

# Rubblization

## Resonant Breaker



# Rubblization

## Drop Hammers





# Rubblized Pavement





# Project Time Line

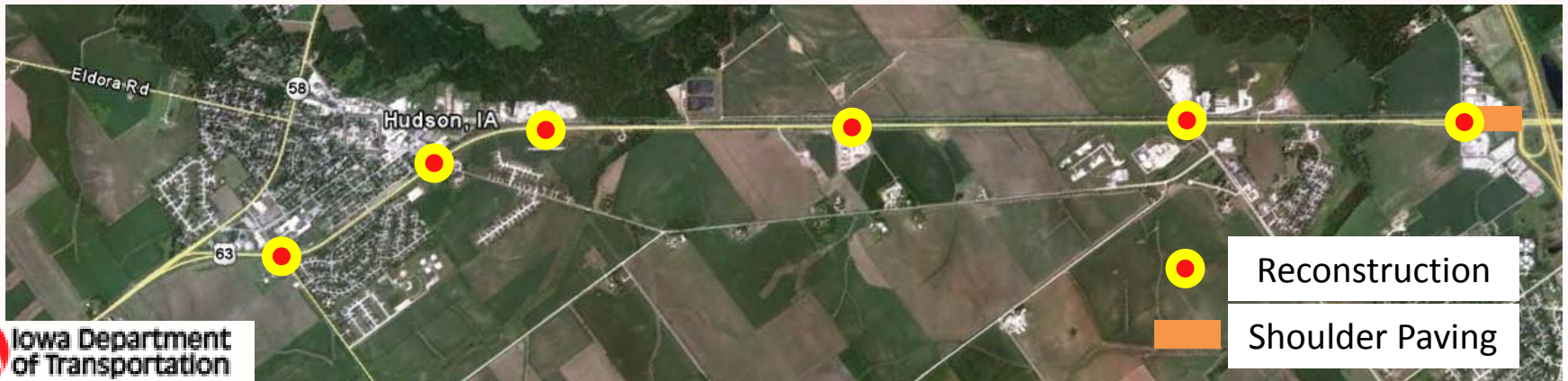
- August 1, 2012
  - Complete Project Design
- October 2012
  - Select Contractor
- Summer 2013
  - Perform Construction

# US 63 Staging

- Stage 1
  - Reconstruct major intersections
- Stage 2
  - Patch, Mill and Resurface IA 58 intersection
- Stage 3
  - Mill, Rubblize, Resurface US 63 from Schrock Road to Waterloo Implement
- Stage 4
  - Mill, Rubblize, Resurface US 63 from Waterloo Implement to US 20
- Stage 5
  - Surface HMA and pavement markings

