



SH 82

GRAND AVENUE BRIDGE

Stakeholder Working Group Workshop

April 10, 2014

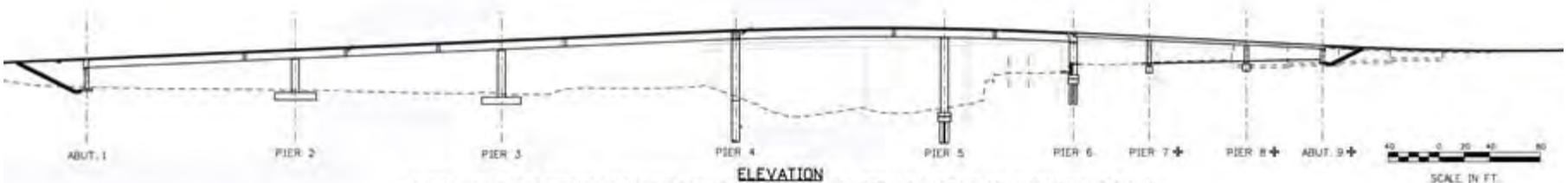
- Purpose for this Meeting
 - Inform about decisions that were made based on input
 - Present updated concepts for input
 - Refine priorities

- PWG review of input - March 24th
- Transportation Commission – April 1
 - What they liked
- City Council Workshop – April 3
 - What they liked

