

Iowa City Gateway

Council Work Session #4





Council Work Session 4

Tonight's Objectives

- Review activities since the January work session
- Discuss the design elements of the project
- Develop the design elements as they will be presented on the Project Concept Statement for submittal to Iowa DOT



Council Work Session 4

Agenda:

- Recent public involvement activities
- Design concept and elements
- Design concept construction impacts and FAQ



Public Involvement

Recent stakeholder engagement with:

- Bella Vista
- Individual property owners
- Civic organizations
- Hancher/Mayflower teams
- Technical Advisory Committee



Public Involvement

Pre-Design Open House:

- Held February 25th at Public Library
- More than 100 attendees
- Displayed the Design Concept with Council parameters
- Formal presentation and informal discussions



Public Involvement

Pre-Design Open House – Key Takeaways:

- Aesthetics – maintain views of the river, park and trees
- Sidewalks along entire east side of Dubuque
- Pedestrian crossings are important to provide
- Speed limit – evenly split between current and all 25 mph
- Dubuque and Park turn lanes important
- Keep construction as short as possible



Transportation Modes and Enhancements

- Pedestrian
 - Sidewalk on east side to facilitate movement between locations on east side and to provide routes to signalized crossings
 - All sidewalks will be brought up to ADA standards
 - Grade separated crossing of Park Road
 - Protected sidewalks on Park Road Bridge
- Bicycle
 - Bike trail built to full ASHTO standards along west side of Dubuque Street
 - Grade separated crossing of Park Road for River Corridor Trail
- Transit – Improved geometry for bus movements
- Vehicular – Reduce delay at the Dubuque Street Park Road intersection
- All Modes
 - Improved flood protection
 - Everything brought up to new condition



Design Concept Discussion

- Design parameters and elements
- Cross section primer
- Design concept discussion
 - Features
 - Renderings
 - Cross sections



Design Parameters

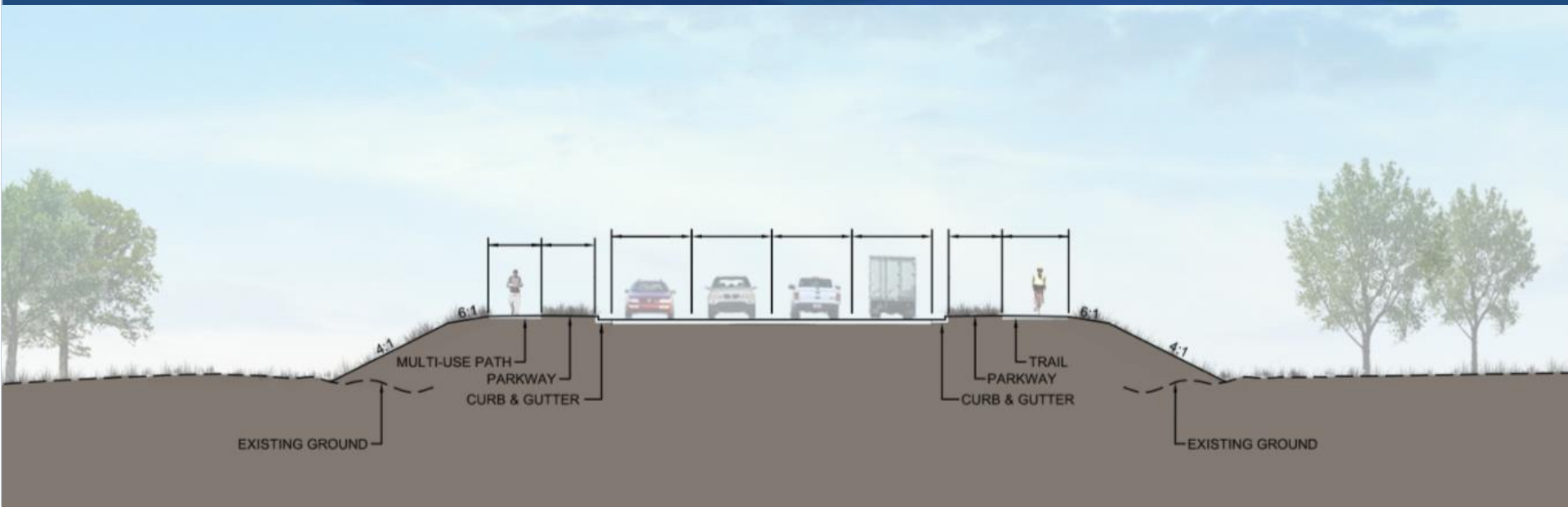
- Partial Through Arch bridge
- Bottom of structure set at 200+1'
- Dubuque Street at 100+1'