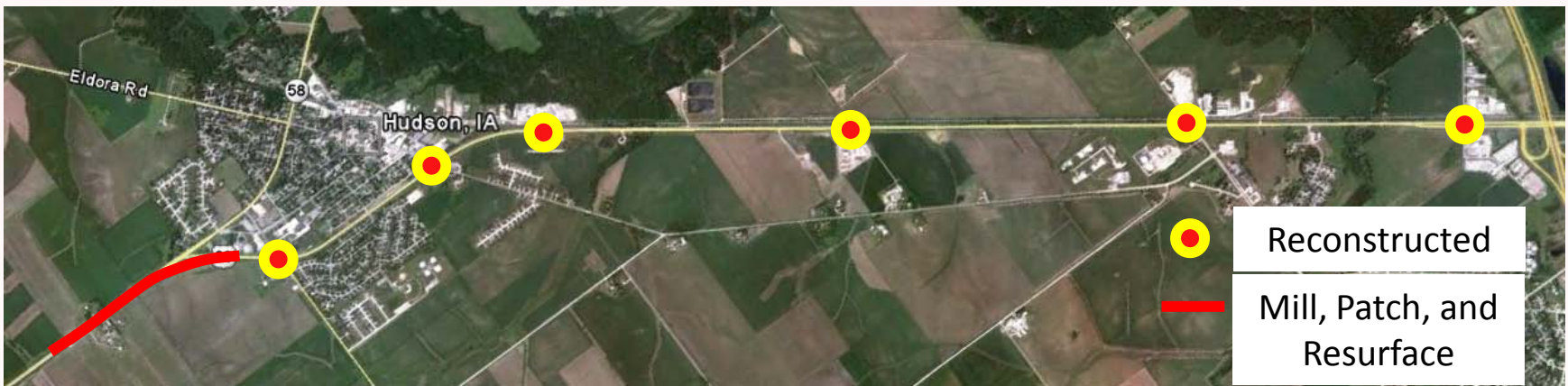
# Stage 1

- To be performed while maintaining US 63 traffic
  - Reconstruct
    - Schrock Road intersection
    - Eldora Road intersection
    - Eddystone Drive intersection
    - Waterloo Implement entrance
    - Shaulis Road intersection
    - Ranchero Road intersection
  - Pave outside shoulders along 4 lane section from Ranchero Road to E.O.P



