Context Sensitive Solutions for State Route 179

September 9, 2005

Salt Lake City

DMJM HARRIS | AECOM
How Perfect for CSS?

The 10 Most Beautiful Places in America

SR 179 Project
Arizona Department of Transportation

DMJM HARRIS | AECOM
Project Background

- Community Concerns Threatening Lawsuit
- November 2002
  - Engineer-to-Engineer Meeting
  - Needs Based Implementation Plan (NBIP) Program
  - Integration of Context Sensitive Solutions
  - Utilization of Design Charrettes in NBIP Process
- High Profile and Political
- One Corridor/One Team
- Multiple Stakeholders
Agency Stakeholders

- Federal Highway Administration
- Coconino National Forest
- Arizona Department of Transportation
- Coconino County
- Yavapai County
- City of Sedona
- Big Park Regional Coordinating Council
Purpose of the Project

Reach Consensus on the Planning, Design, and Construction of SR 179
Context Sensitive Solutions

- Address the Transportation Need
  Safe, Financially Feasible, Implementable

- Become a Community Asset
  Involve the Community and Stakeholders in
  Collaborative, Interdisciplinary Approach

- Compatibility with the Natural and Built
  Environments
  Implemented with Minimal Impacts, Aesthetic
  Integration
Needs Based Implementation Plan

Collaborative Team Effort that Assesses Community Needs as the Foundation for a Context Sensitive Solution for SR 179
Teams Established to Date

- Executive Team
- Public Outreach Team
- Project Management Team
- ADOT Technical Team
Agency Perspective: Unique to CSS

- “New” Public
- Agency Commitment
- Agency as Visible Project Spokesperson
- Collaborative Scope Development
- Multi-Disciplinary Team Composition
- Resources Required (time, cost)
Multi-Disciplinary Team Perspective

- Community and Transportation Planners
- Interdisciplinary Engineering Group
- Urban Designers
- Landscape Architects
- Graphic Artists
- Environmental Specialists
- Public Outreach (facilitation, communication, event planning, etc.)
Project Team Involvement

- **Concept to Construction**
  - Planning (NBIP)
  - Design
  - Construction

- **Key Team Members Involved Throughout All Project Phases**
  - Level of Commitment Varies by Phase
  - Long-term Commitment

- **Nowhere to Run … Nowhere to Hide**
  - Ownership of Process and Outcome

- **Successful Planning Phase is Key to Project Success**
Collaborative, Multi-Disciplinary Approach Integrating both the Agencies and the Community into the Planning and Design of Corridor Improvements

Requires Early Definition of How Decisions will be Made and Who Makes Those Decisions

Carefully Thought Out Public Outreach Program
### NBIP 3-Phase Process

<table>
<thead>
<tr>
<th>Phase</th>
<th>Process Definition</th>
<th>Corridor-Wide Design Framework</th>
<th>Segment Design Concepts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objective</td>
<td>Consensus-Based Planning and Design Program and Decision-Making Process</td>
<td>Establish Corridor-Wide Design Vision and Corridor Components for Design</td>
<td>Establish Segment Design Concepts within Corridor-Wide Design Framework</td>
</tr>
</tbody>
</table>

*Executive Team approval required prior to beginning next phase!!!*
### NBIP Process Timeline

**Needs Based Implementation Plan Process Timeline**

**2003**
- **July**: Process Definition
- **August**: Stakeholder Input
- **September**: Draft Process Definition
- **October**: Approval by Executive Team
- **November**: Community Information Gathering
- **December**: Situation Assessment
  - Problems
  - Needs
  - Resources
  - Community Suggestions

**2004**
- **January**: Corridor-Wide Design Framework
  - Vision
  - Core Values
  - Resources
  - Community Suggestions
- **February**: Charrette Process
  - Charrette 1
  - Charrette 2
  - Charrette 3
- **March**: Prioritization of Corridor-Wide Alternatives
- **April**: Products
  - Draft Corridor-Wide Framework
  - Corridor Community Team
  - Design Advisory Panels
- **May**: Executive Team Approval
- **June**: Segment Design Concepts
- **July**: Formulate Segment Alternatives Concepts
- **August**: Workshop 1
- **September**: Workshop 2
- **October**: Evaluate Detailed Design Options
- **November**: Draft Recommended Segments Concept Plans

### Community Involvement
- **2003**
  - Initial Public Hearing
  - Key Community Members
  - Executive Team
  - Community Stakeholders
- **2004**
  - Public Meetings

### Teams
- **2003**
  - Executive Team
  - Multi-Criteria Team
  - Community Information Team
  - Design Team

Note: Timing of events is approximate and subject to change.