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Grand Avenue Bridge

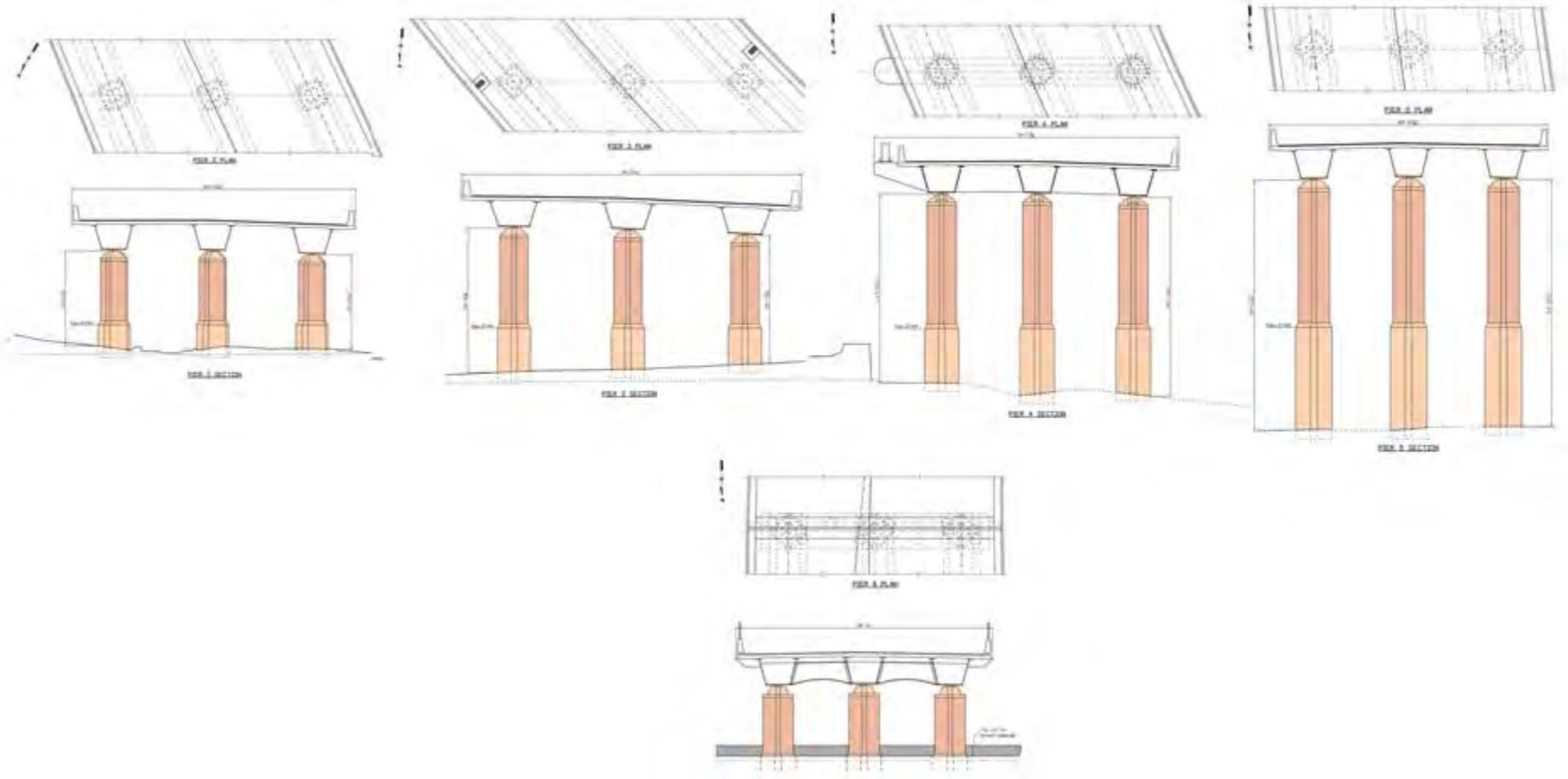


5-SPAN MAIN UNIT. CONSTANT DEPTH STEEL TRAPAZOIDAL BOX GIRDERS

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Grand Avenue Bridge

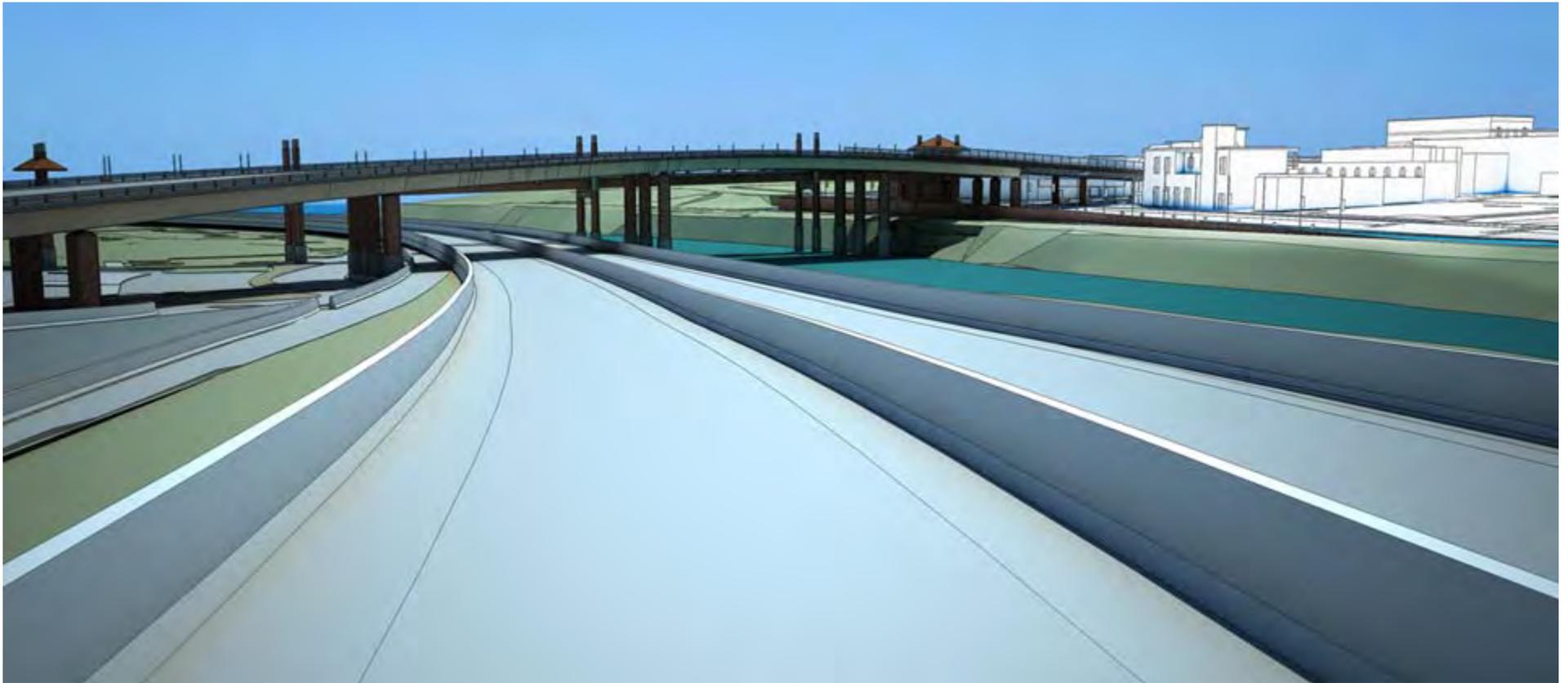


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Grand Avenue Bridge

- From I-70 eastbound



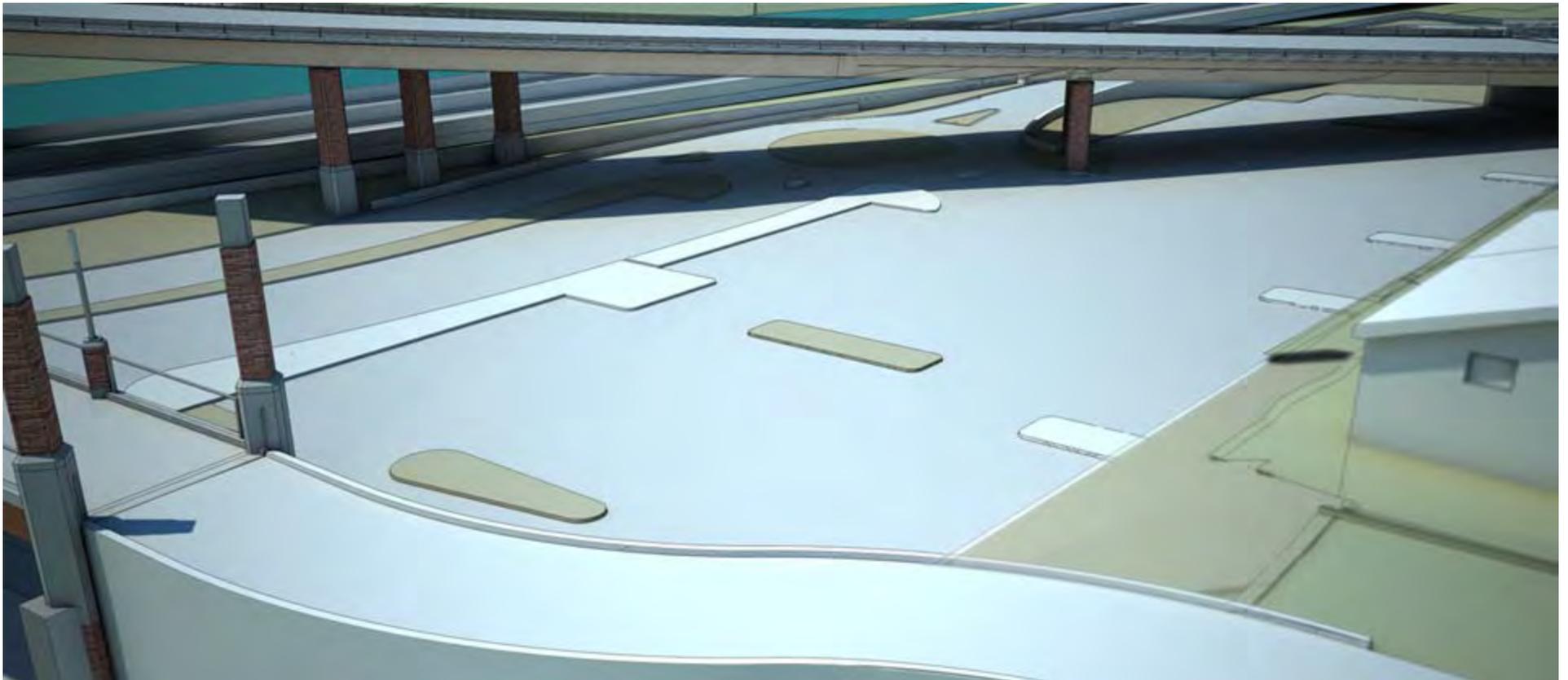
View D

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Grand Avenue Bridge

- To Glenwood Hot Springs parking



View E

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GRAND AVENUE BRIDGE

- From Colorado Avenue looking north

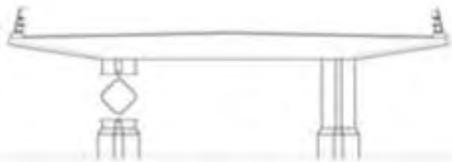


View O

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Grand Avenue Bridge



TYPICAL SECTION B

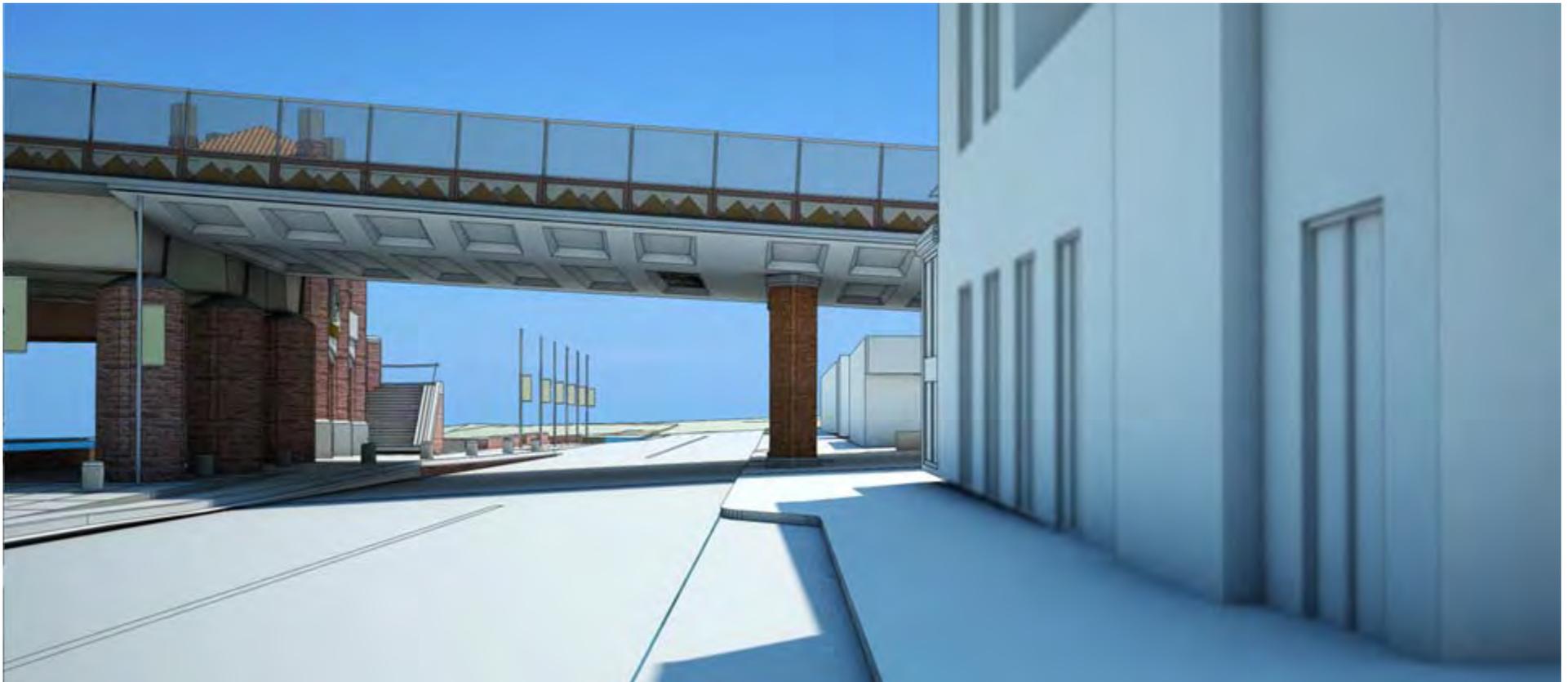
TSOUVARAS SIMONIS HOLDENESS
CONSULTING ENGINEERS

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Grand Avenue Bridge

- On 7th Street looking east



View N

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Grand Avenue Bridge

- From 7th Street looking south (east side of Grand Avenue)

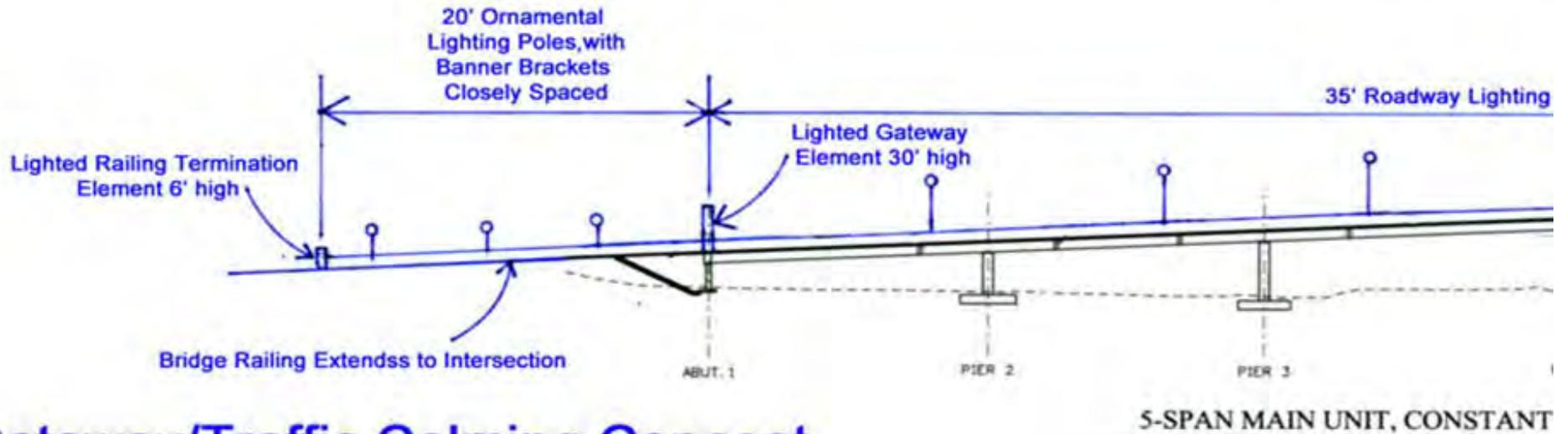


View M1

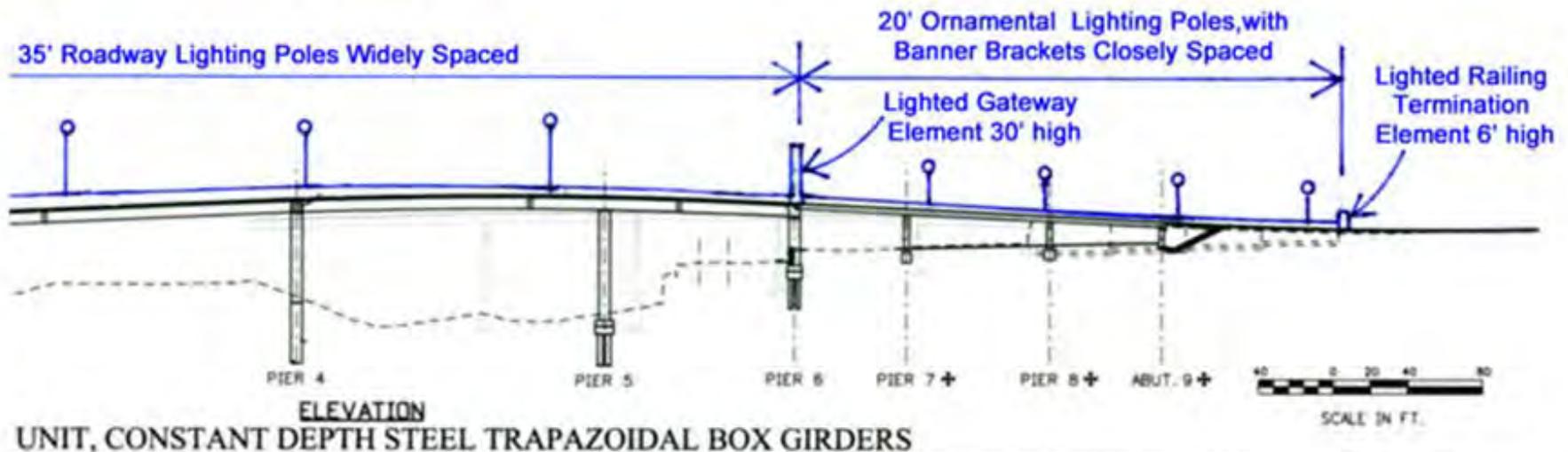
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Gateway/Traffic Calming Concept