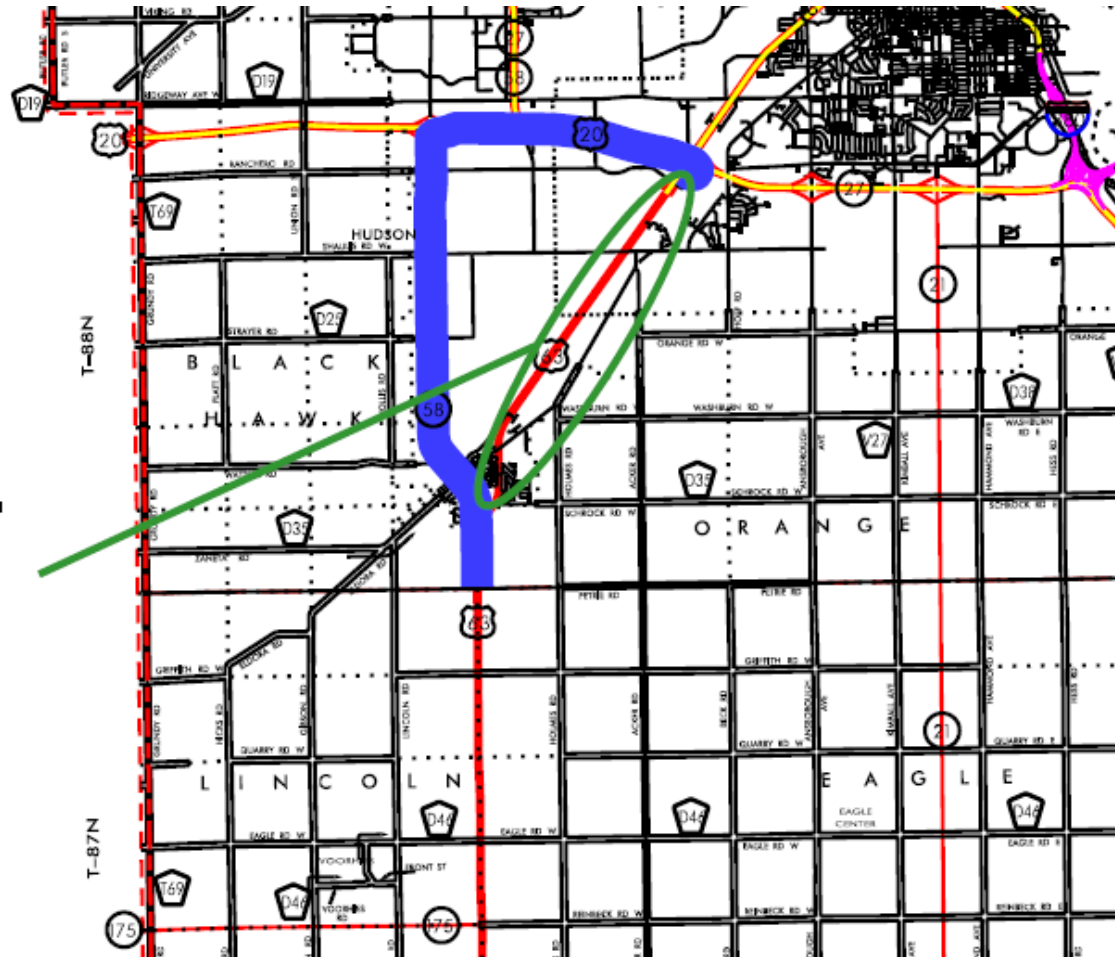
# Stage 2

- To be performed while maintaining US 63 traffic
  - Mill, Patch, and Resurface through intermediate lift from B.O.P. to Schrock Road



# Stages 3-4 – Implement Detour

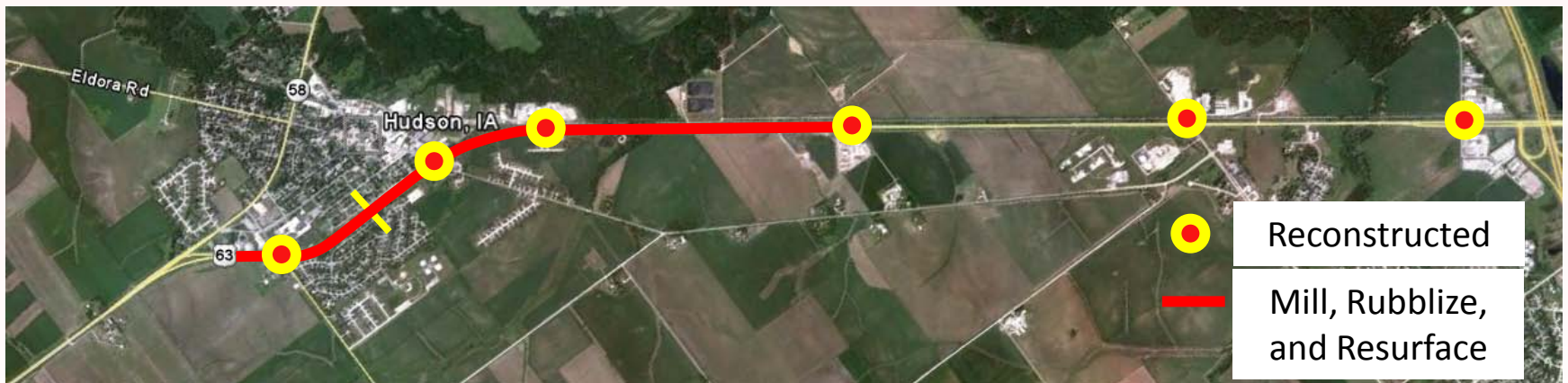
**LOCATION OF  
WORK TO BE  
PERFORMED**





# Stage 3

- Detour U.S. 63 using IA 58 and U.S. 20
- Mill, Rubblize, and Resurface between intersections
  - IA 58 intersection to Schrock Road
  - Schrock Road to Eldora Road (Maintain temporary crossing at 3<sup>rd</sup> St.)
  - Eldora Road to Eddystone Drive
  - Eddystone Drive to Waterloo Implement



# Stage 4

- Mill, Rubblize and Resurface through intermediate HMA
  - Waterloo Implement to Shaulis Road
  - Shaulis Road to Ranchero Road
  - Ranchero Road to E.O.P. (One lane traffic maintained each direction from Ranchero to E.O.P.)
- Remove Detour



# Stage 5

- To be performed under US 63 traffic
  - Place surface HMA and shoulder from B.O.P. to E.O.P.
  - Place permanent pavement markings from B.O.P. to E.O.P.
- End Construction

# Construction Under Traffic

- Project could be engineered for construction under traffic
- Roughly \$500,000 added cost to pave shoulders to carry traffic
- Longer construction duration
- Pilot car ushering traffic through work zone
  - Up to 8 minute delay
- Many local citizens will self detour
- Final product may be affected

# Thank You



# Questions?