Urban Section

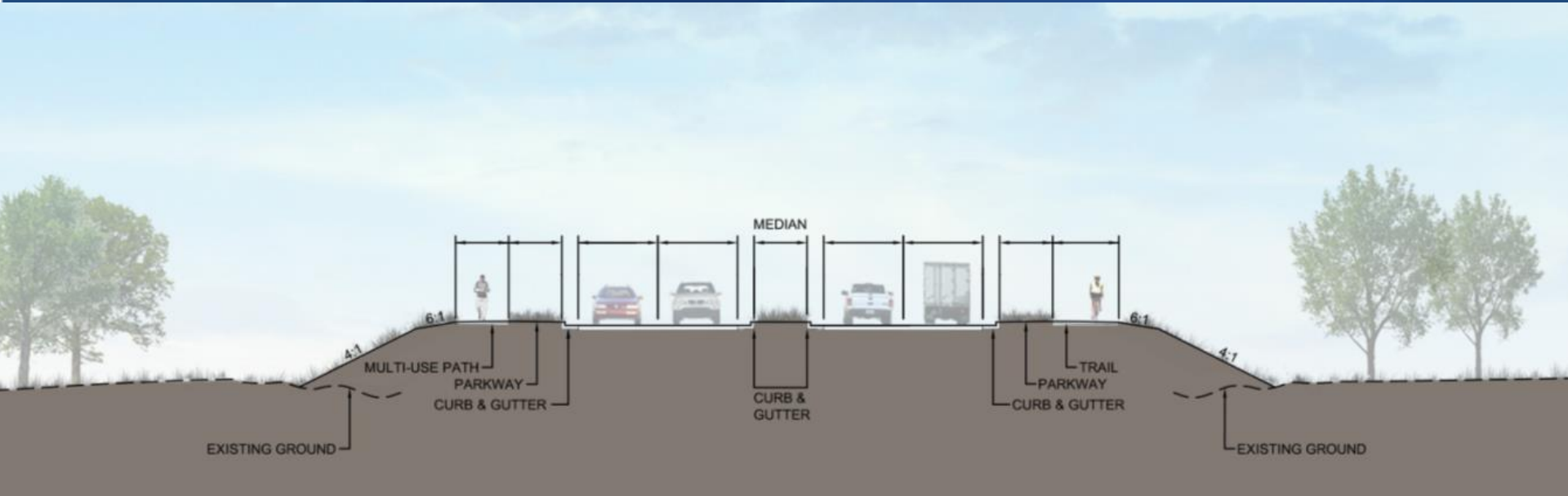
Curb and Gutter with no Median





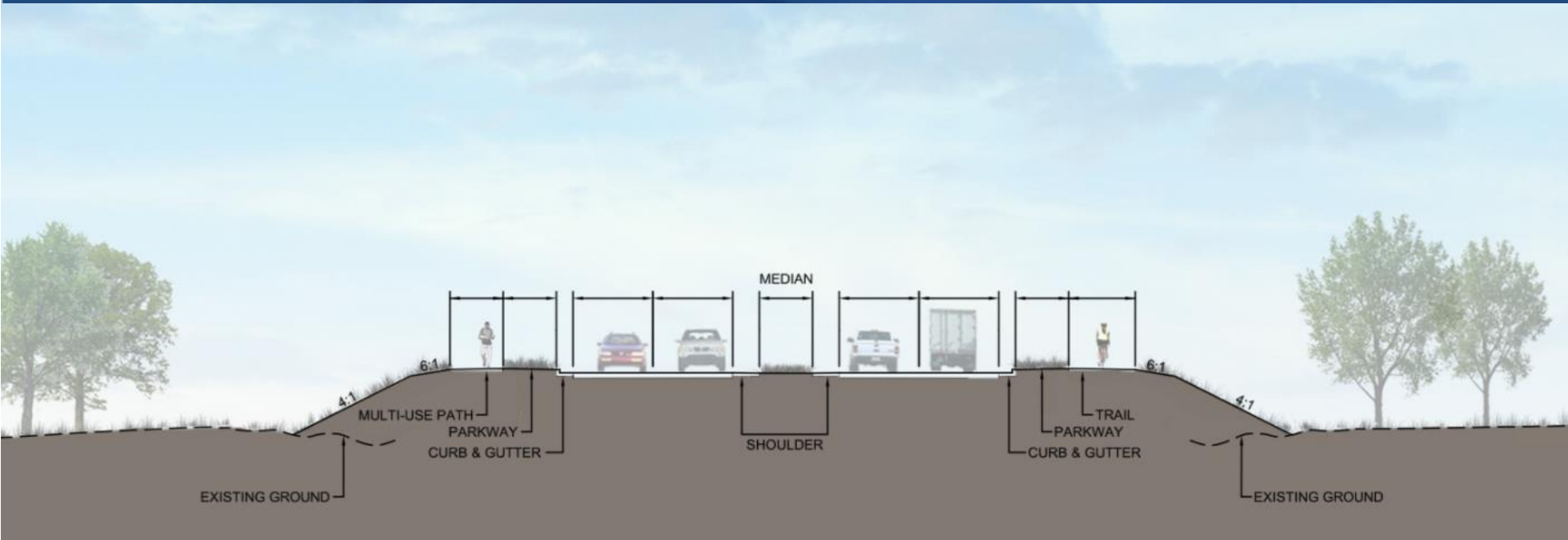
Urban Section

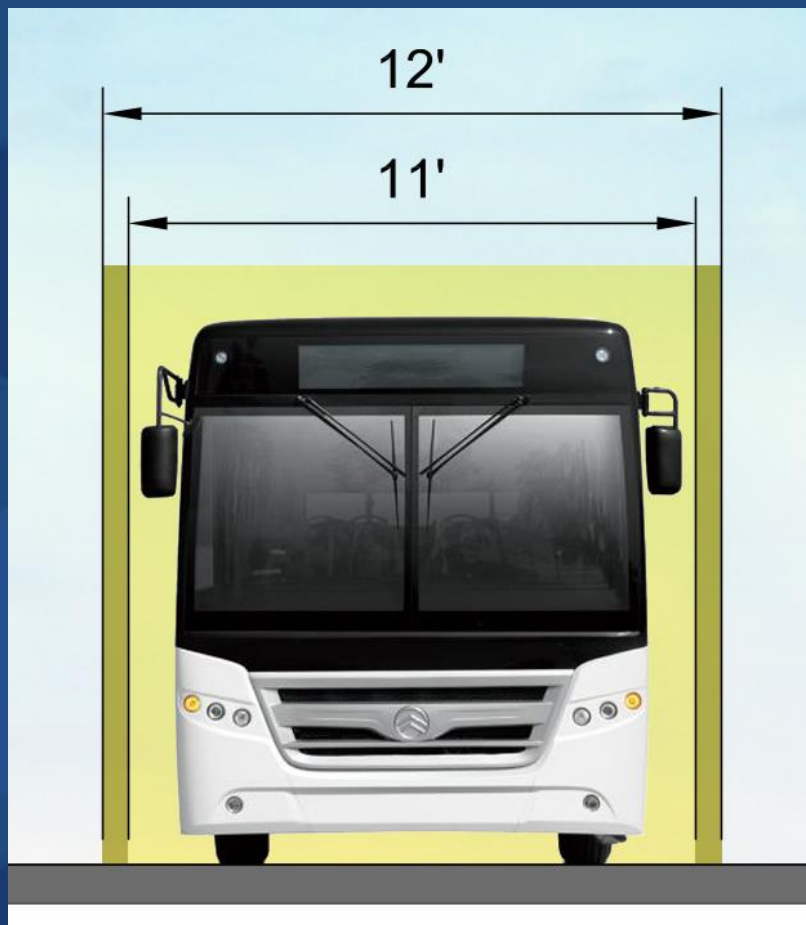
Curb and Gutter with Median





Modified Rural Section With Inside Shoulder and Median





12 foot versus 11 foot lanes



Functions of Curb and Gutter

Stormwater conveyance



Snow storage intrusion





Dubuque at Foster



Dubuque North of Mayflower



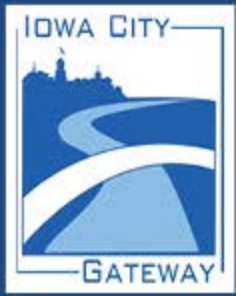
Dubuque North of Kimball



Boathouse Looking South



Lower City Park Looking East



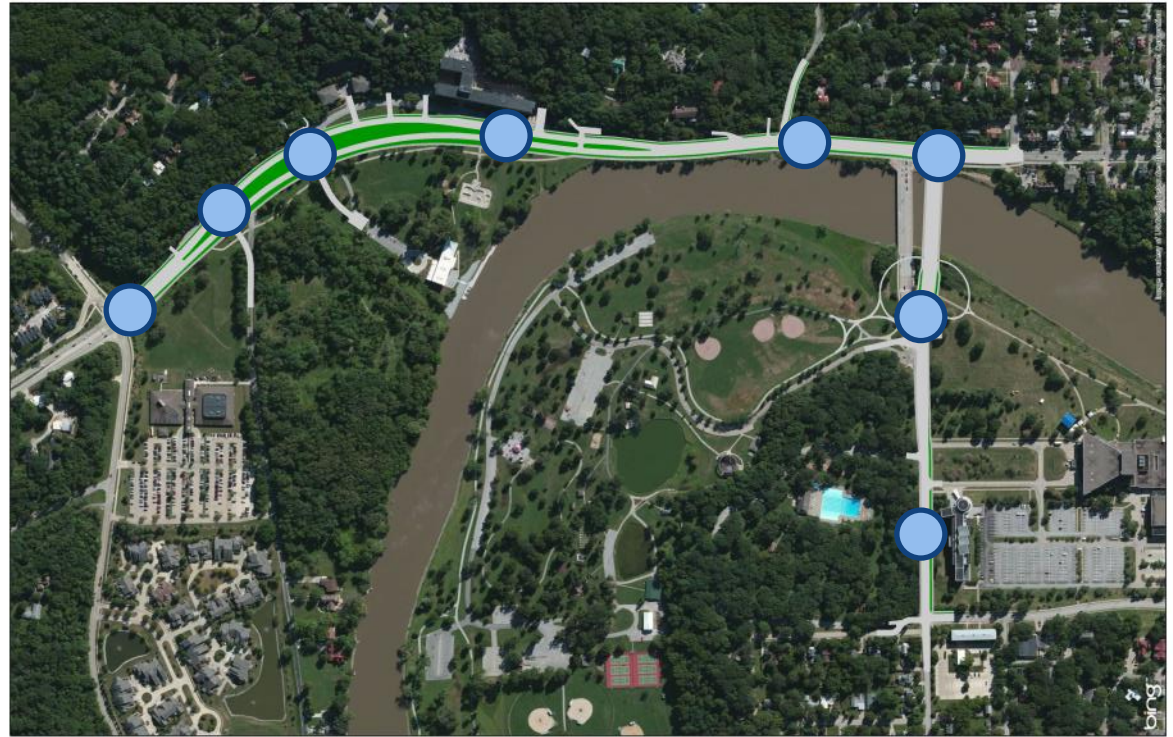
Park Road Looking East



Design Concept Focus Areas

Focus Areas:

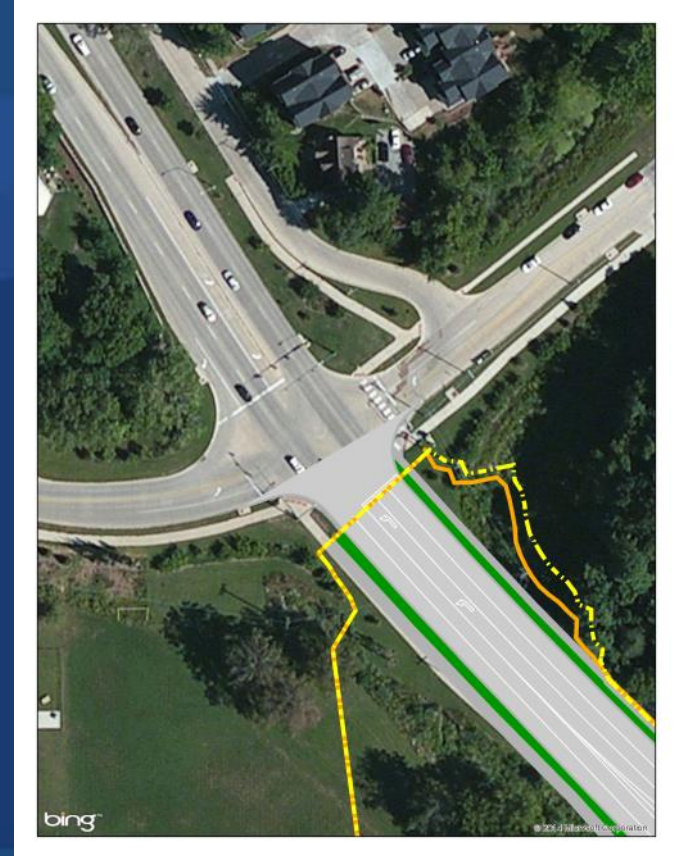
- Dubuque @ Foster
- Dubuque @ Taft
- Dubuque @ Ridge
- Dubuque @ Mayflower
- Dubuque @ Kimball
- Dubuque @ Park
- Park Road Bridge
- Park Road