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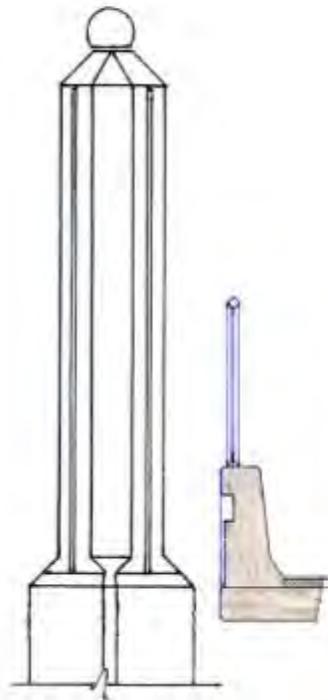
Grand Avenue Bridge



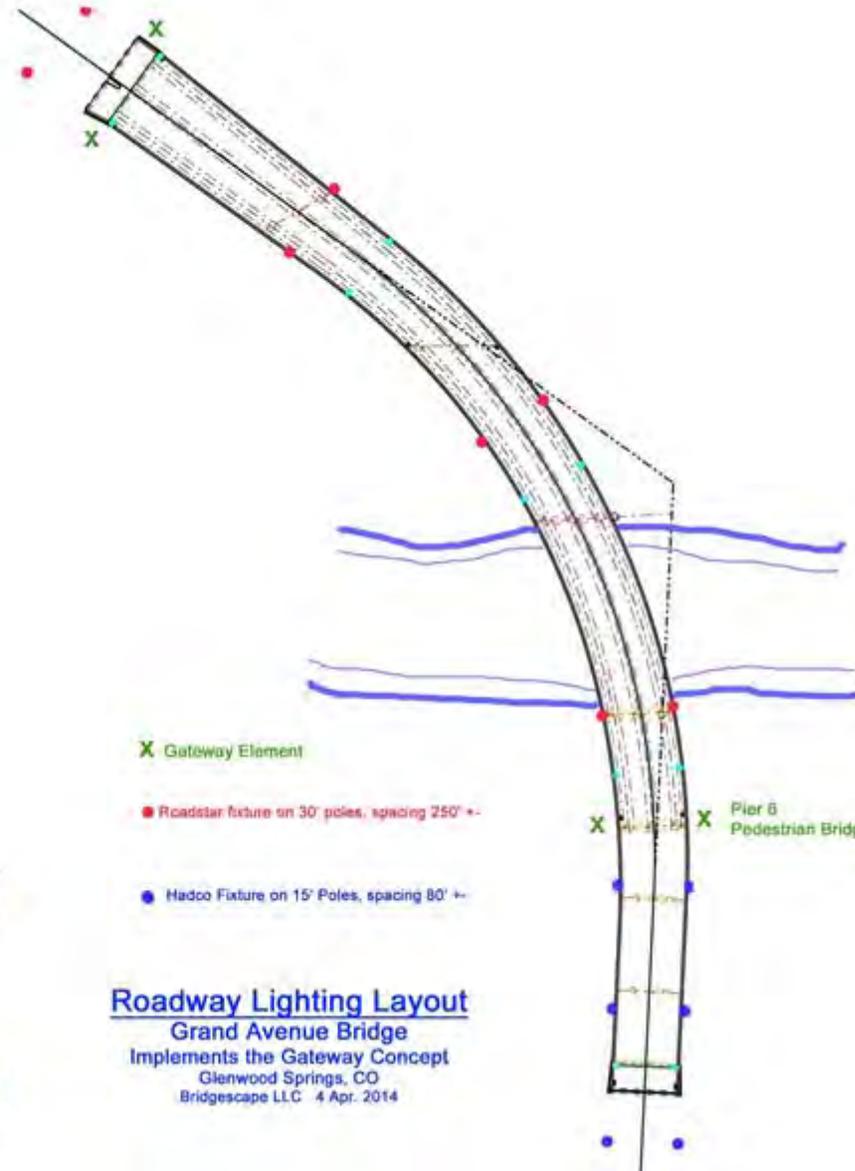
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Grand Avenue Bridge



Gateway Element



Roadway Lighting Layout

Grand Avenue Bridge

Implements the Gateway Concept

Glenwood Springs, CO

Bridgescape LLC 4 Apr. 2014

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Grand Avenue Bridge

- From 8th Street looking north (west side of Grand Avenue)



View P

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GRAND AVENUE BRIDGE



South Side Aesthetics

Plaza Under Grand Avenue Bridge

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South Side Aesthetics



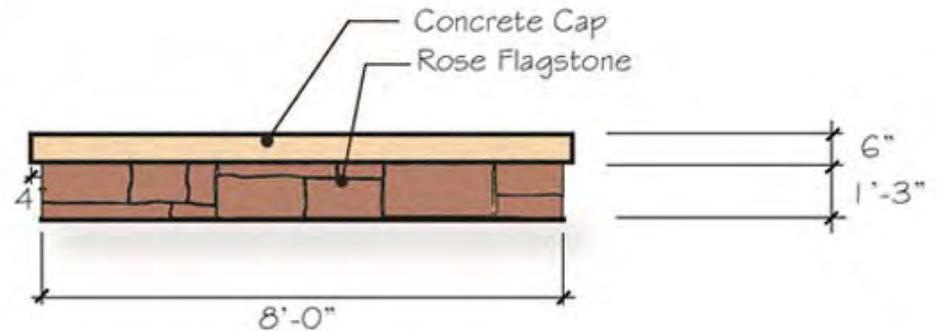
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South Side Aesthetics



Concrete with bands of sandstone. Continues the feel and the paving pattern from 7th Street



Stone seat walls to alternate with concrete stairs



Abutment faced with sandstone

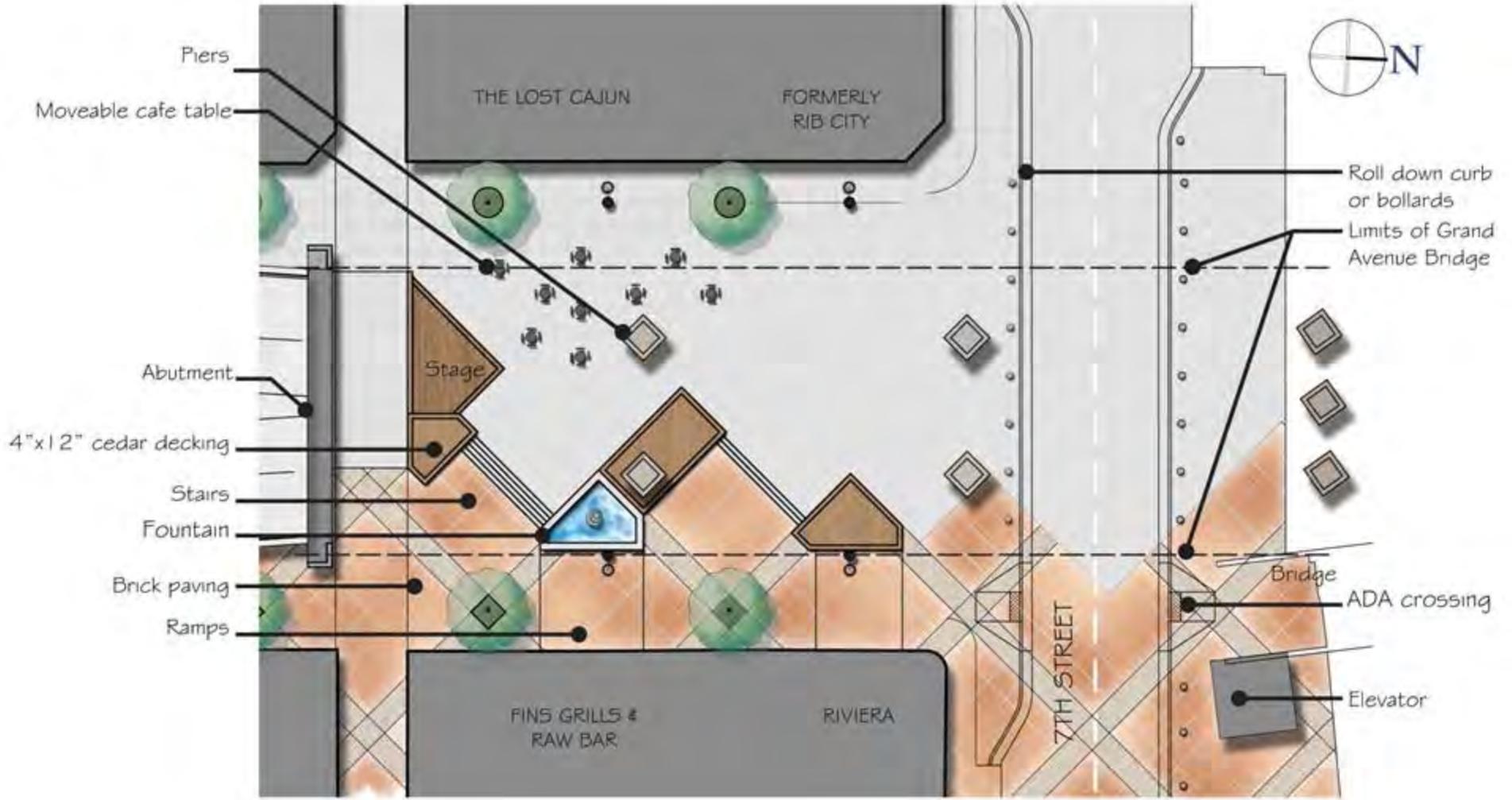


Moveable café furniture to maintain flexibility

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South Side Aesthetics



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South Side Aesthetics



Cedar Bench



Abutment faced with sandstone



Moveable Café furniture
to maintain flexibility

South Side Aesthetics

- Incorporate donor bricks in plaza
 - 384 Donor Bricks will most likely need to be replaced
- How to honor donor names
 - Engrave names on new bricks or flagstone
 - Provide plaque with donor names and the history of the Wing Street transformation to a pedestrian mall
 - Location
 - Plaza paving
 - Abutment wall
 - Piers
 - Monumentation



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South Side Aesthetics



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South Side Aesthetics





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Lighting the Plaza

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South Side Aesthetics

- Existing lighting conditions



- Two lighting options
 - Base lighting
 - Down lights
 - Enhanced Lighting
 - Down lights
 - Linear lights on coffers
 - Wash lighting on abutment wall