**September 2013**

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**SR 179 Project**

**Arizona Department of Transportation**

**DMJM HARRIS**

**AECOM**
NBIP Phase 1: Process Definition

MONTHS

<table>
<thead>
<tr>
<th>July 2003</th>
<th>August 2003</th>
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<tbody>
<tr>
<td>Stakeholder Input</td>
<td>Draft Process Definition</td>
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</tbody>
</table>

COMMUNITY INVOLVEMENT

- Agency Stakeholders
- Meetings
- Key Community Interviews

COMMUNICATION

- Newsletter
- Website Updates
- News Releases
- Press Conference
- E-newsletters

TEAMS

- Executive Team
- Public Outreach Team

SBP Phase 1: Process Definition

SR 179 Project

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Process Definition

- Identify/Verify Stakeholders
- Establish the Plan/Scope of Work for the Planning Phase of the Project
- Agree Upon Decision-Making Structure/Process
- Establish the Public Outreach Program for the Project
  - Public Information/Communications
  - Ongoing Education
  - Community Participation Opportunities
## NBIP Phase 2: Corridor–Wide Framework

<table>
<thead>
<tr>
<th>MONTHS</th>
<th>Sept ’03</th>
<th>Oct ’03</th>
<th>Nov ’03</th>
<th>Dec ’03</th>
<th>Jan ’04</th>
<th>Feb ’04</th>
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<td><strong>Commmunity Information Gathering</strong></td>
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<td>Draft Corridor-Wide Framework</td>
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<td>Corridor Consistency Team</td>
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### COMMUNITY INVOLVEMENT
- Celebratory Events
- Educational Forums (4)
- Focus Groups (15)
- Electronic Forums (7)
- Charrettes (3 multi-day events)
- Random Sample Survey
- Donuts and Dialogue

### COMMUNICATION
- News Releases (8)
- Newsletters (7)
- Website Updates
- E-newsletters
- Press Conferences (2)

### TEAMS
- Executive Team
- Public Outreach Team
Corridor-Wide Framework

- Corridor Situation Assessment
  - Problems
  - Needs
  - Resources
  - Community Suggestions
- Vision – Core Values of the Community
- Evaluation Program
  - Evaluation Criteria
  - Prioritization (Weighting Factor)
  - Performance Measures
- Planning Concept Development
- Establish Preferred Concept Defining the Major Form Givers, but Not All the Detail
### NBIP Phase 3: Segment Concept Design

#### Design Workshops By Segment

- **Workshop 1**
  - Formulate Segment Alternative Concepts
  - Refinement of Segment Alternative Concepts
    - Evaluation Criteria
  - Detailed Design Options
- **Workshop 2**
  - Evaluate Detailed Design Options
  - Draft Preferred Segment Concept Plans

#### Approval By Executive Team

- Informal Approval By Jurisdiction Agencies
- Products: NBIP, AMP, CMP

#### Community Involvement

- Segment Walkabouts (4)
- Design Workshops (8 events)
- Celebratory Event
- Electronic Forums (8)
- Donuts and Dialogue

#### Communication

- News Releases (5)
- Newsletters (6)
- E-newsletters
- Press Conference
- Website Updates

#### Teams

- Executive Team
- Public Outreach Team
- Corridor Consistency Team
- Design Advisory Panels

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Segment Concept Design

- Refinement of the Corridor-Wide Framework Segment by Segment
- Address the Details
- Finalize the Corridor Plan for Design
Charrette Characteristics

- Multi-Day Collaborative Event
- Corridor Tour
- Community Working Together to Resolve Problems or Issues
- Continual Feedback Loops
- Public Event to Present Findings
- Holistic Approach to Collaboration
Charrette Process