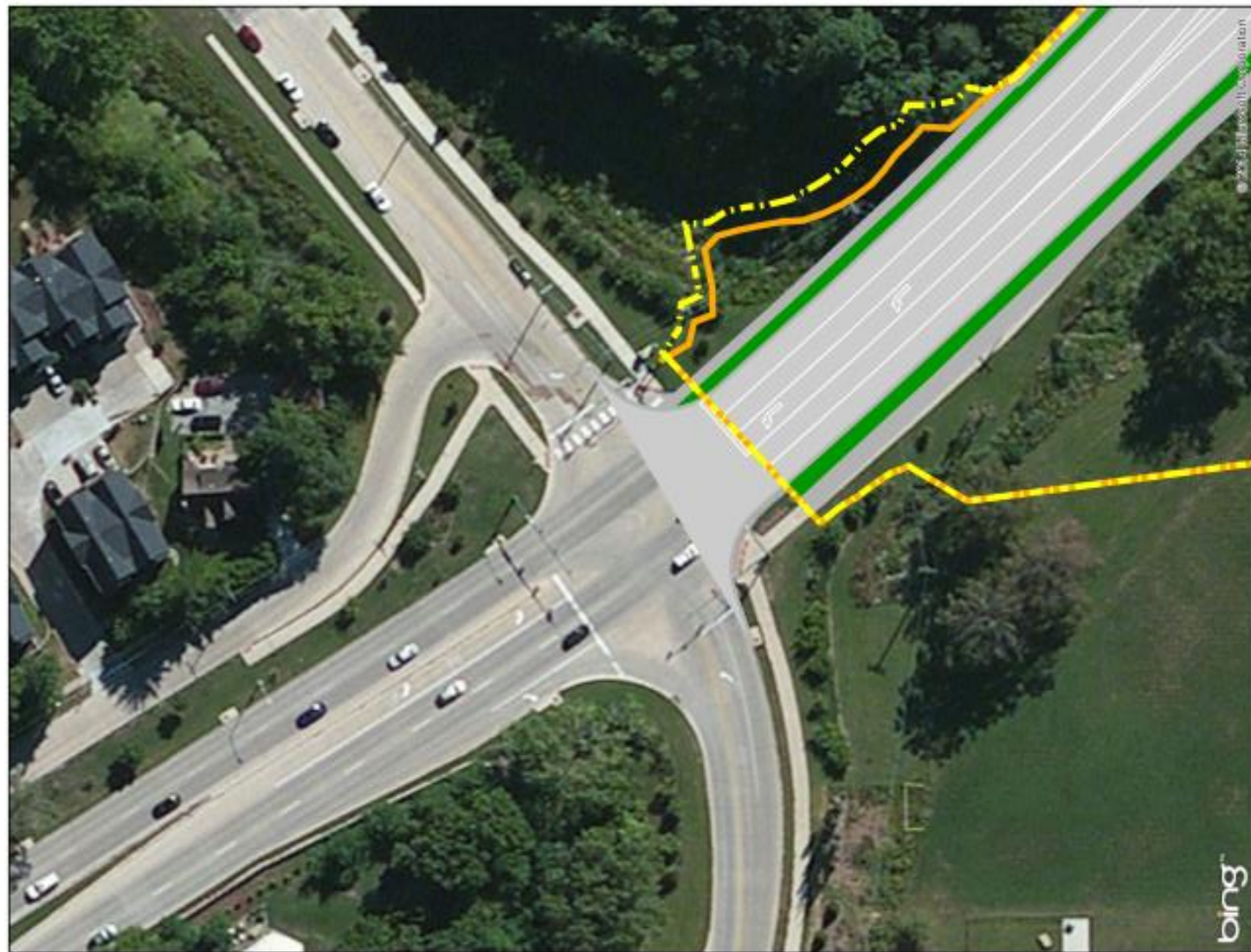




Dubuque at Foster Road

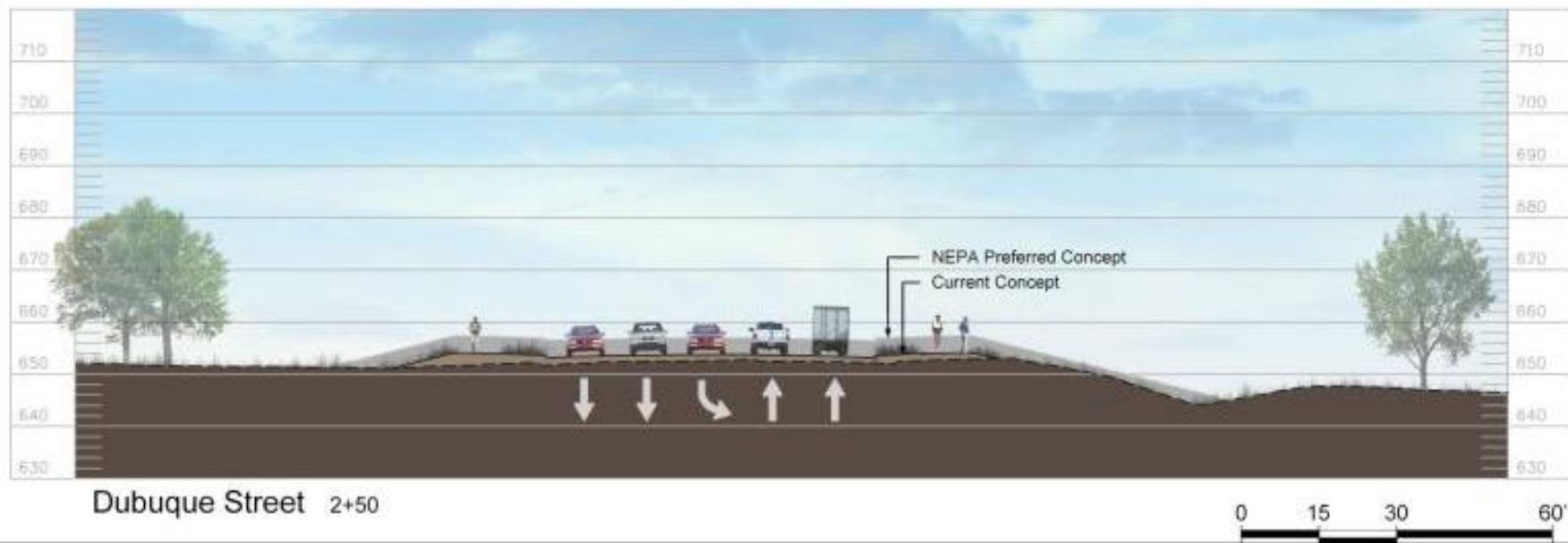
- Urban section, no median
- 35 mph speed limit
- Path/sidewalk both sides
- Reduced footprint







Dubuque at Foster Road





Recommendation

Dubuque near Foster

- Maintain multi-use path/sidewalk on both sides 10-foot/6-foot
- Maintain current 35 mph speed limit
- 12-foot lanes / 1.5-foot curb and gutter
- Transitions from using no median to having a median

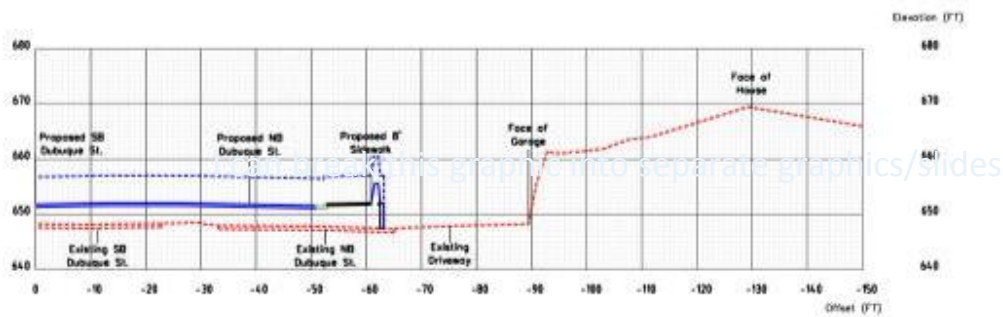
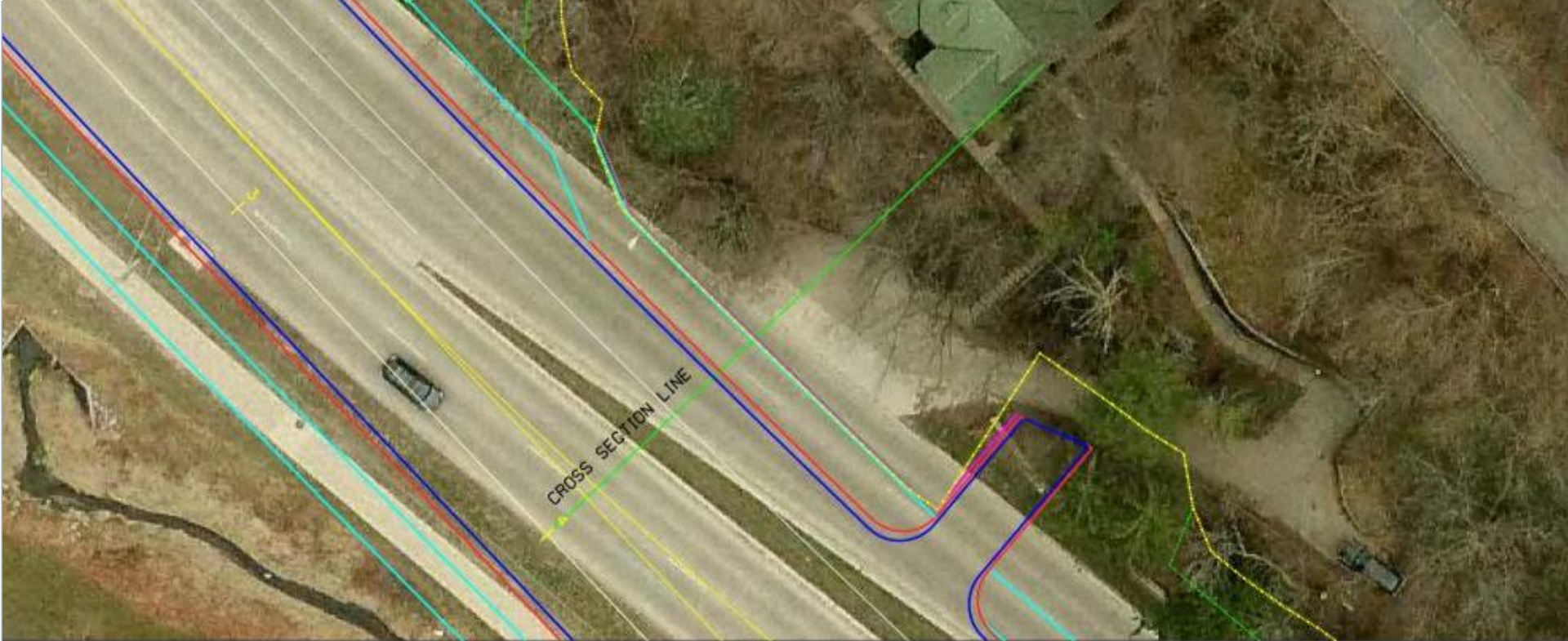


Dubuque near Taft Speedway

- Median transition
- 35 mph speed limit
- Realigned Taft intersection
- Path/sidewalk both sides of Dubuque
- Reduced footprint
- Reduced wall heights
- Changes to park impacts







X-SECTION EXHIBIT

MARCH 2014

XS-1

DR. HH & SYLVILLA JACOBSEN HOUSE
52-05067 - 1818 N DUBUQUE STREET
CROSS SECTION & PLAN VIEW



Recommendation

Dubuque near Taft Speedway

- Maintain multi-use path and sidewalk on both sides 10'/6'
- Maintain current 35 mph speed limit
- 12-foot lanes / 1.5-foot curb and gutter
- Keep urban section transition with and without median



Dubuque near Ridge Road

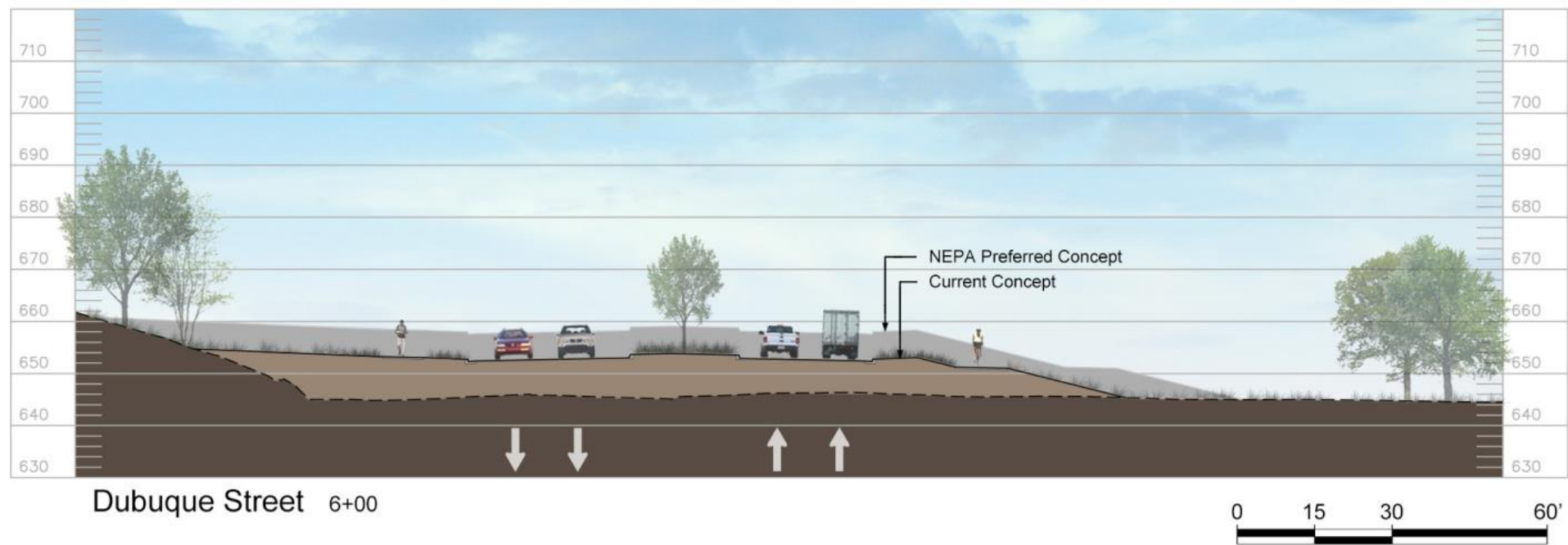
- Urban with median used
- 35 mph speed limit
- Relocated Ridge intersection
- Reduction in footprint
- Changes to park impacts
- Still allows Cambus turnaround