Down Lights



Linear Lights on Coffers



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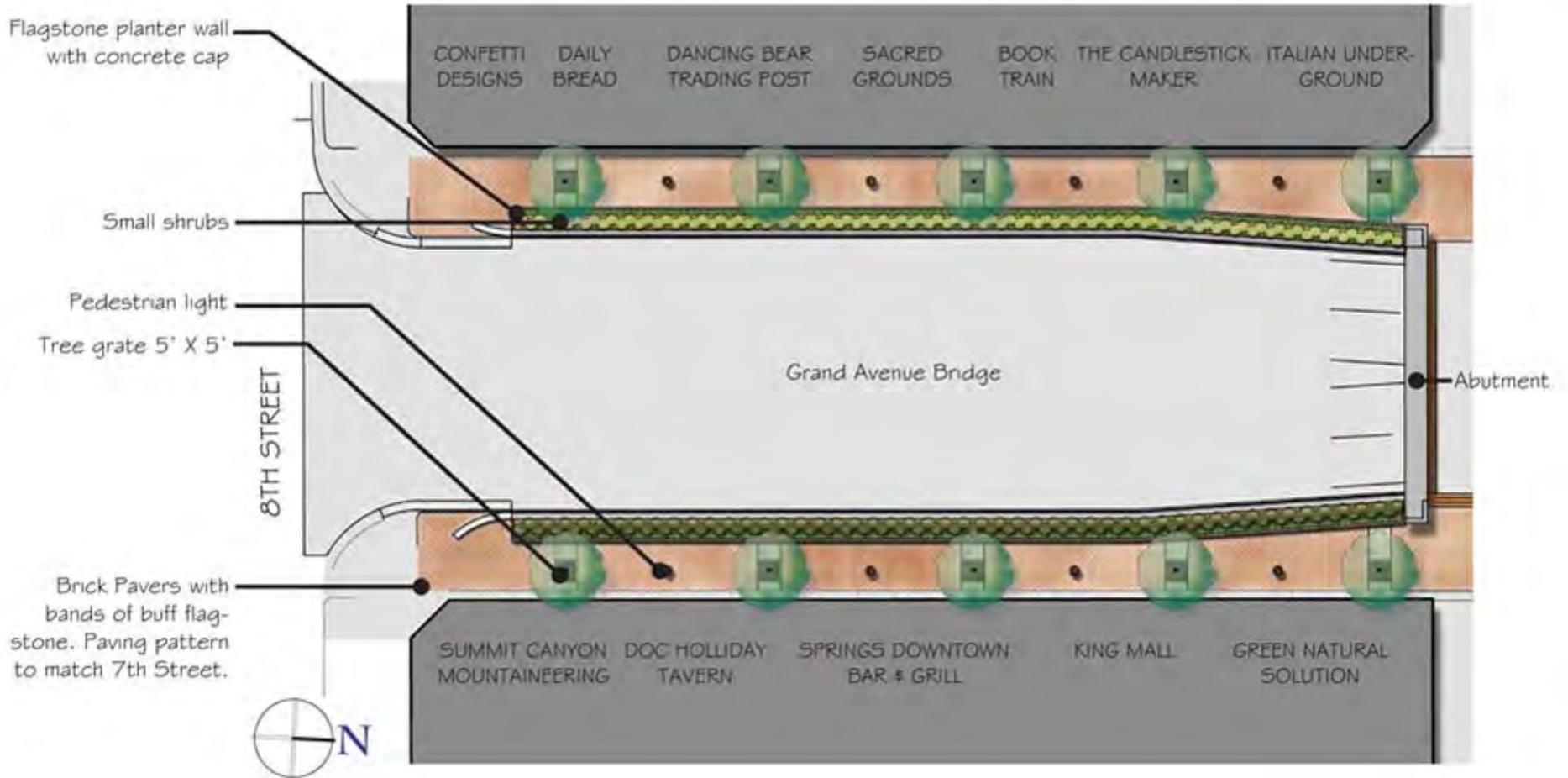
GRAND AVENUE BRIDGE

**Sidewalk Connection
from
7th Street Alley - 8th Street**

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South Side Aesthetics



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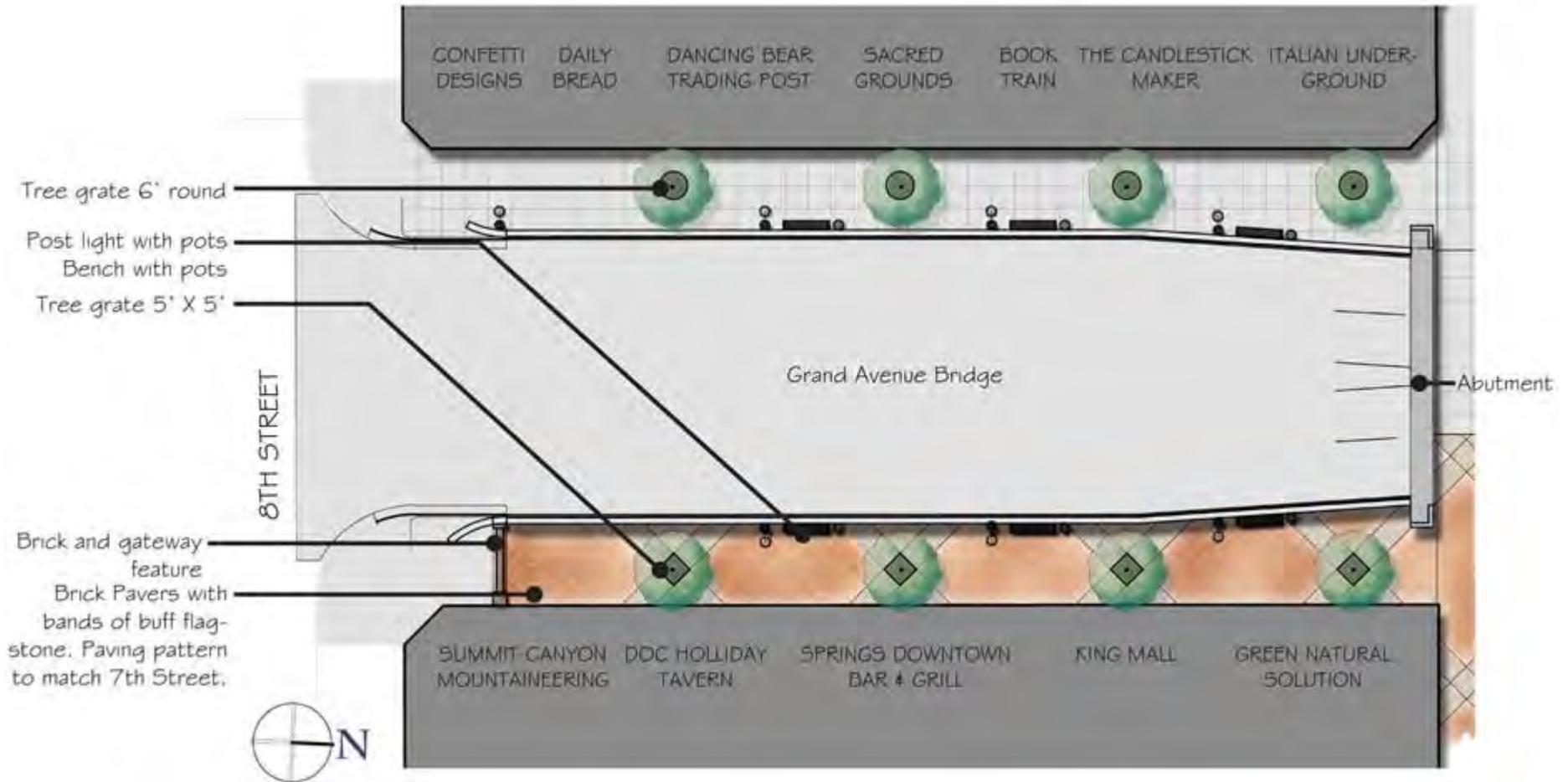
South Side Aesthetics



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South Side Aesthetics



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South Side Aesthetics

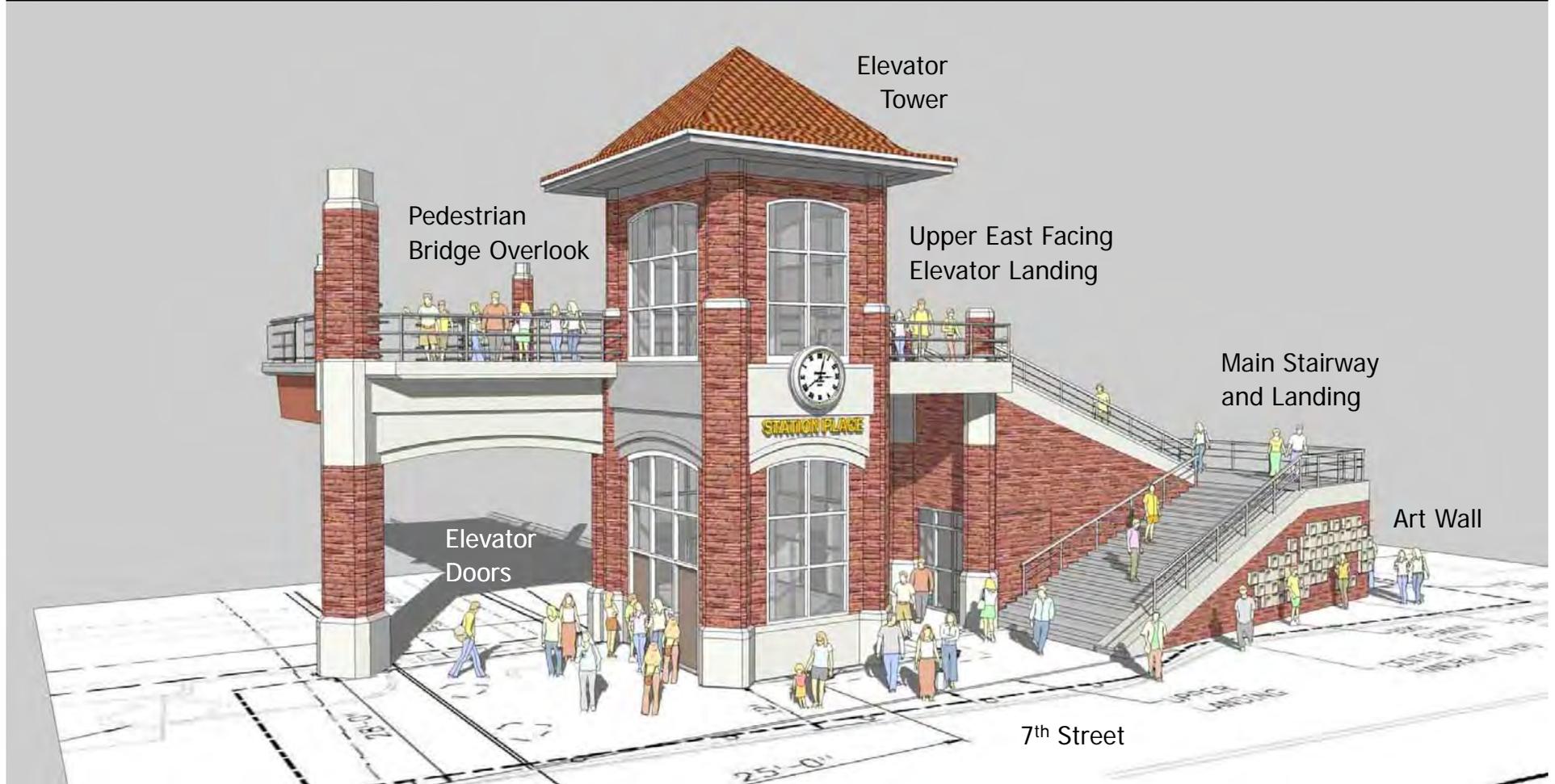


- 4 layouts reviewed
- Option B-a: PWG Selection
 - Two options required the realignment of 7th Street - delays design schedule and adds additional costs.
 - One option required grade break on pedestrian bridge - adds cost and complexity to the design.
 - North-south facing options included a barrier at street access - blocked area for 7th Street crosswalk to former wing street.
 - North-south facing options have upper elevator waiting area and access to stairs in same path – congested circulation.