Charrette 1
Core Values
Vision

Charrette 2
Evaluation Program
Formulation of Planning Concepts

Charrette 3
Prioritization of Planning Concepts
Charrette #1: Core Values

- Economic Sustainability
- Regional Coordination
- Walkability
- Multi-Modal Corridor
- Mobility
- Context Sensitive
- Multi-Purpose
- Character
- Roadway Footprint
- Environmental Preservation
- Scenic Beauty
- Public Safety
Core Values Application

Core Values
- Scenic Beauty
- Public Safety
- Environmental Preservation
- Multi-Modal Corridor
- Character
- Walkability
- Multi-Purpose
- Context Sensitivity
- Regional Coordination
- Economic Sustainability
- Roadway Footprint
- Mobility

SR 179 Project Vision

Draft Evaluation Criteria
Examples:
- Provide safe bicycle crossings and circulation
- Minimize the potential for crashes

Toolbox
Examples:
- Signalized intersections
- Exclusive turn lanes
- Raised medians
- Roundabouts

Charrette #2
Public Discussion of Evaluation Criteria (Jan 14)

Prioritize Evaluation Criteria (Jan 15)

Apply Toolbox to Formulate Planning Concepts (Jan 20)
Charrette #2: Gaming Workshop
Evolution of Planning Concepts

Planning Concept from Gaming Workshop

Matrix Summarizing Planning Concepts

Fishbone Diagram

12 Planning Concepts (Level 1 Screening)

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Planning Concepts Evaluation Process

**DESIGN**

- Roadway Elements
- Transit Elements
- Bicycle Elements
- Pedestrian Elements
- Supportive Facilities

**TOOLBOX**

- Evaluation Criteria and Performance Measures
- Project Constraint Criteria

**Universe of Planning Concepts**

- Level 1 Screening
- Level 2 Screening
- Level 3 Screening
- Level 4 Screening

**Preferred Planning Concept—Corridor-Wide Design Framework**

- 12 +/- Planning Concepts (Jan)
- 6 +/- Planning Concepts (Mar-May)
- 3 +/- Planning Concepts (May)

**Charrettes**

- Charrette #2
- Donuts & Dialogue/ET Mtg
- Screening Workshop/ET Mtg
- Screening Workshop/ET Mtg

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Refinement of Planning Concepts

Planning Concepts (Level 2 Screening)

Screening Workshop #1

Screening Workshop #2
Charrette #3: Preferred Planning Concept
## Planning Concept Matrix (Example)

<table>
<thead>
<tr>
<th>Planning Concept</th>
<th>Components</th>
<th>Segment 1</th>
<th>Segment 2</th>
<th>Segment 3</th>
<th>Segment 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>(1A) MP 304.5 to Village of Oak Creek</td>
<td>(1B) Village of Oak Creek</td>
<td>USFS</td>
<td>(3A) Back O'Beyond - Canyon</td>
</tr>
<tr>
<td>Lanes</td>
<td></td>
<td>2 throughout</td>
<td>+ Passing Lanes</td>
<td></td>
<td></td>
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<tr>
<td>Shoulders</td>
<td></td>
<td>8' throughout</td>
<td></td>
<td></td>
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<tr>
<td>Edge of Pavement (EPs)</td>
<td>Ditch</td>
<td>Curbs with storm drains/scuppers</td>
<td>Ditch</td>
<td></td>
<td>Curbs with storm drains/scuppers</td>
</tr>
<tr>
<td>Median</td>
<td>4' Raised</td>
<td>16' Raised</td>
<td>Bifurcated</td>
<td>12' Raised to Ranger</td>
<td>None</td>
</tr>
<tr>
<td>Accommodates Pedestrians</td>
<td>Yes 5' unpaved Both sides</td>
<td>Yes 8' both sides</td>
<td>Yes Bell Rock Path w/ trailhead connection</td>
<td>Yes 8' both sides</td>
<td></td>
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<tr>
<td>Landscape Buffer between EPs and Pathways</td>
<td>Yes Meet Clear Zone</td>
<td>Yes 4' - 12' meandering</td>
<td>No</td>
<td>Yes 4'</td>
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<tr>
<td>Accommodates Bikes</td>
<td>Yes</td>
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<td>Major Intersection Types</td>
<td>Signals</td>
<td>Ridge Trail, Jacks Canyon, Cortez, Bell Rock, Chapel, Schnebly Hill, &amp; 'Y'</td>
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<tr>
<td>Left Turn Accommodation</td>
<td>Widen Intersections</td>
<td>In Median Island</td>
<td>Widen Intersections</td>
<td>In Median Island</td>
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<tr>
<td>Other</td>
<td>None</td>
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<td>Realigned Morgan Rd.</td>
<td>None</td>
<td>Brewer/Ranger One-Way Loop (2 in NB on 179/2 in SB on Brewer/Ranger)</td>
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</tbody>
</table>
Displays: Planimetric Illustration