Dubuque North of Ridge





Recommendation

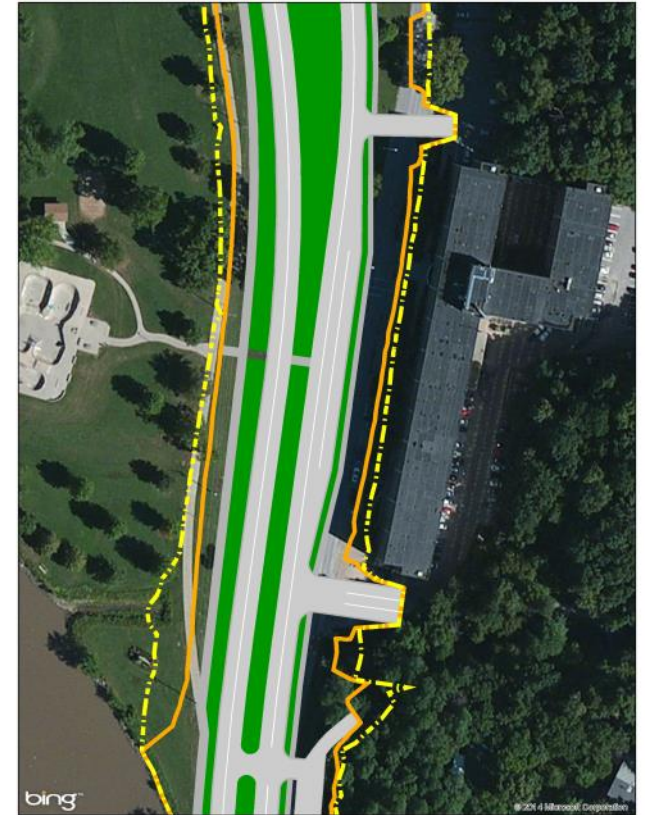
Dubuque near Ridge Road

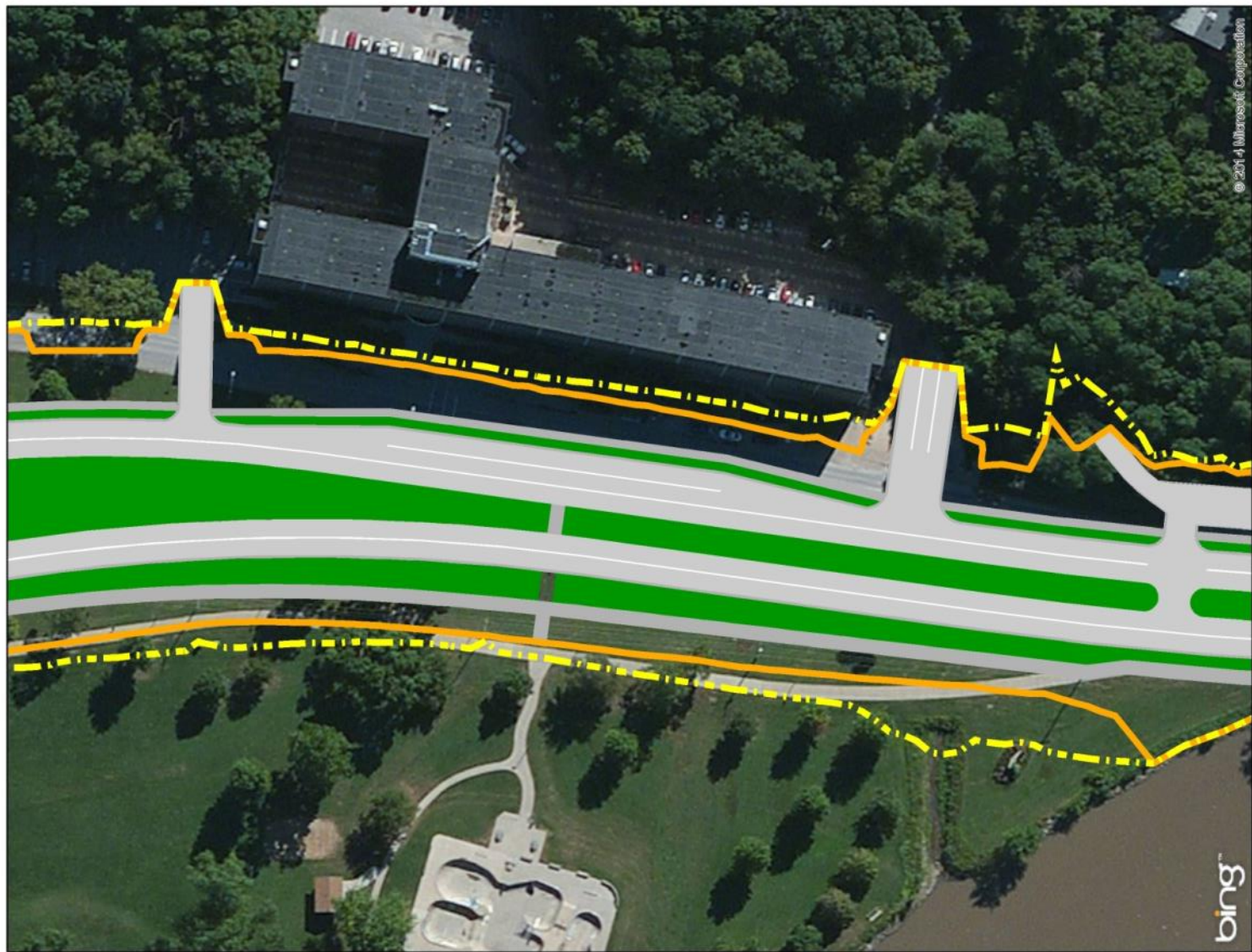
- Keep Cambus turnaround
- Maintain multi-use path/sidewalk on both sides 10-foot/6-foot
- Maintain current 35 mph speed limit
- 12-foot lanes and 1.5-foot curb and gutter



Dubuque near Mayflower

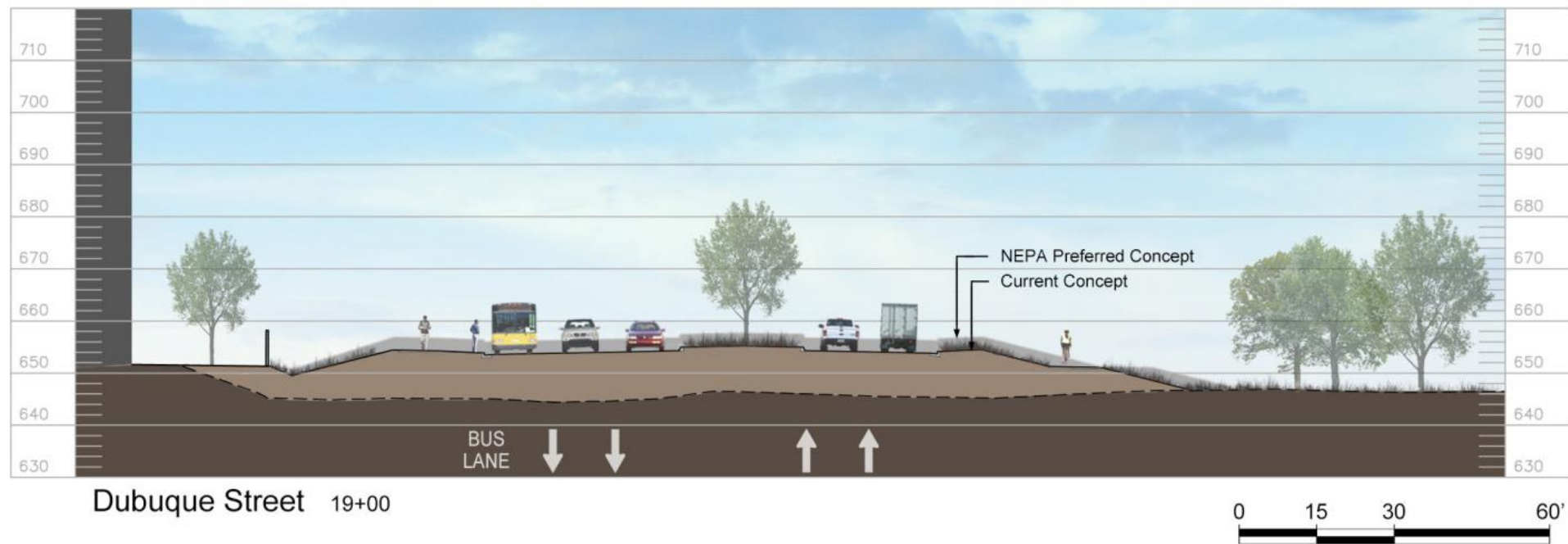
- Transition zone
 - Urban sections include varied median
 - Speed limit 35 mph
- Multi-use path and sidewalks





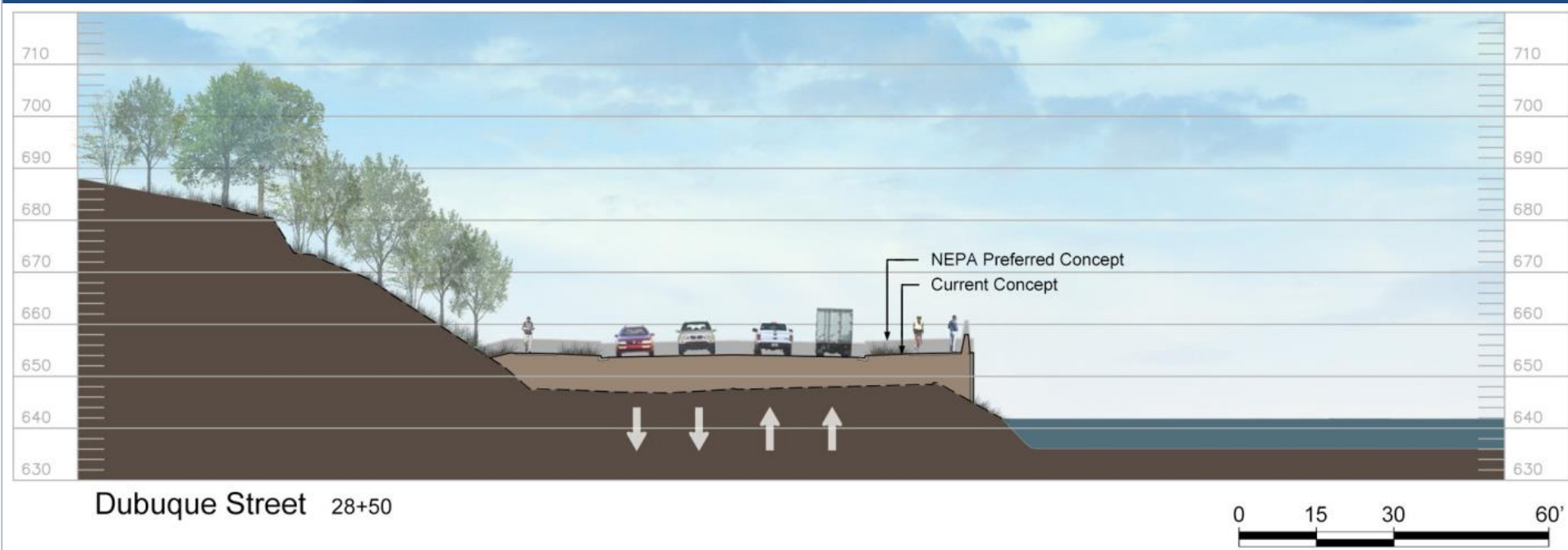


Dubuque at Mayflower





Dubuque South of Mayflower





Sidewalk Continuity





Sidewalk/Trail Continuity





Recommendations

Dubuque Mayflower to north of Kimball

- Maintain current Cambus operations
- Maintain multi-use paths on both sides
 - Southbound side use 10 foot path throughout corridor
 - Northbound side use 8-foot paths transition to 6-foot north of Mayflower
- Un-signalized crosswalk at Mayflower
- Maintain current 35 mph speed limit
- 51-foot curb to curb without median / median varies