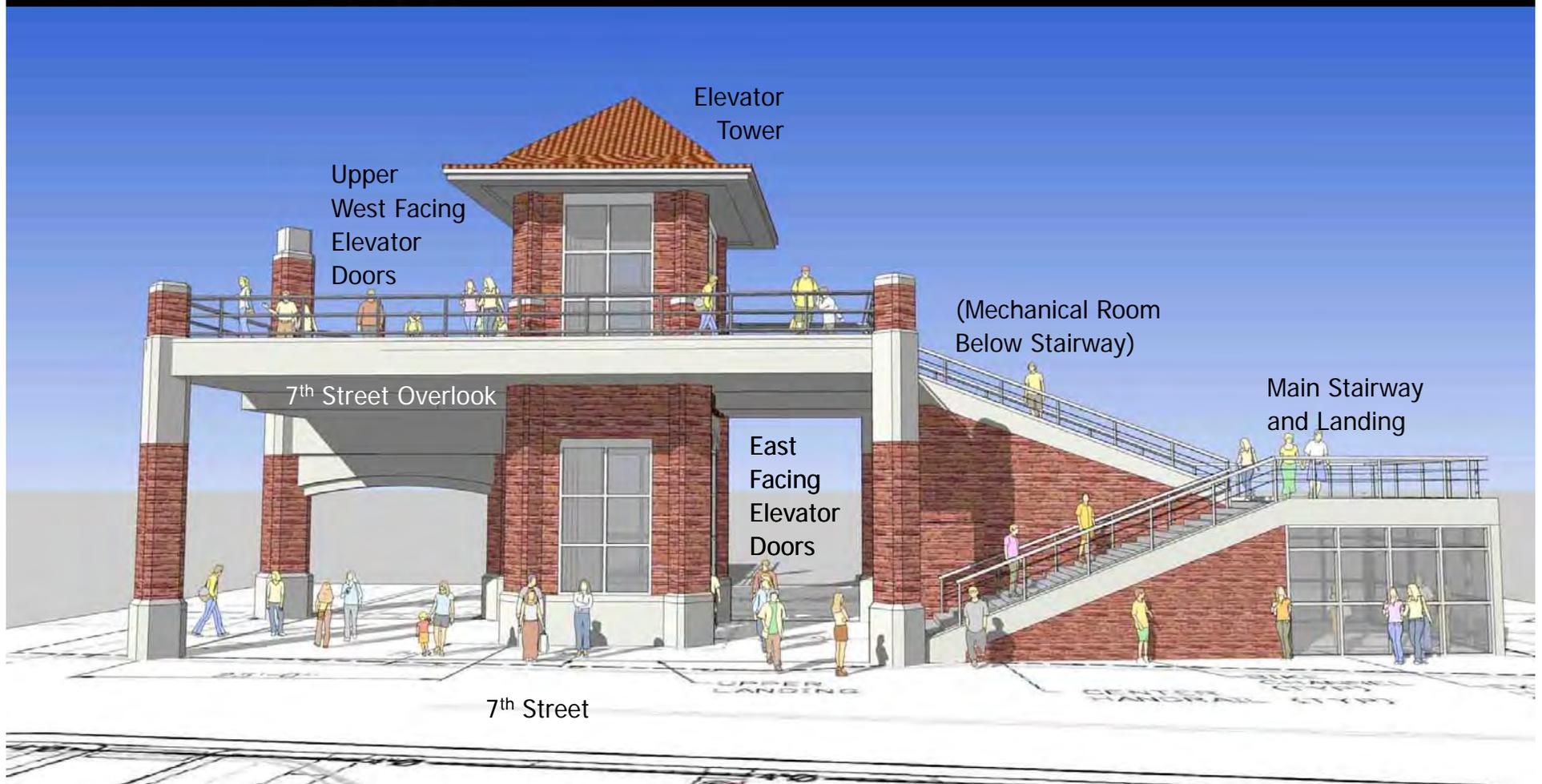
Elevator Option "B-a"

View Looking Northeast



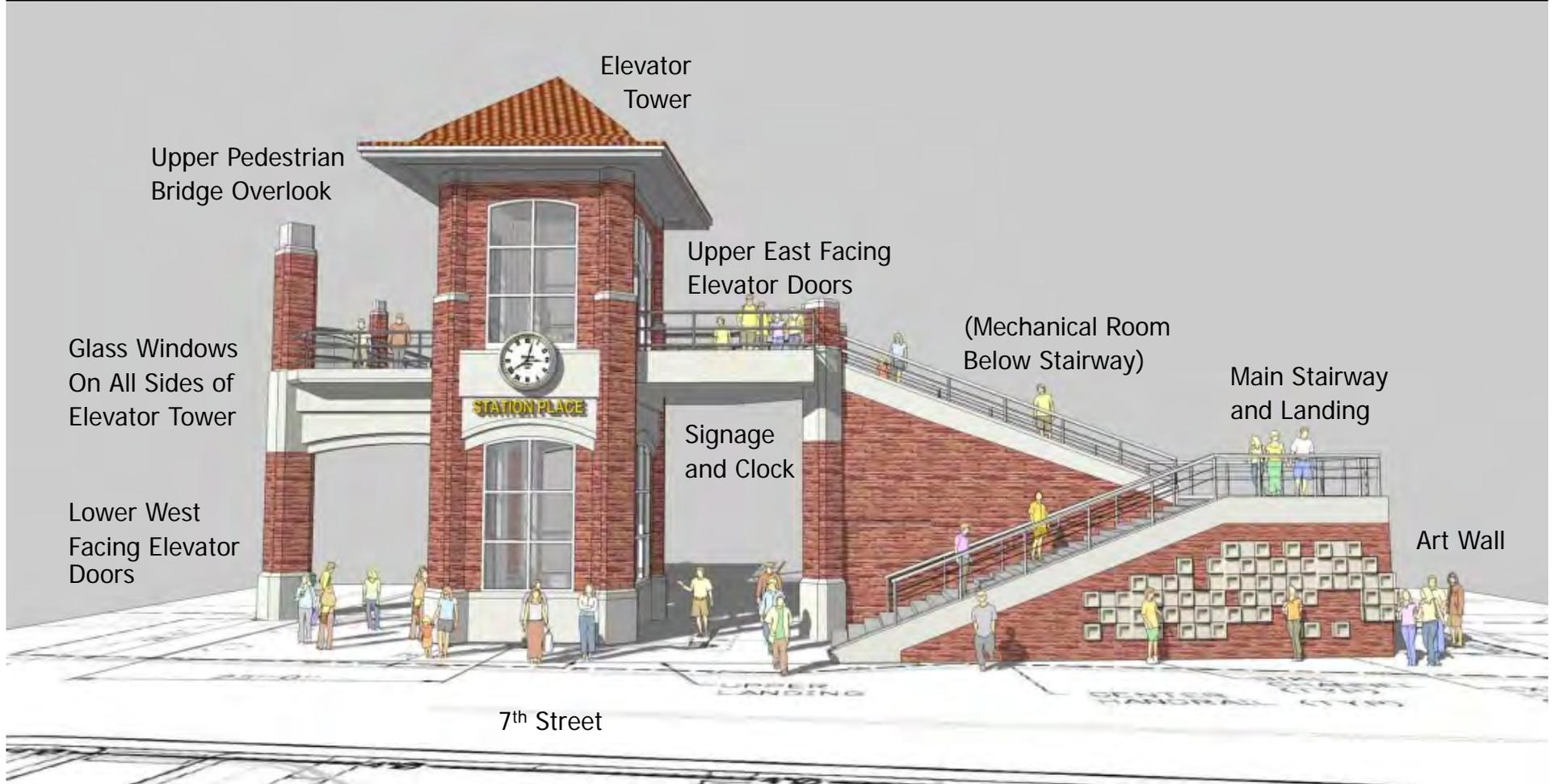
Elevator Option “Modified B-a”

View Looking Northeast



Elevator Option "B-a"

View Looking North



Elevator Option "Modified B-a"

View Looking North

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Elevator Layout



East Elevation



South Elevation



North Elevation



West Elevation

Elevator Option "Modified B-a"

Elevation Studies

Modified Tower Aesthetics

- Reduced stair tread widths
- Reduced mid landing length
- Revised elevator tower roof
- Revised elevator tower glass
- Reviewed opening area under stairs
- Continue to review options of materials and the treatment of concrete on landings

■ Concerns with blocked views



- Restrooms (existing structure is about 12 feet by 24 feet)
- Elevator tower design requires:
 - Mechanical room (Minimum 8 feet by 10 feet)
 - Room for backup generator (Minimum 11 feet by 12 feet)