Planning Concept
Presented On Aerial Photograph
Displays: Typical Sections

(Section Displayed for Each Segment by Concept)
Displays: Focus Area Rendering
Displays: Urban Design Studies
Displays: Photo Simulations

(Concept Superimposed on an Existing Photograph at Two Locations: Bell Rock Blvd., Poco Diablo Entrance)
<table>
<thead>
<tr>
<th>Planning Concepts</th>
<th>Core Values</th>
<th>Scenic Beauty</th>
<th>Environmental Protection</th>
<th>Walkability</th>
<th>Multi-Purpose</th>
<th>Context Sensitivity</th>
<th>Multi-Modal</th>
<th>Mobility</th>
<th>Public Safety</th>
<th>Character</th>
<th>Regional Coordination</th>
<th>Footprint</th>
<th>Economic Sustainability</th>
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<td>Pinyon Pine</td>
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</table>
Technical Analysis Displays

- Traffic Forecasts
- Planning Concept Tradeoffs
- Physical Impact of Level 3 Planning Concepts
- Construction Cost of Level 3 Planning Concepts
- Tradeoff Graphics
- Level 3 Evaluation Criteria/Performance Measures Comparison
Trade Offs

- Intersection Control Options
- Bifurcation Concept
- Urban Design Studies
- Median Options
- Paved Pathway Options
### Physical Impact of Level 4 Planning Concept

<table>
<thead>
<tr>
<th>Planning Concepts</th>
<th>Estimated Right-of-Way to be Purchased (1) (Acres)</th>
<th>Potential Total Property Takes (2)</th>
<th>Estimated Disturbance Area (3) (Acres)</th>
<th>Estimated Maximum Cut/Fill Heights (4)</th>
<th>Estimated Lateral Feet Retaining Wall</th>
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</thead>
<tbody>
<tr>
<td>Copper</td>
<td>16</td>
<td>6</td>
<td>75</td>
<td>60’</td>
<td>10,165’</td>
</tr>
<tr>
<td>Turquoise</td>
<td>22</td>
<td>7</td>
<td>100</td>
<td>80’</td>
<td>10,883’</td>
</tr>
<tr>
<td>Quartz</td>
<td>16</td>
<td>5</td>
<td>71</td>
<td>60’</td>
<td>9,370’</td>
</tr>
</tbody>
</table>

**Notes to Figure:**
1. New Right-of-Way Area Purchased (in Addition to Existing Right-of-Way), Does Not Include USFS Easement
2. Based on Implementation of Planning Concepts Presented. Mitigation Measures will be Explored in Segment Concept Design
3. Total Area of Disturbance Less Pavement Area
4. Estimated Maximum Cut or Fill by Planning Concept Without Mitigation (e.g. Retaining Wall)
## Construction Cost of Level 4 Planning Concepts

<table>
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<tr>
<th></th>
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<tbody>
<tr>
<td>Copper</td>
<td>2 Lanes Throughout</td>
<td>$40,200,000</td>
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<tr>
<td></td>
<td>Biurcated on Forest Lands</td>
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<tr>
<td></td>
<td>Passing Lanes in Segment 2 and 3A</td>
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<td></td>
<td>Roundabouts Throughout</td>
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</tr>
<tr>
<td></td>
<td>2-Way Brewer/Ranger Loop</td>
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</tr>
<tr>
<td>Turquoise</td>
<td>4 Lanes Throughout</td>
<td>$47,600,000</td>
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<td></td>
<td>Biurcated on Forest Lands</td>
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<tr>
<td></td>
<td>Traffic Signals Throughout</td>
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<td></td>
<td>1-Way Brewer/Ranger Loop</td>
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<tr>
<td>Quartz</td>
<td>2 Lanes Throughout</td>
<td>$34,900,000</td>
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<td></td>
<td>Mostly Roundabouts Throughout</td>
<td></td>
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</table>