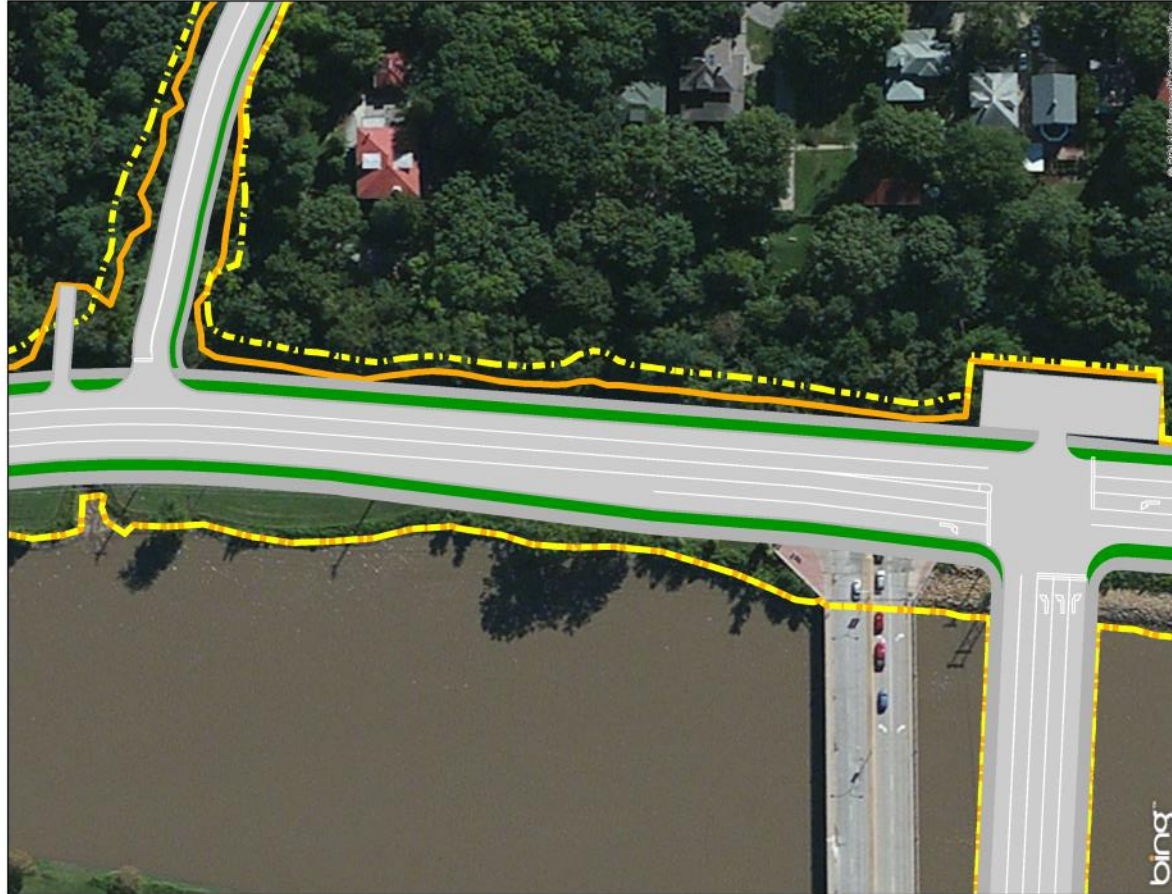
Kimball to Park

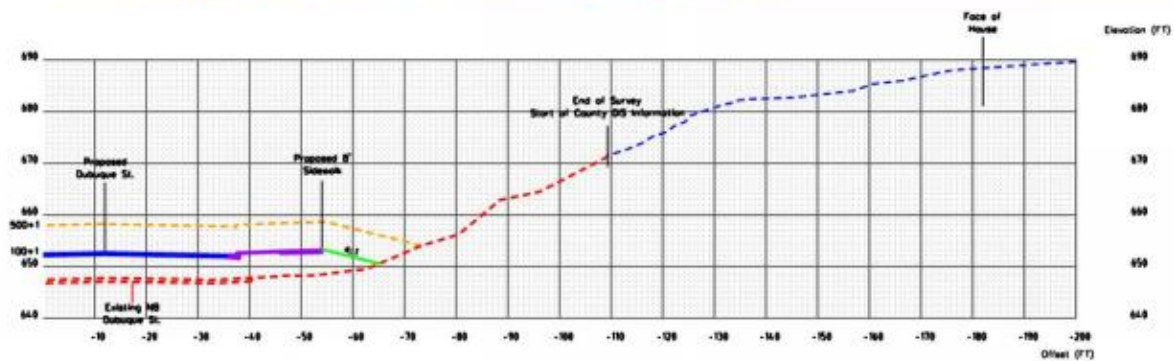
- Lower elevation based on design parameters
- Retaining wall along southbound
- Urban section
- Speed limit 25 south of Kimball
- Multi-use path and sidewalks
- Reduced footprint along northbound lanes





Kimball to Park





Preliminary - Subject to Change

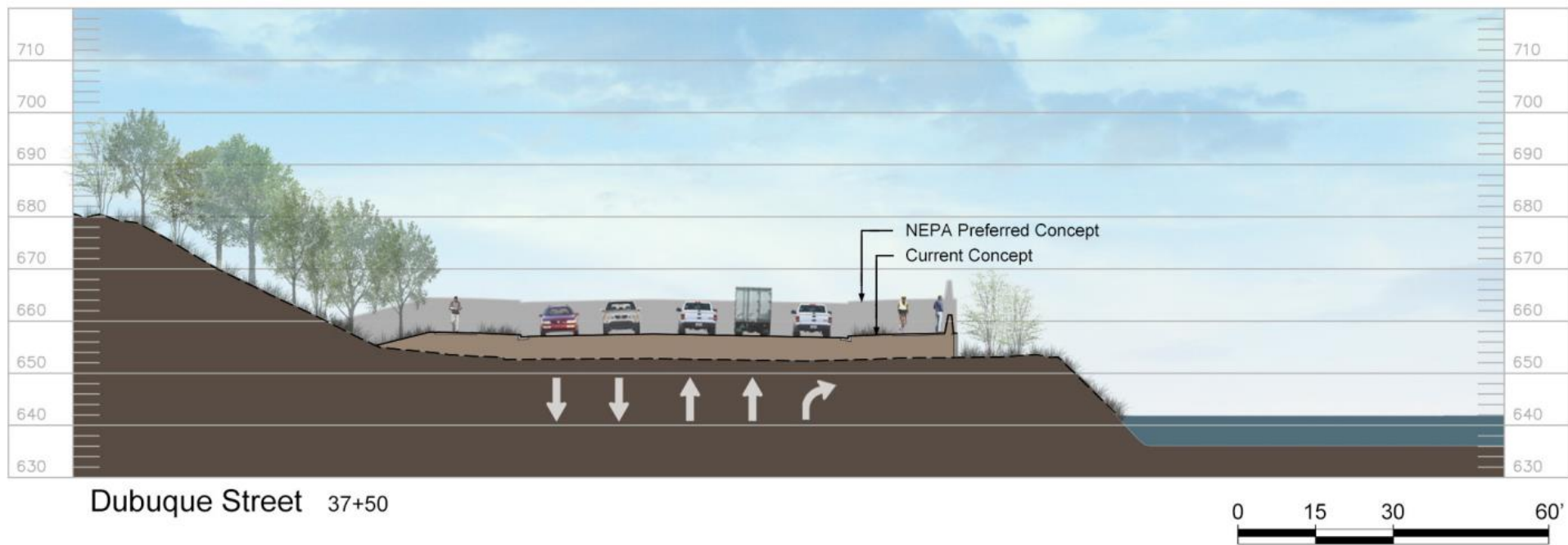
X-SECTION EXHIBIT

XS-3

12 BELLA VISTA
BROWN STREET HISTORIC DISTRICT
CROSS SECTION & PLAN VIEW



North of Park Road





Recommendation

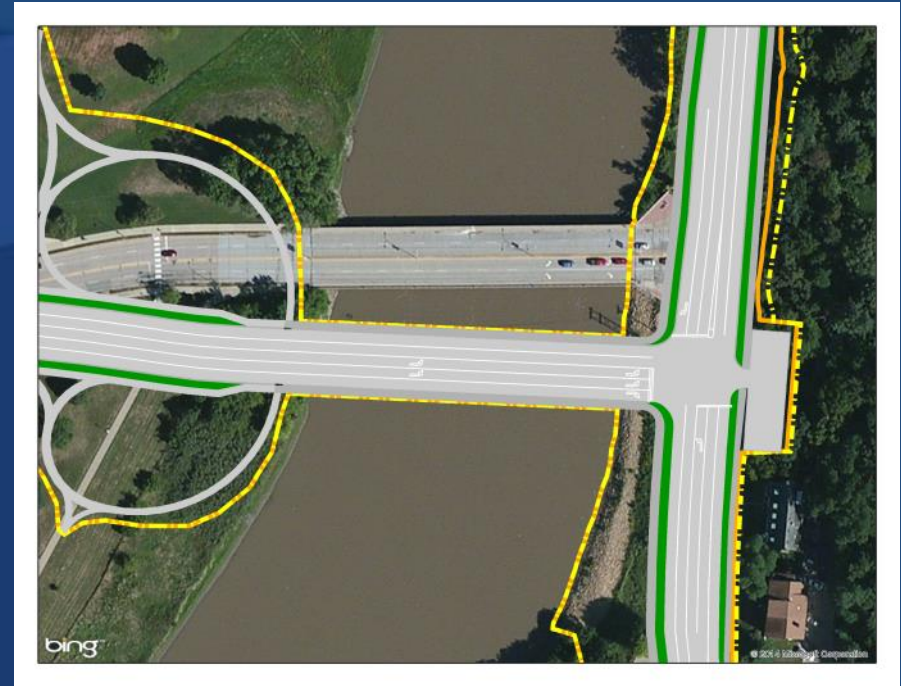
Dubuque from Kimball to Park

- 12-foot lanes
- 1.5-foot curb and gutter both sides
- 51-foot from back of curb to back of curb
- Use 8-foot parkway both sides
- Southbound side use 10 foot multi-use path
- Northbound side use 8-foot sidewalks