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Pedestrian Bridge



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Pedestrian Bridge



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Pedestrian Bridge



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Pedestrian Bridge

- Overlooks at all piers, roofs at all overlooks



View H Option 1

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Pedestrian Bridge

- Overlooks at all piers, roofs at all overlooks



View J Option 1

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GRAND AVENUE BRIDGE

Pedestrian Bridge



SH 82

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Pedestrian Bridge

- Overlooks at all piers, arches at all overlooks



View H Option 2

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Pedestrian Bridge

- Overlooks at all piers, arches at all overlooks

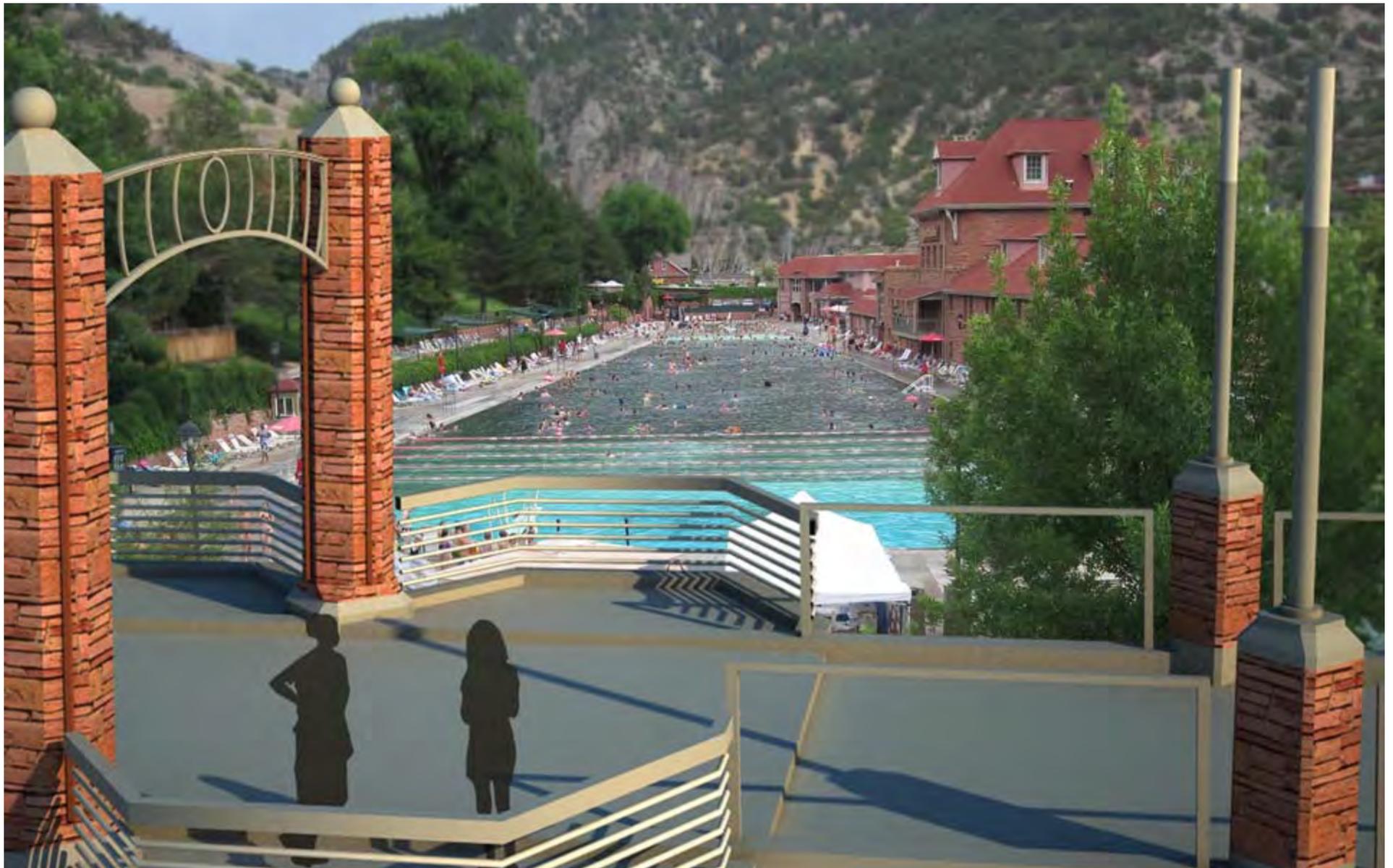


View J Option 2

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Pedestrian Bridge



SH 82

GRAND AVENUE BRIDGE

Pedestrian Bridge

- Overlooks at all piers, roofs at Piers 2 & 5, arches at Piers 3 & 4



View H Option 3

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GRAND AVENUE BRIDGE

Pedestrian Bridge

- Overlooks at all Piers, roofs at Piers 2 & 5, arches at Piers 3 & 4



View J Option 3

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Pedestrian Bridge



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Pedestrian Bridge

■ Revised railing



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Pedestrian Bridge



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Pedestrian Bridge

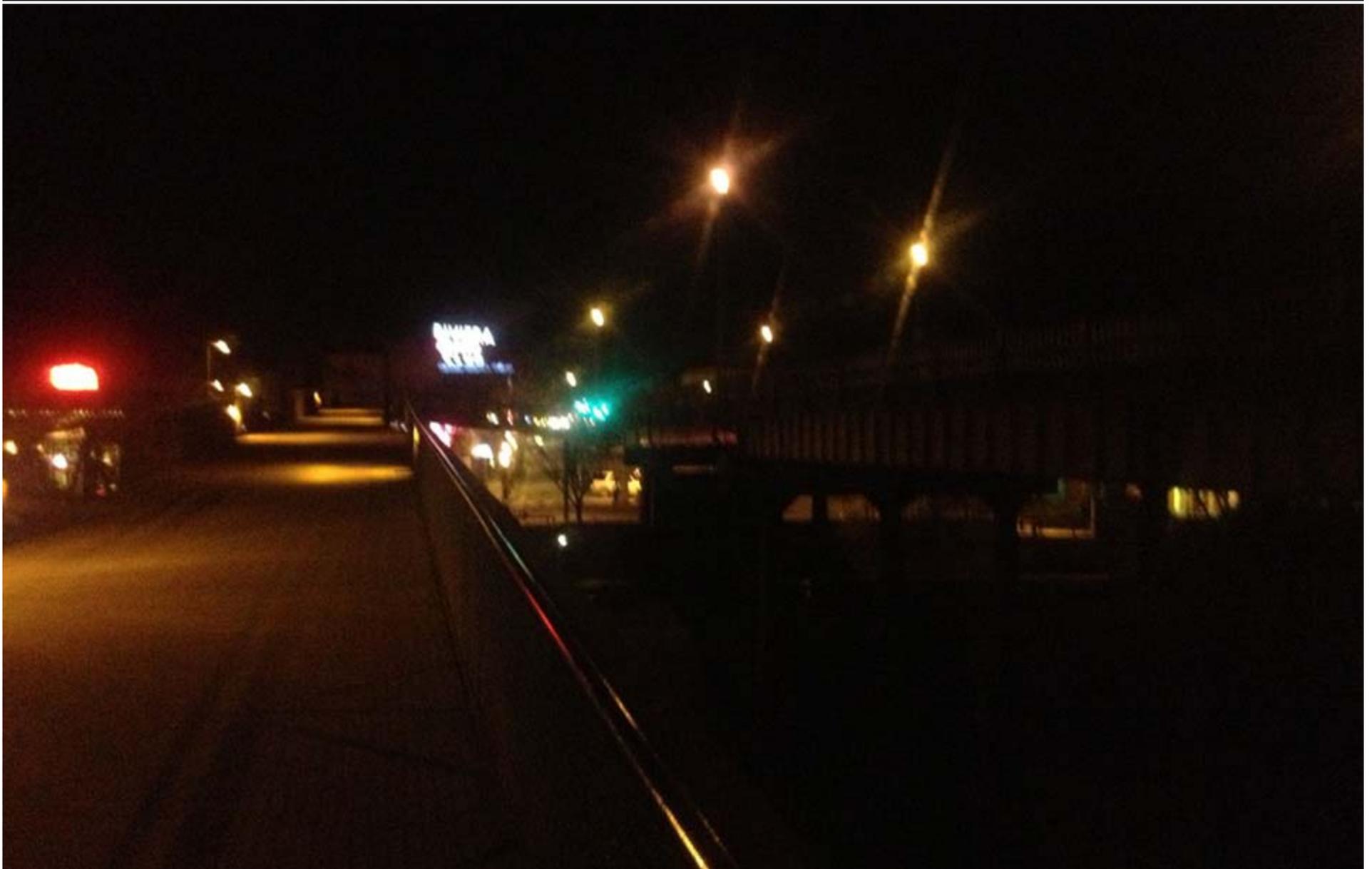


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Pedestrian Bridge



SH 82

GRAND AVENUE BRIDGE



Pedestrian Bridge





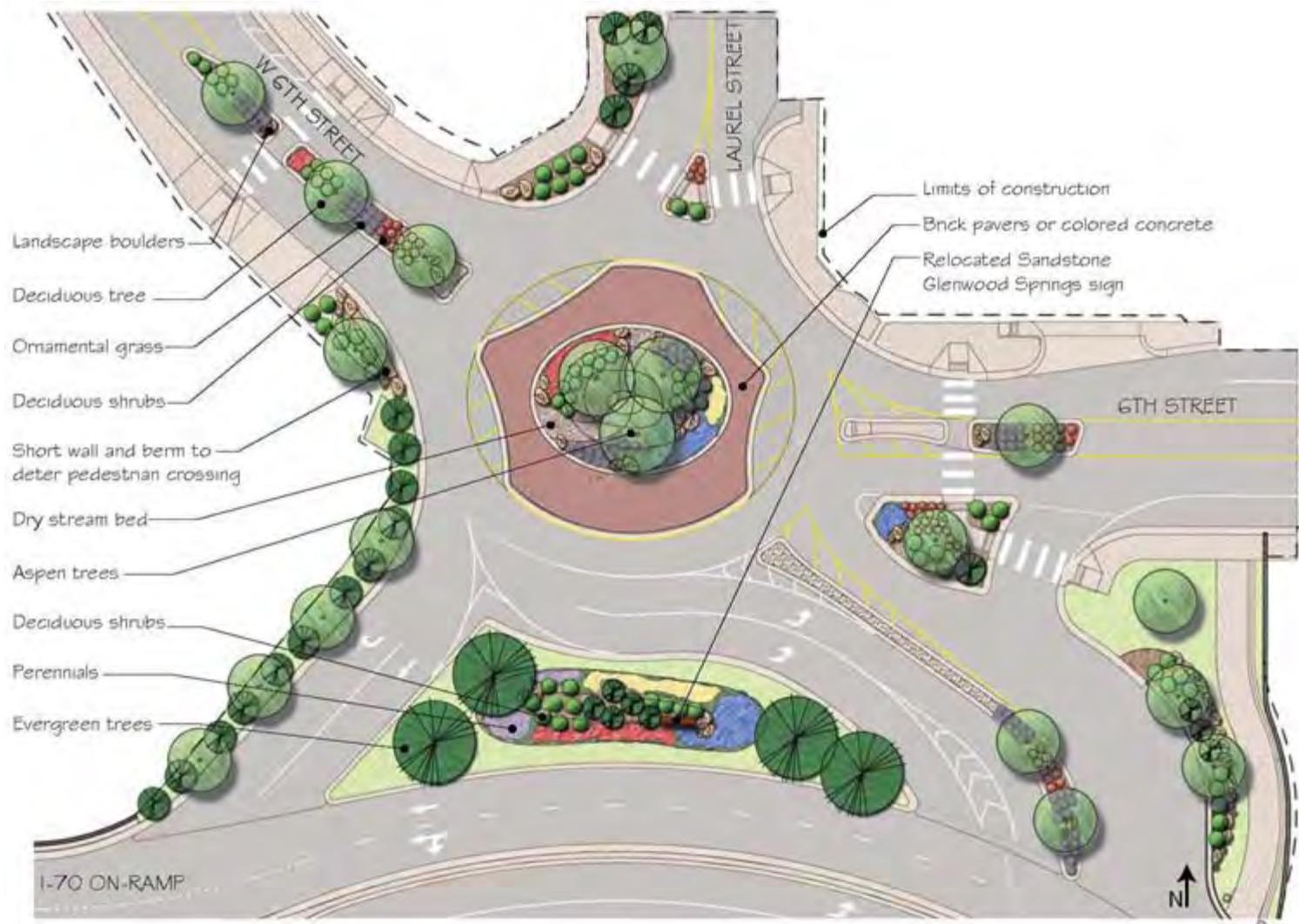
North Side Landscape

- Three landscape options presented at March meeting
 - Traditional
 - Xeric
 - Native/Organic