### Notes to Figure:
1. Does Not Include Required Right-of-Way Purchases
2. Includes Utility Relocation Estimates Based on Final Design Concept Report (Alternative C)
3. Includes Construction Contingency Based on Current Level of Planning and Design
4. Includes Estimate of Construction Administration Costs
5. Does Not Include NBIP or Engineering Design Costs
## Level 4 Planning Concept Ranking

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Weighting Factor*</th>
<th>Copper</th>
<th>Lime</th>
<th>Quartz</th>
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</thead>
<tbody>
<tr>
<td>Retain &amp; enhance natural appearance of the landscape, and ability to enjoy scenic views from the corridor</td>
<td>10.70</td>
<td>3.7</td>
<td>3.7</td>
<td>2.7</td>
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<tr>
<td>Provide a distinctive corridor identity &amp; a unique experience for the user</td>
<td>5.86</td>
<td>3.7</td>
<td>2.3</td>
<td>3.3</td>
</tr>
<tr>
<td>Provide effective &amp; attractive wayfinding aids</td>
<td>3.82</td>
<td>3.7</td>
<td>3.7</td>
<td>3.7</td>
</tr>
<tr>
<td>Provide safe vehicular and emergency access to/from and around the corridor</td>
<td>7.46</td>
<td>4.4</td>
<td>3.9</td>
<td>3.6</td>
</tr>
<tr>
<td>Provide safe bike crossings &amp; circulation</td>
<td>5.86</td>
<td>4.4</td>
<td>3.9</td>
<td>3.6</td>
</tr>
<tr>
<td>Provide safe pedestrian crossings &amp; circulation</td>
<td>6.08</td>
<td>4.4</td>
<td>3.9</td>
<td>3.6</td>
</tr>
<tr>
<td>Provide accessibility &amp; longevity for maintenance</td>
<td>3.33</td>
<td>4.4</td>
<td>3.9</td>
<td>3.6</td>
</tr>
<tr>
<td>Minimize noise impacts in a context sensitive manner</td>
<td>4.00</td>
<td>4.4</td>
<td>3.9</td>
<td>3.6</td>
</tr>
<tr>
<td>Provide accommodations for wildlife</td>
<td>4.31</td>
<td>4.4</td>
<td>3.9</td>
<td>3.6</td>
</tr>
<tr>
<td>Minimize light pollution of the night sky</td>
<td>4.53</td>
<td>4.4</td>
<td>3.9</td>
<td>3.6</td>
</tr>
<tr>
<td>Minimize the disturbed area &amp; contours in the corridor, including disturbance of habitat &amp; wetlands</td>
<td>10.74</td>
<td>4.4</td>
<td>3.9</td>
<td>3.6</td>
</tr>
<tr>
<td>Minimize light-of-way requirements</td>
<td>8.79</td>
<td>4.4</td>
<td>3.9</td>
<td>3.6</td>
</tr>
<tr>
<td>Minimize air quality impacts (motor vehicle emissions, dust)</td>
<td>2.98</td>
<td>4.4</td>
<td>3.9</td>
<td>3.6</td>
</tr>
<tr>
<td>Provide non-intersecting transportation system &amp; reasonably predictable travel times within the constraints of the external network</td>
<td>5.59</td>
<td>4.4</td>
<td>3.9</td>
<td>3.6</td>
</tr>
<tr>
<td>Accommodate a public transit system</td>
<td>3.73</td>
<td>4.4</td>
<td>3.9</td>
<td>3.6</td>
</tr>
<tr>
<td>Provide ease in transfer between transportation modes</td>
<td>2.75</td>
<td>4.4</td>
<td>3.9</td>
<td>3.6</td>
</tr>
</tbody>
</table>