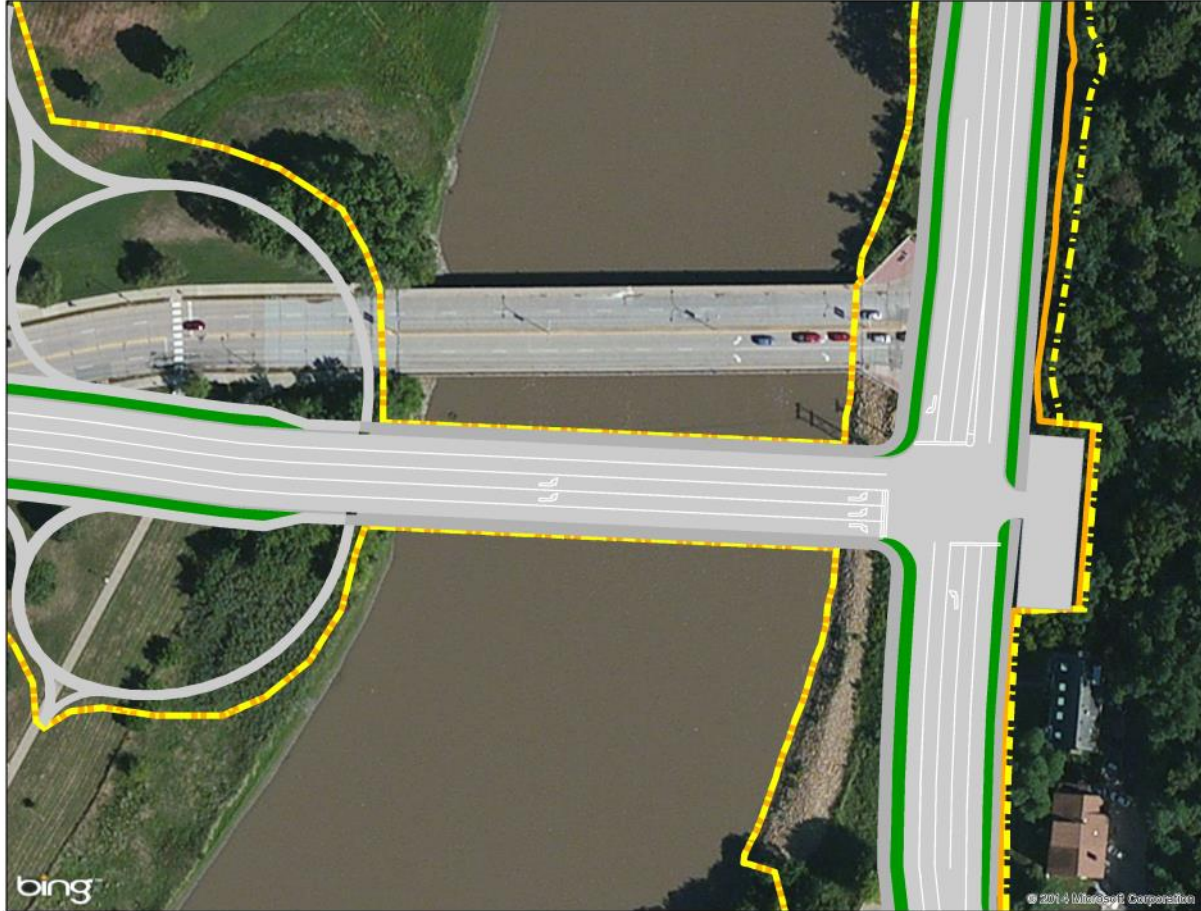
Park/Dubuque Intersection

- Urban section applied
- Includes Dubuque right turn lane
- Park Road Bridge 5 lanes
- Speed limit 25 mph south of Kimball
- Lower elevation – now 100+1'
- Retaining wall along southbound
- Multi-use path and sidewalks
- Smaller footprint along northbound lanes