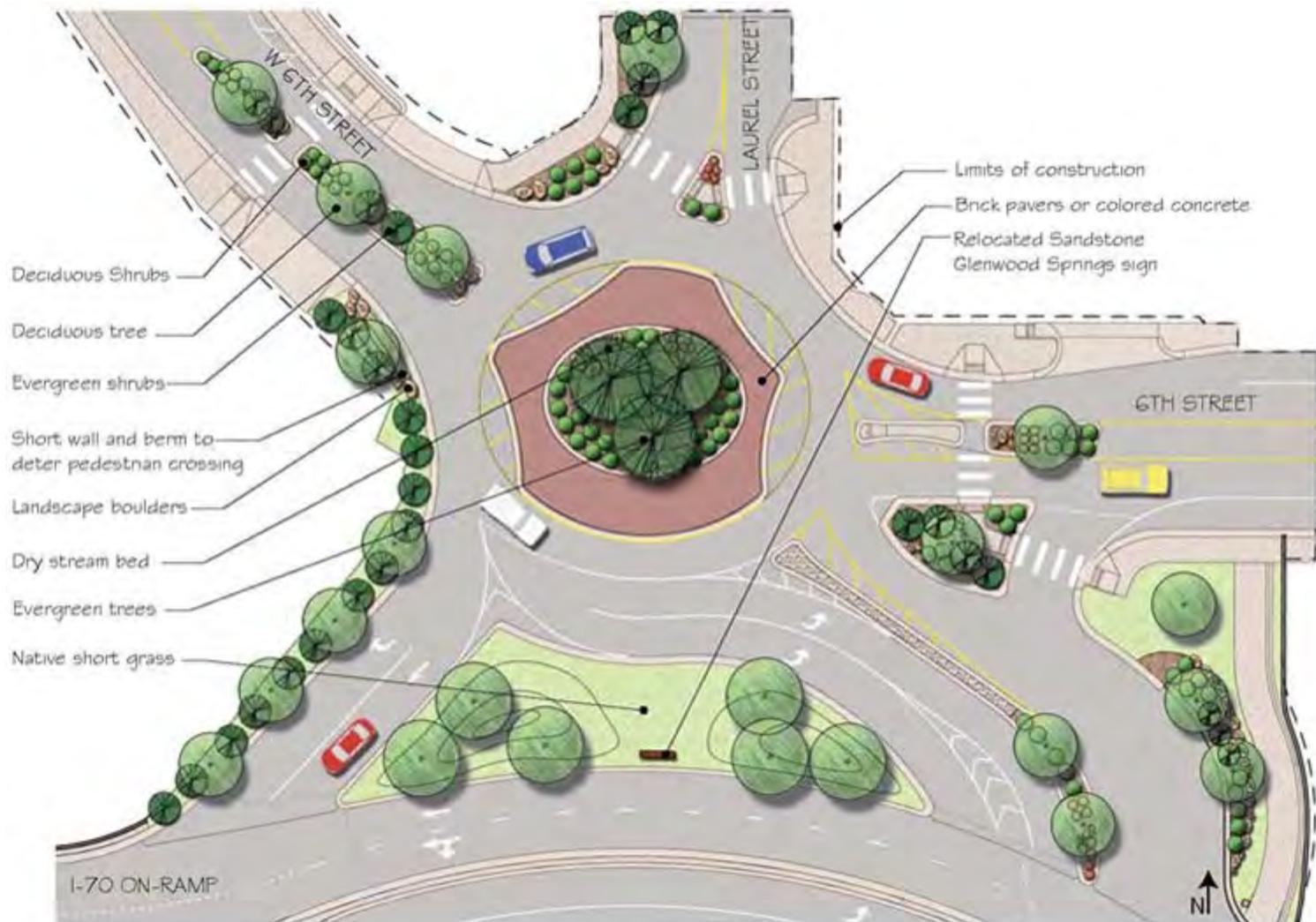
- Moving forward with Native/Organic

North Side Landscape

■ Native - higher maintenance option



■ Native - lower maintenance option

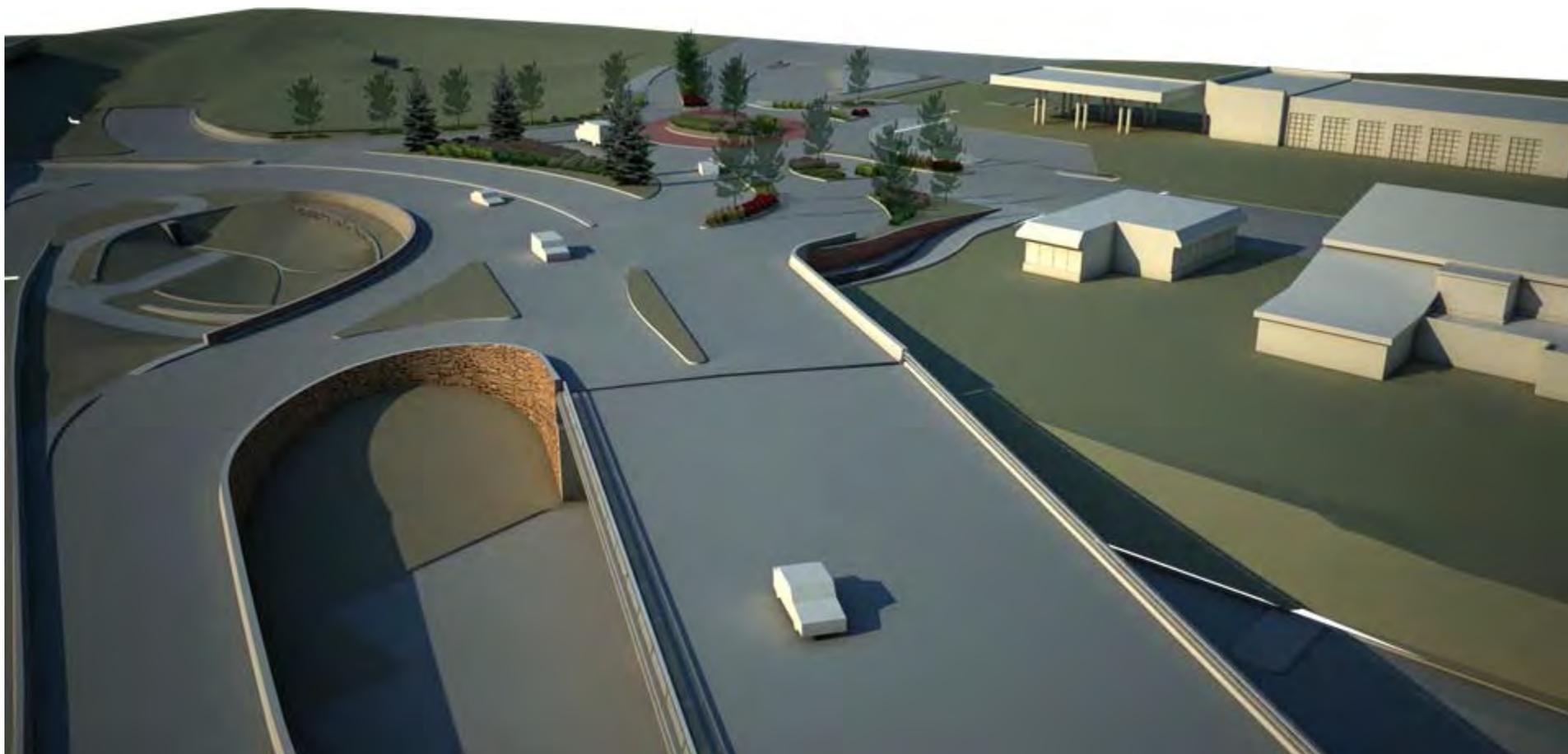


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North Side Landscape

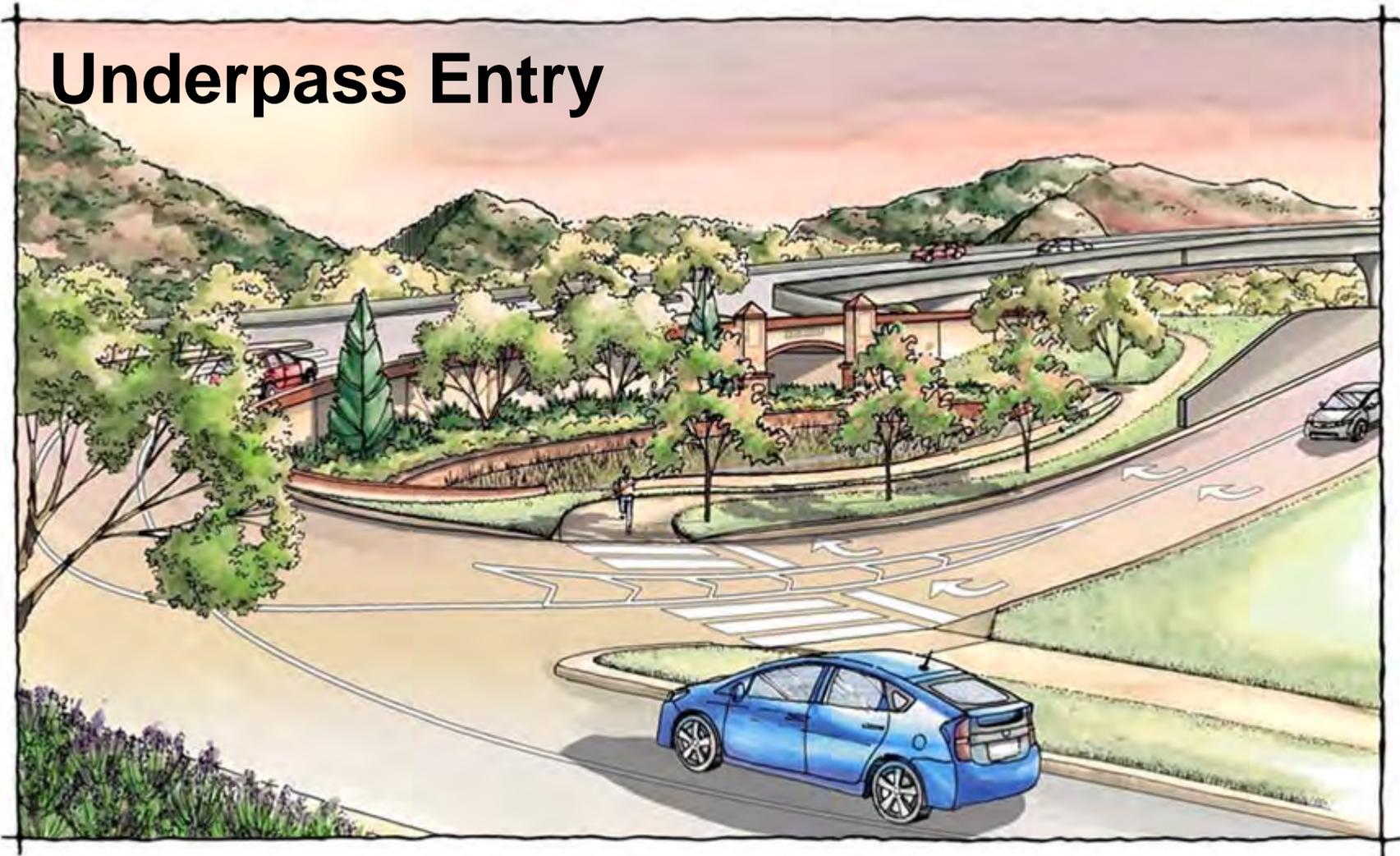


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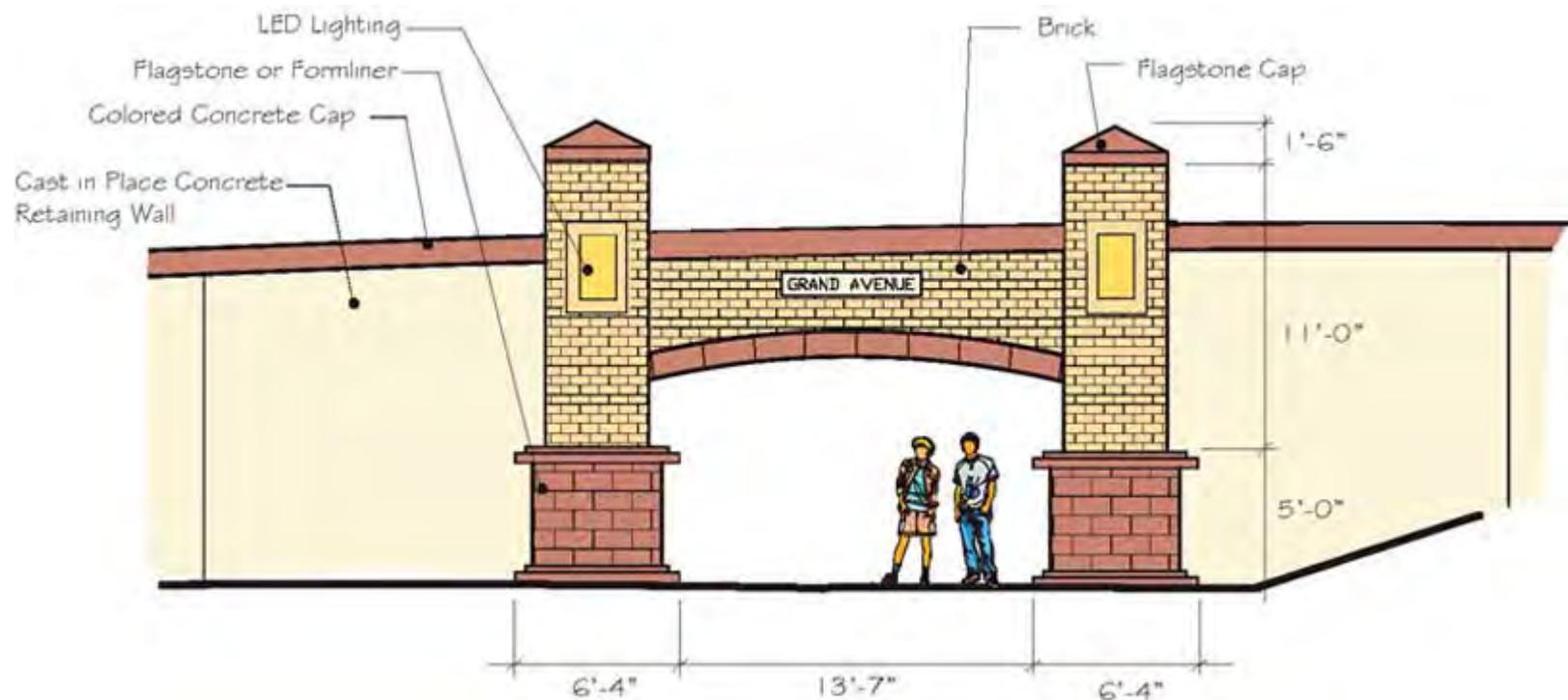
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North Side Underpass

Underpass Entry



- Pedestrian/bicycle underpass - Historic Influence
 - Monuments designed to reflect the architecture of Glenwood Springs through color and materials
 - Monuments have high end finishes
 - Enhancement



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North Side Underpass

■ Pedestrian/bicycle underpass

- 121' Long
- 16' Wide
- 8'-9' Clearance inside the underpass



- Underpass
 - Form liner
 - Lithichrome Chemstain



Lithichrome
Chemstain



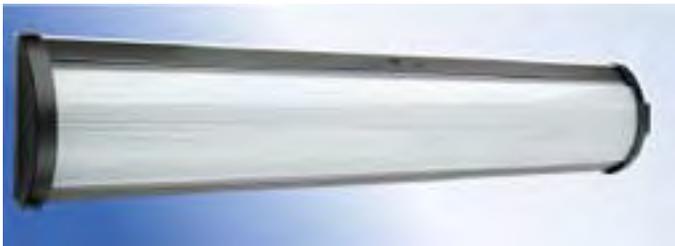
Sandblast form liner



Wood plank/ mining form liner

■ Underpass lighting

- Lifetime vandal-proof guarantee
- LED white light high color rendering
- Low energy, highly efficient, long life
- Bi-level or dimmable operation
- Base cost with low maintenance



- Located at base of ceiling



- Located at eye level
- Provides better vertical illumination (light on people's faces)

Retaining Walls

21 walls included in the Grand Avenue Project

<p>Wall A</p> <ul style="list-style-type: none"> - Retains Village Inn property - 2'-4" tall, 140' length 	<p>Wall I</p> <ul style="list-style-type: none"> - Retains North River Street - 1'-18" tall
<p>Wall C</p> <ul style="list-style-type: none"> - Retains Grand Avenue - Terraced wall - 3' tall 	<p>Wall J-a</p> <ul style="list-style-type: none"> - Retains private properties - 11' tall