**TOTAL SCORE**

- Average of Performance Measures Points: 350.0
- Average of Performance Measure Points X Weighting Factor: 300.3
- Highest Ranking for Individual Evaluation Criteria: 331.8

*Adopted by Executive Team based on Community Ranking of Evaluation Criteria in Charette #2
Evaluation Program Summary

- Based on 17 Evaluation Criteria and 64 Performance Measures Finalized in Charrette #2
- Results of the Evaluation Program Ranking are Within 14% of Each Other
- Demonstrates the Planning Concepts are All Viable and Reflect the Community’s Values
**Prioritization Form (example segment by segment)**

The purpose of this worksheet is to identify your priorities, segment by segment, for the SR 179 planning concepts under consideration. The outcome of Charrette #3 will be the preferred planning concept for the corridor.

**INSTRUCTIONS**

- You have been given six dots—one for each segment.
- Please place one dot in the box corresponding with the planning concept you prefer for each segment.
- You can place dots straight across one row, or you can mix and match segments as you prefer.

If you have any questions, please contact any of the staff available during the Charrette. **Worksheets that are not completed correctly will not be considered, so please carefully place your dots!**

**ID #___________________**

<table>
<thead>
<tr>
<th>Planning Concept</th>
<th>Segment 1A MP 304.5 to Village of Oak Creek</th>
<th>Segment 1B Village of Oak Creek</th>
<th>Segment 2 USFS</th>
<th>Segment 3A Back O’ Beyond Rd to Canyon Dr</th>
<th>Segment 3B Canyon Dr to Schnebly Hill Rd</th>
<th>Segment 4 Schnebly Hill Rd to SR 89A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turquoise</td>
<td><img src="image" alt="Orange dot" /></td>
<td><img src="image" alt="Orange dot" /></td>
<td></td>
<td><img src="image" alt="Orange dot" /></td>
<td><img src="image" alt="Orange dot" /></td>
<td></td>
</tr>
<tr>
<td>Quartz</td>
<td><img src="image" alt="Orange dot" /></td>
<td><img src="image" alt="Orange dot" /></td>
<td></td>
<td><img src="image" alt="Orange dot" /></td>
<td></td>
<td><img src="image" alt="Orange dot" /></td>
</tr>
</tbody>
</table>
Prioritization of Preferred Planning Concept

- **Tier #1: Statistical Analysis**
  - Prioritization Worksheets Results
  - Cross Tabulation of Priorities and Questions from Worksheets

- **Tier #2: Project Team Analysis**
  - Planning Concept Rankings from Evaluation Program
  - Professional Judgment

- **Tier #3: Observation – Based Analysis**
  - Interaction between Project Team and Community
  - Trends in Community Feedback through NBIP Process
# SR 179 Preferred Planning Concept Matrix