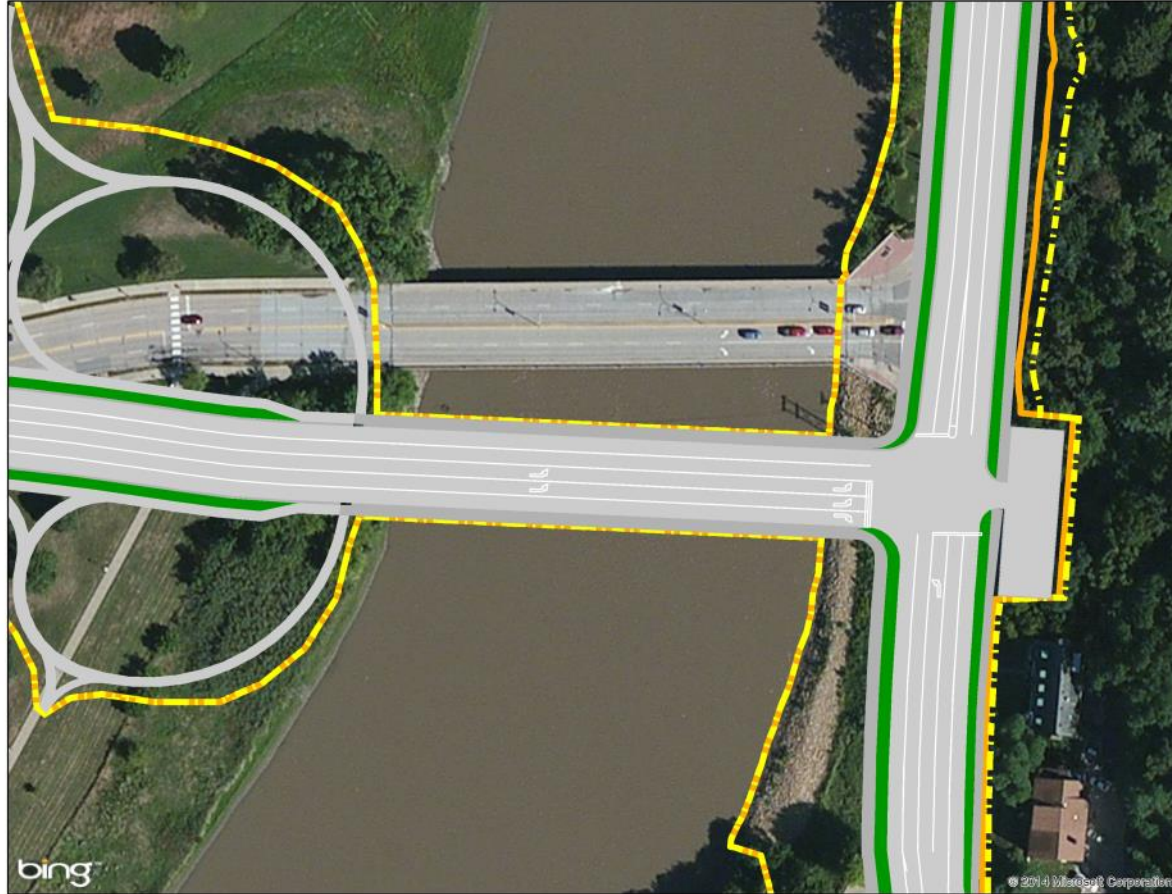


Park/Dubuque Intersection



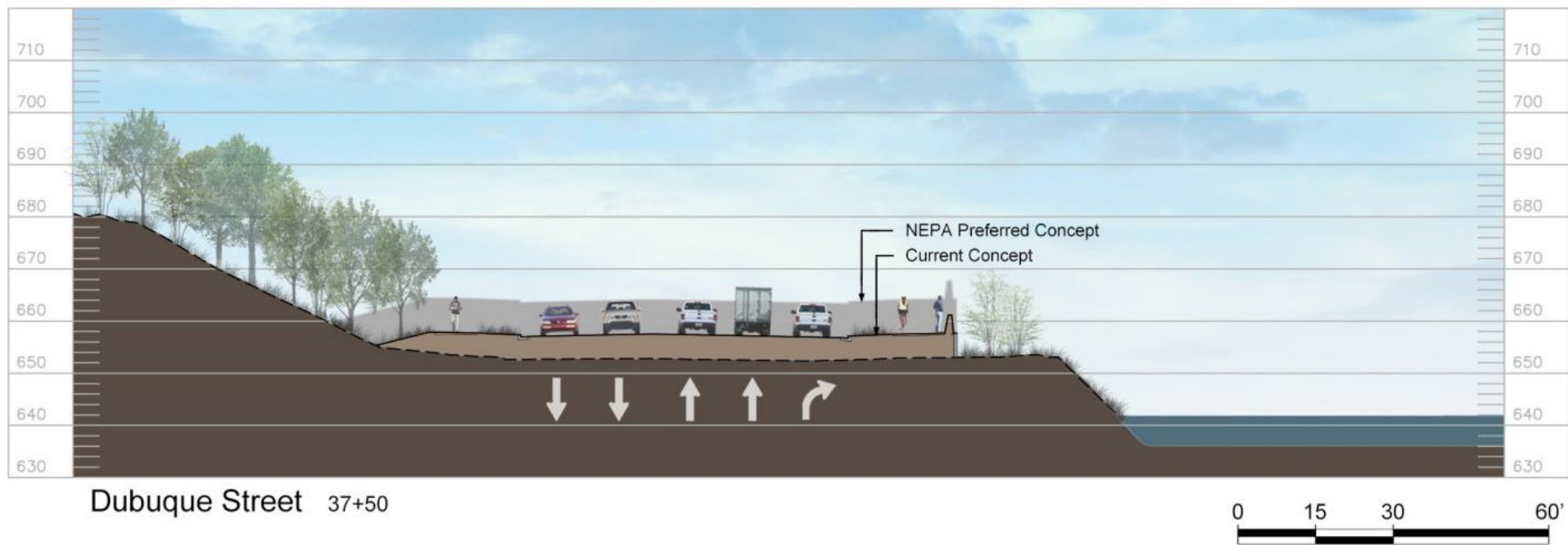


Dubuque Right Turn Lane



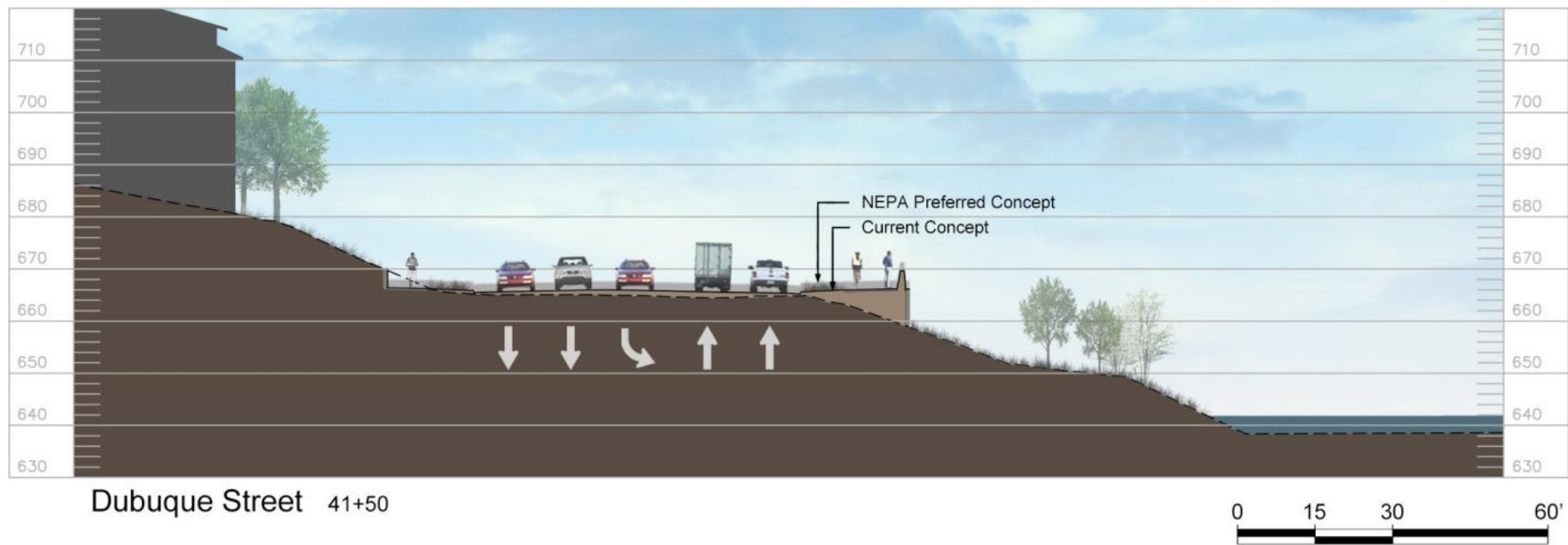


North of Park Road





South of Park Road





Traffic Operations

Dubuque/Park Intersection

Is the Southbound right turn lane needed?

- Southbound causes delays in the morning peak hour
- LOS F today and in 2040 for southbound and intersection
- Without right turn lane
 - Southbound LOS F today and in 2040 – Four minute delays
 - Intersection LOS F today and in 2040 – Two and a half minute delays
- With 275-foot right turn lane
 - Southbound LOS C today and in 2040 – Delays less than 25 seconds
 - Intersection LOS B today and in 2040 – Delays less than 20 seconds



Traffic Operations

Dubuque/Park Intersection

How many lanes does eastbound Park Road need?

- Two lanes eastbound today
- Eastbound movement causes delay
- Current intersection LOS E today / LOS F in 2040
- Two eastbound lane scenario:
 - Intersection improves – LOS C today / LOS E in 2040
 - Eastbound movement poor – LOS E today / LOS F in 2040
- Three eastbound lane scenario
 - Intersection improves – LOS B today / LOS C in 2040
 - Eastbound improves – LOS C today / LOS D in 2040



Traffic Operations

Dubuque/Park Intersection

How many westbound lanes should Park Road have?

- Two lanes there today
- Considered scenario with one westbound lane and two
- No capacity issues for westbound lanes
- Cambus stop on bridge
- Driver safety consideration
- Two lanes provides capacity for events and incident management



Recommendation

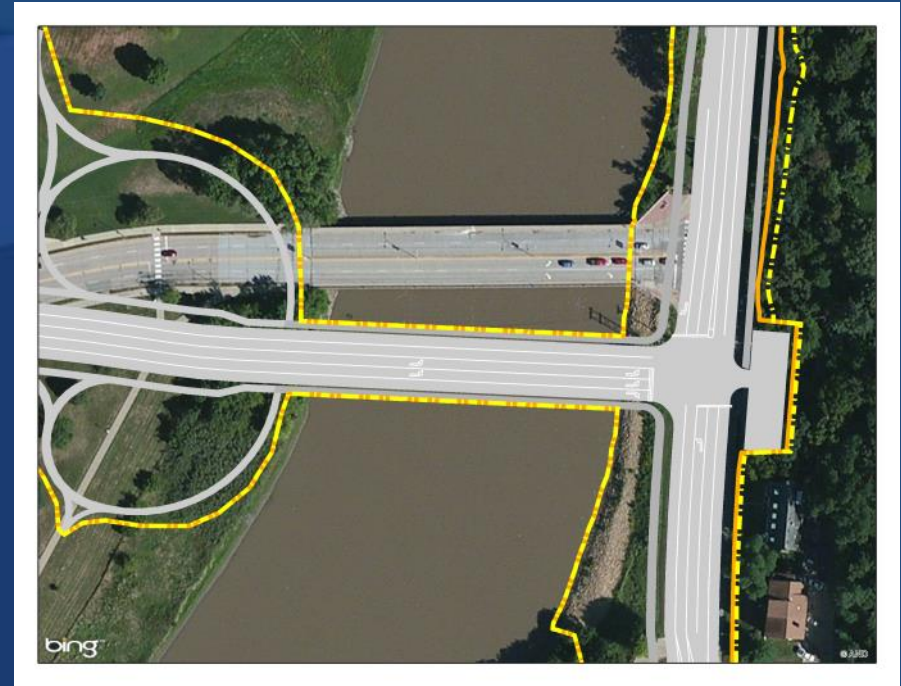
Dubuque Street at Park Road:

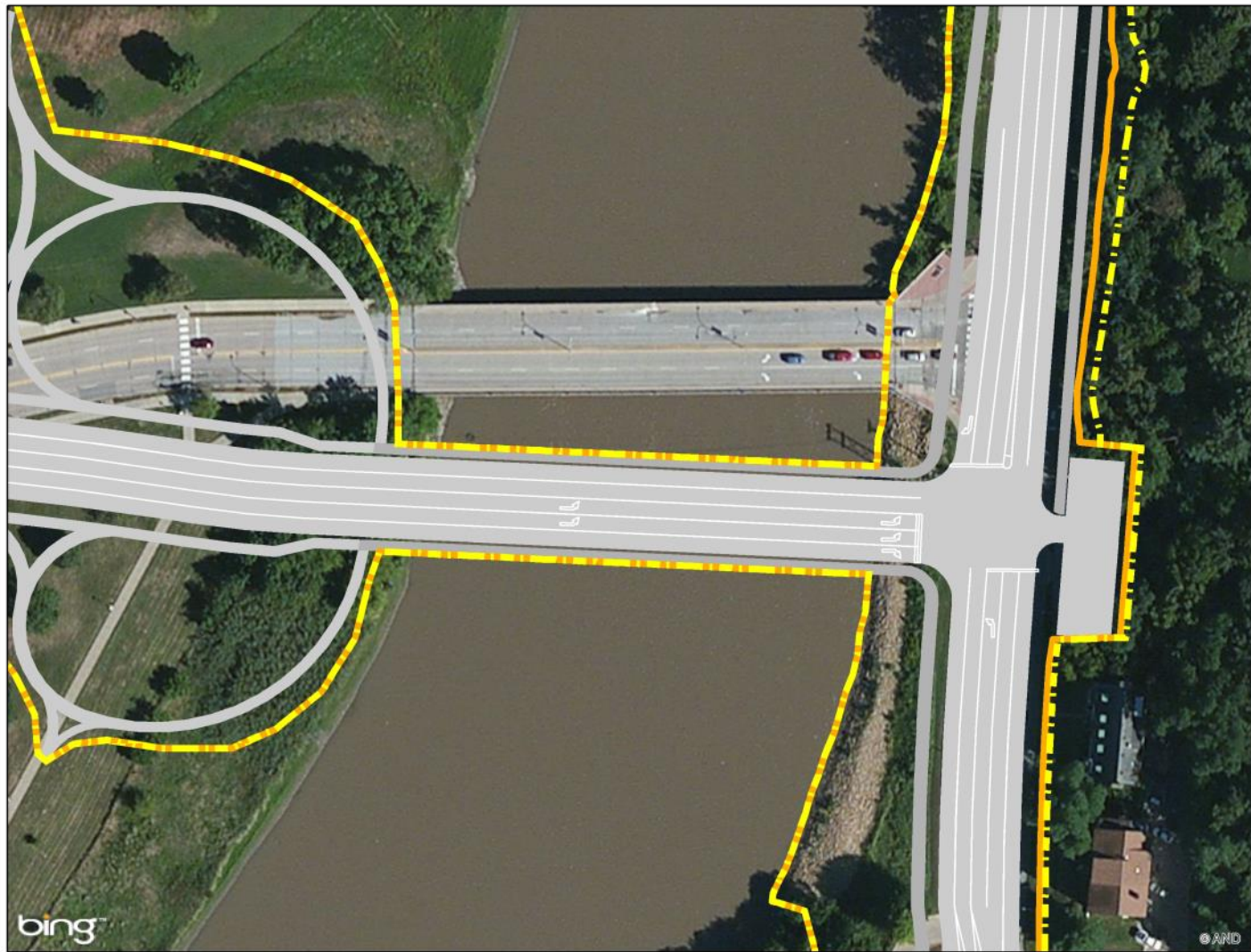
- 12-foot lanes
- 1.5-foot curb and gutter both sides
- 51-foot from back of curb to back of curb
- Use 8-foot parkway / 10 foot multi-use path / 8-foot sidewalks
- Add right turn lane to southbound
 - Improve level of service
 - Turn lane does not shift roadway to the east
 - Considerable expense to add at a later date
- Maintain the existing lane configuration northbound

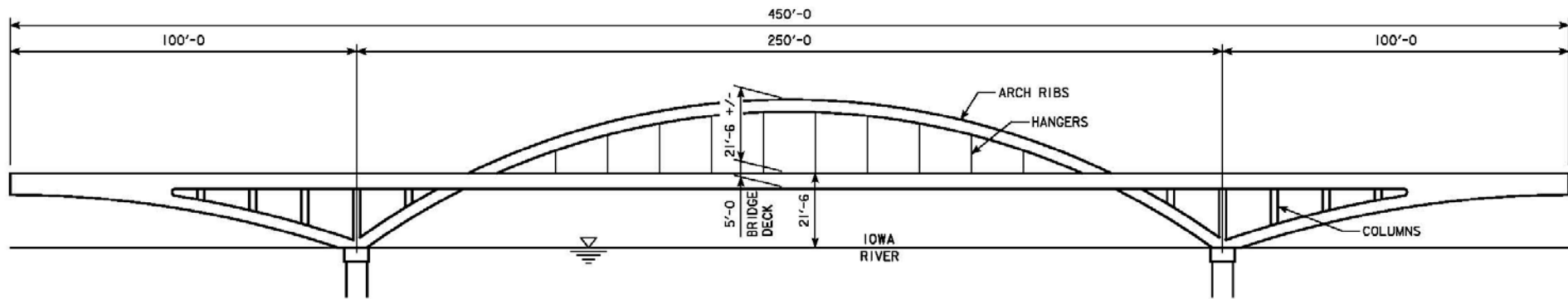


Park Road Bridge

- Partial Through Arch bridge
- Five lane bridge
- 3 lanes eastbound 2 west
- Multiple bike/ped crossings
- Trail underpass on west side
- 25 mph

