Falling into Place

The Case of the Blue Lake Roundabout

Presented by Steve Weinberger, P.E.
Overview

- Location (proximity to other roundabouts)
- Intersection Characteristics
- Driving force
- Public Process
- Design Process (design vehicles)
- Field Test
- Construction Phasing
- Final Product
Falling Into Place – The Case of the Blue Lake Roundabout
Falling Into Place – The Case of the Blue Lake Roundabout
Falling Into Place – The Case of the Blue Lake Roundabout
Falling Into Place – The Case of the Blue Lake Roundabout
Falling Into Place – The Case of the Blue Lake Roundabout
Falling Into Place - The Case of the Blue Lake Roundabout
Falling Into Place - The Case of the Blue Lake Roundabout
Falling Into Place – The Case of the Blue Lake Roundabout
Falling Into Place – The Case of the Blue Lake Roundabout
Setting

- Humboldt County, California
- 8 miles east of Eureka/Arcata
- Gateway to the Blue Lake downtown
- Near an elementary School
- Lumber Mill Traffic
Setting

- Humboldt County, California
- 8 miles east of Eureka/Arcata
- Gateway to the Blue Lake downtown
- Near an elementary School
- Lumber Mill Traffic
- Near Arcata’s roundabouts
Falling Into Place - The Case of the Blue Lake Roundabout
Falling Into Place - The Case of the Blue Lake Roundabout
Intersection Characteristics

- 4-way intersection
- 10,000 entering vehicles per day
- 90 percent in north-south direction
- One leg very low traffic volumes
- Hillside running along one direction
Intersection Characteristics

- 4-way intersection
- 10,000 entering vehicles per day
- 90 percent in north-south direction
- One leg very low traffic volumes
- Hillside running along one direction
- Empty lot on one corner
Driving Force

- Blue Lake Rancheria
- 20,000 square foot casino with events
- Add 5,000 vehicles per day to intersection
- Evening events with mass exodus
Driving Force

- Blue Lake Rancheria
- 20,000 square foot casino with events
- Add 5,000 vehicles per day to intersection
- Evening events with mass exodus
- Willing to fund intersection improvements
Public Process

- Concern about traffic signal
- Concern over speed of lumber trucks
- Desire to slow through traffic down
- Concern regarding speed near school
Public Process

- Concern about traffic signal
- Concern over speed of lumber trucks
- Desire to slow through traffic down
- Concern regarding speed near school
- **Supported roundabout**
Design Process

- Limited land
- Reduce speed... but accommodate trucks
- Oh.. and also serve the “big one”
Design Process

- Limited land
- Reduce speed... but accommodate trucks
- Oh.. and also serve the "big one"
  (Extended Low-Bed Lumber Equipment Carrier)
Design Process

- Limited land
- Reduce speed... but accommodate trucks
- Oh.. and also serve the “big one”
  (Extended Low-Bed Lumber Equipment Carrier)
- No turns at intersection
Falling Into Place – The Case of the Blue Lake Roundabout
Falling Into Place - The Case of the Blue Lake Roundabout
Falling Into Place – The Case of the Blue Lake Roundabout
Falling Into Place – The Case of the Blue Lake Roundabout
Falling Into Place - The Case of the Blue Lake Roundabout
Falling Into Place - The Case of the Blue Lake Roundabout
Falling Into Place - The Case of the Blue Lake Roundabout
Construction Phasing

Falling Into Place - The Case of the Blue Lake Roundabout
Construction Phasing
Falling Into Place - The Case of the Blue Lake Roundabout
Construction - Phase 2

Falling Into Place - The Case of the Blue Lake Roundabout
Construction - Phase 2

Falling Into Place - The Case of the Blue Lake Roundabout
Construction - Phase 2

Falling Into Place - The Case of the Blue Lake Roundabout
Construction - Phase 2

Falling Into Place - The Case of the Blue Lake Roundabout
Falling Into Place – The Case of the Blue Lake Roundabout
Falling Into Place – The Case of the Blue Lake Roundabout
Construction - Phase 3

Falling Into Place - The Case of the Blue Lake Roundabout

National Roundabout Conference 2005 DRAFT
Construction - Phase 3

Falling Into Place - The Case of the Blue Lake Roundabout
Construction - Phase 3

Falling Into Place - The Case of the Blue Lake Roundabout
Construction - Phase 3

Falling Into Place - The Case of the Blue Lake Roundabout
Construction - Phase 3

Falling Into Place - The Case of the Blue Lake Roundabout
Construction - Phase 3
Falling Into Place - The Case of the Blue Lake Roundabout
Falling Into Place - The Case of the Blue Lake Roundabout
Falling Into Place - The Case of the Blue Lake Roundabout
Falling Into Place - The Case of the Blue Lake Roundabout
Falling Into Place - The Case of the Blue Lake Roundabout
Falling Into Place - The Case of the Blue Lake Roundabout
Falling Into Place - The Case of the Blue Lake Roundabout
Falling Into Place - The Case of the Blue Lake Roundabout
Success

- No reported collisions 2 ½ years
- Virtually no queuing
- Serves the access needs of the casino
- Accommodates lumber vehicles
- Acts as a traffic calming device for traffic entering town.
Falling Into Place - The Case of the Blue Lake Roundabout
Falling Into Place - The Case of the Blue Lake Roundabout
Falling Into Place - The Case of the Blue Lake Roundabout