<table>
<thead>
<tr>
<th>Planning Concept</th>
<th>Components</th>
<th>Segment 1</th>
<th>Segment 2</th>
<th>Segment 3</th>
<th>Segment 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1A) MP 304.5 to Village of Oak Creek</td>
<td>(1B) Village of Oak Creek</td>
<td>USFS</td>
<td>(3A) Back O’Beyond - Canyon</td>
<td>(3B) Canyon - Schnebly</td>
</tr>
<tr>
<td>Lanes</td>
<td></td>
<td>2 throughout</td>
<td>+ Passing Lanes</td>
<td>2 NB 1 SB to “Y”</td>
<td></td>
</tr>
<tr>
<td>Shoulders</td>
<td></td>
<td>8’</td>
<td></td>
<td>None</td>
<td>Ranger to “Y”</td>
</tr>
<tr>
<td>Edge of Pavement (EPs)</td>
<td></td>
<td>Curbs with underground storm drains/scuppers throughout</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Median</td>
<td>4’ Raised</td>
<td>16’ Raised</td>
<td>Bifurcated</td>
<td>12’ Raised to Ranger</td>
<td>12’ Flush Decorative</td>
</tr>
<tr>
<td></td>
<td>8’ both sides</td>
<td></td>
<td></td>
<td>Yes 8’ both sides</td>
<td></td>
</tr>
<tr>
<td>Accommodates Pedestrians</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes Bell Rock Path w/ trailhead connection</td>
<td>Yes 10’ one side</td>
<td>Yes 8’ both sides</td>
</tr>
<tr>
<td></td>
<td>5’ unpaved East side only</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Landscape Buffer between EPs and Pathways</td>
<td>Yes</td>
<td>No</td>
<td>Yes 4’</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4’ - 12’ meandering</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum Total Section Width*</td>
<td>78’ Max</td>
<td>96’ Max</td>
<td>52’</td>
<td>88’ Max</td>
<td>76’</td>
</tr>
<tr>
<td>Accommodates Bikes</td>
<td>Yes on 8’ shoulder</td>
<td></td>
<td>5’ Bike Lane both sides</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major Intersection Types</td>
<td>Ridge Trail, Jacks Canyon, Cortez, Bell Rock, Chapel, Schnebly Hill (or Traffic Signal), Ranger, ‘Y’, Brewer/89A (Study potential Roundabouts at Back-O-Beyond, Arrow/Morgan)</td>
<td>Roundabouts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Left Turn Accommodation</td>
<td>Widen Intersections</td>
<td>In Median Island</td>
<td>Widen Intersections</td>
<td>In Median Island</td>
<td>In Flush Decorative Median</td>
</tr>
<tr>
<td>Other</td>
<td>Realigned Wild Horse Mesa Dr.</td>
<td>None</td>
<td>Realigned Morgan Rd.</td>
<td>Realigned Highland Dr.</td>
<td>Brewer/Ranger Two-Way Loop (2 NB, 1 SB on SR 179, 1 NB, 1 SB on Brewer/Ranger)</td>
</tr>
</tbody>
</table>

* Dimension from back of sidewalk to back of sidewalk
Segment Concept Design (July–November)

- Address the Details of the Community–Generated Corridor–Wide Framework Segment by Segment
- Citizen–Based Design Advisory Panels
- Finalize the Planning Process to Prepare for Final Design and Preparation of Construction Documents
Project Team Perspective: Unique to CSS

- Difference in Role for Project Team in Collaborative Design
- Establish Trust with Community and Stakeholders
- Importance of Education
- Importance of Listening
- Massive Amount of Data to Gather, Sort, and Analyze
- “No Opinion” – All Alternatives Technically Feasible
- Creativity to Convey Complex Messages
Community Involvement

- Key Community Interviews
- Focus Groups
- Celebratory Events
- Educational Forums
- Charrettes
- Donuts and Dialogue
- Workshops (Screening, Design)
- Random Sample Surveys
- Corridor Tour
- Segment Walkabouts
Communications Program

- Newsletters
- E-newsletters
- News Releases/Media Outreach Program (Print, Electronic)
- Website
- Telephone Hotline
- Speakers Bureaus
- Small Group/One-on-One Meetings
- Press Kits
- Process Diary
- Traveling Exhibit
- Question Quilt

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Approach to Public Outreach Program

- Excellent and Ongoing Information
- Two-Way Education Between the Project Team and Stakeholders, as well as Community, Throughout the Process
- Wide Variety of Active and Passive Participation Opportunities to Maximize Stakeholder Involvement Throughout
Local Project Office

- **Required in DMJM+HARRIS Scope of Work**
- **On-Site Project Information Center**
  - Including Computer Terminal, Process Diary, and Project Displays to View Project Information and Public Comment
- **ADOT and Consultant Team Work Room**
- **Location for Small Group Meetings**
- **Construction Coordination Office**
SR 179 Corridor Project Schedule*

<table>
<thead>
<tr>
<th>Year</th>
<th>NBIP</th>
<th>Final Design</th>
<th>Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2004</td>
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<td>2005</td>
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<td>2006</td>
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<tr>
<td>2007</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2008</td>
<td></td>
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</tbody>
</table>

* schedule is approximate and subject to change
SR 179 Recognitions

- ITE 2004 Best International Transportation Planning Project
- APA 2004 Award for Public Outreach/Multi-Agency Coordination, Arizona Planning Association
- Notable Practice in AASHTO Center for Environmental Excellence’s Best Practices in CSS
- TRB 2005 Paper and Poster Presentation, Committee on Public Involvement