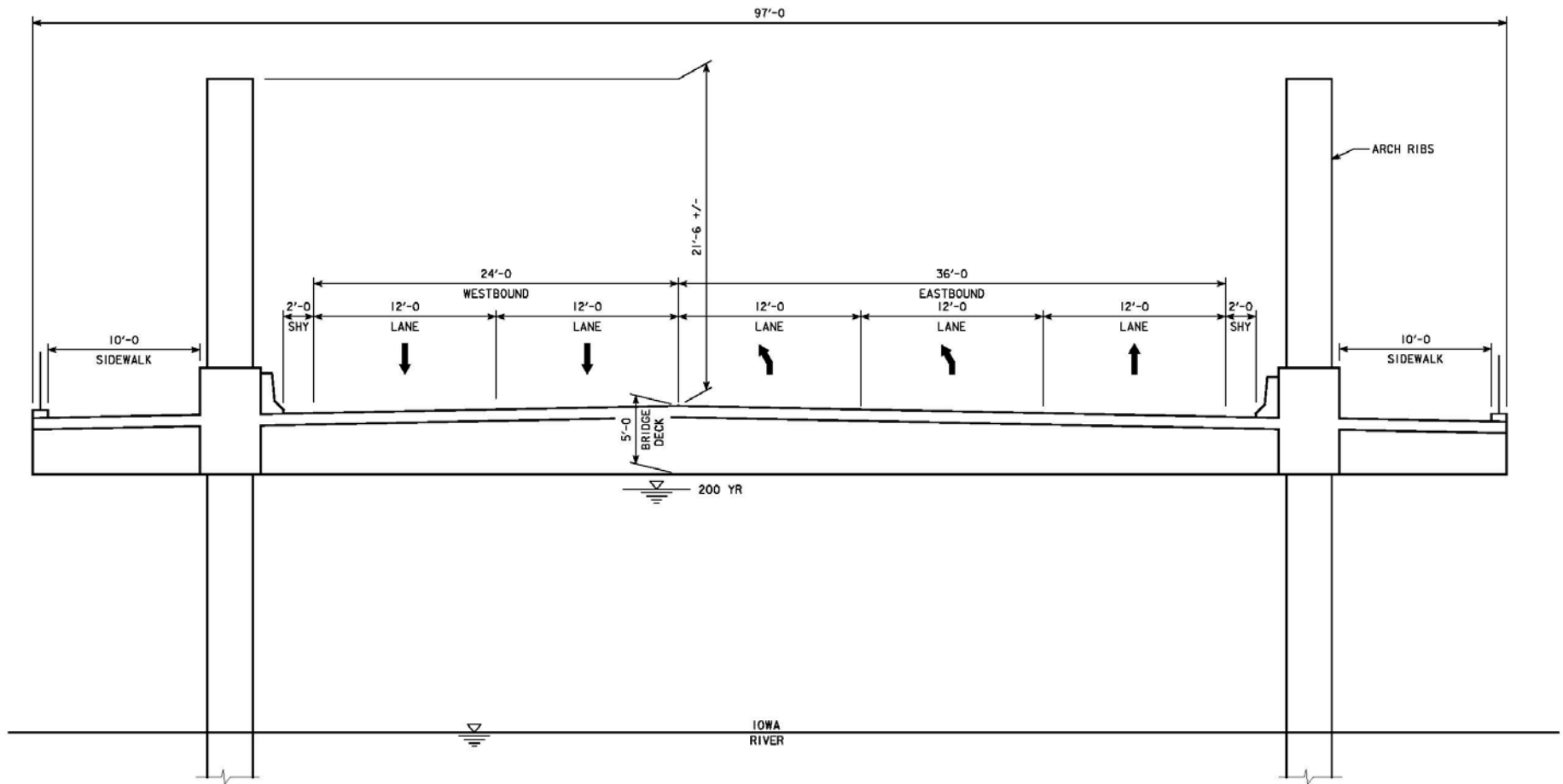






ELEVATION

Park Road Bridge



Park Road Bridge



Recommendation

Park Road Bridge

- Five 12-foot lanes on bridge
 - Eastbound – dual left turn lanes and one right turn lane
 - Westbound – two lanes
- Warranted by existing traffic
- Arch bridge cannot be widened at a later date
- Allows Cambus to operate as it does today
- Provides capacity for events and incident management



Park Road West of Bridge

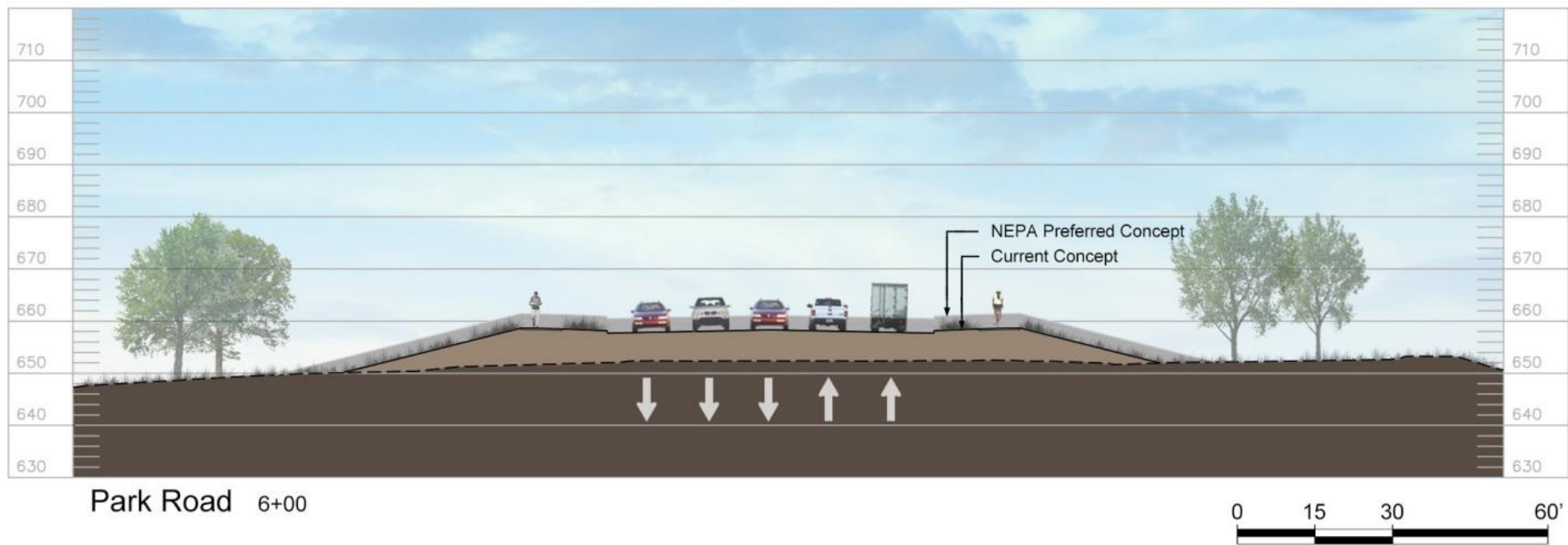
- 5 lane and 3 lane sections
- 8-foot and 6-foot sidewalks
- Minimal change to footprint
- Maintains City Park and Hancher access/egress





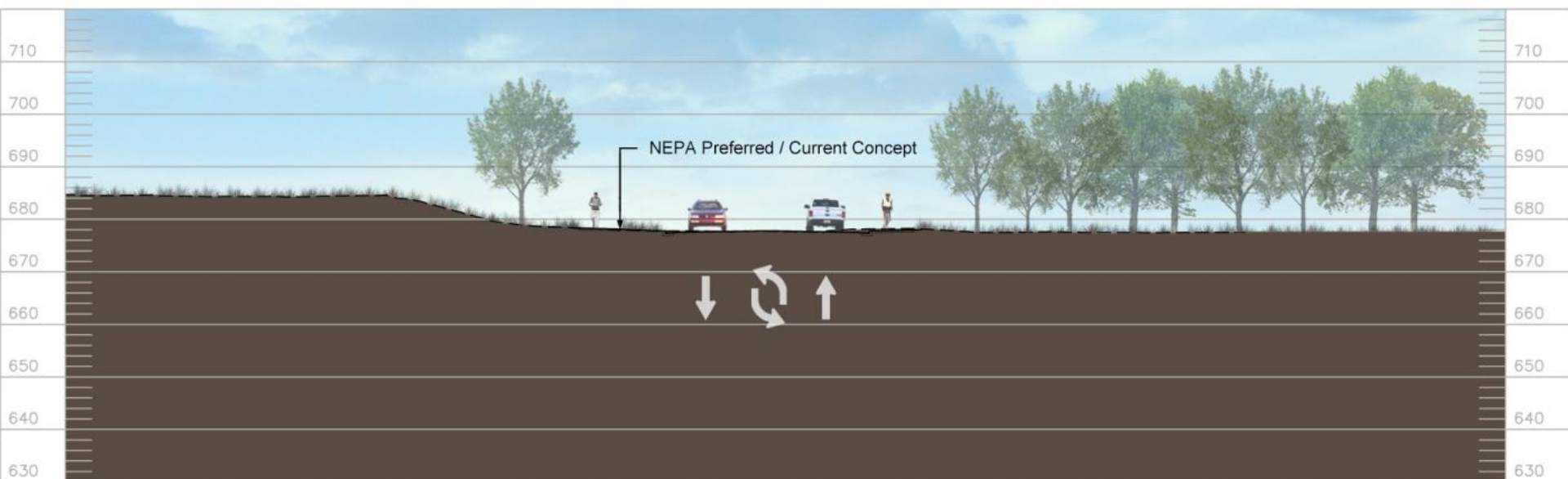


Park Road West of Bridge





Park Road Along Hancher and Upper City Park



Park Road 16+00





Recommendation

- On Park Road from bridge to Lower City Park
 - Sidewalks transition for 10-foot at bridge to 8 or 6-foot
 - Five 12-foot lanes drop outside lanes at Lower City Park
- From Lower City Park to Riverside
 - Three lane section – 12-foot center turn lane / 11-foot travel lanes
 - Use 1.5-foot curb and gutter
 - Sidewalks – 8-foot along eastbound lanes / 6-foot along westbound
 - Benefits event traffic at Hancher and City Park
 - Benefits daily traffic including new Hancher loading docks



Next Steps

- Complete conceptual design phase
- Submit Concept Statement to DOT
- Subject to DOT approval
- Develop aesthetics and landscape concepts
- Begin preliminary and final design
- Continued stakeholder coordination