<p>Wall D</p> <ul style="list-style-type: none"> - Retains Grand Avenue - 1'-6"-6" tall 	<p>Wall J-b</p> <ul style="list-style-type: none"> - Terraced wall around pedestrian bridge pier - Height unknown
<p>Wall E</p> <ul style="list-style-type: none"> - Retains Grand Avenue - 2'-9" tall, 154' length - Guardrail Type 7 on type wall 	<p>Wall J-c</p> <ul style="list-style-type: none"> - Terraced wall around pedestrian bridge pier - Height unknown
<p>Wall F</p> <ul style="list-style-type: none"> - Retains Grand Avenue - 10'-6" tall, 228' length - Guardrail Type 7 on type wall 	<p>Wall M</p> <ul style="list-style-type: none"> - Retains I-70 - 6' tall, 561' length
<p>Wall Ga</p> <ul style="list-style-type: none"> - Terraced Wall - 2' tall, 193' length 	<p>Wall N</p> <ul style="list-style-type: none"> - Seat walls
<p>Wall Gb</p> <ul style="list-style-type: none"> - Retains pedestrian walkway in WQ pond - 2' tall 	<p>Walls O and P</p> <ul style="list-style-type: none"> - Curb around inlets
<p>Wall Gc</p> <ul style="list-style-type: none"> - Retains pedestrian walkway in WQ pond - 3' tall, 62' length 	<p>Wall Q</p> <ul style="list-style-type: none"> - Retains Grand Ave - 10'-6" tall, 206' length
<p>Wall Ha</p> <ul style="list-style-type: none"> - Retains North River Street - 6'-10" tall, 371' length - Guardrail Type 7 on type wall 	<p>Wall R</p> <ul style="list-style-type: none"> - Retains Grand Ave - 12'-6" tall
<p>Wall Hb</p> <ul style="list-style-type: none"> - Retains I-70 - 3'-7" tall, 123' length 	<p>Wall S</p> <ul style="list-style-type: none"> - Retains plaza area north of 7th at clock tower - Height unknown



North Side Walls

- Walls on the north side
 - Stone wall- natural



- Walls on the north side
 - Stone wall or stone form liner



- Walls on the south side
 - Stone wall or stone form liner



- Walls on the north side
 - Stone form liner



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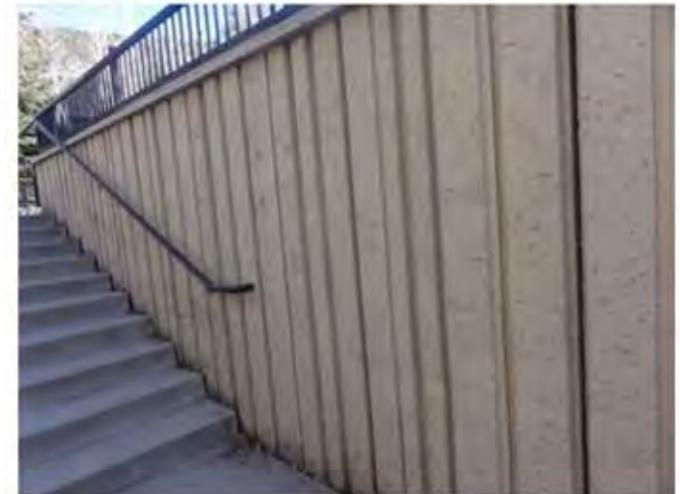
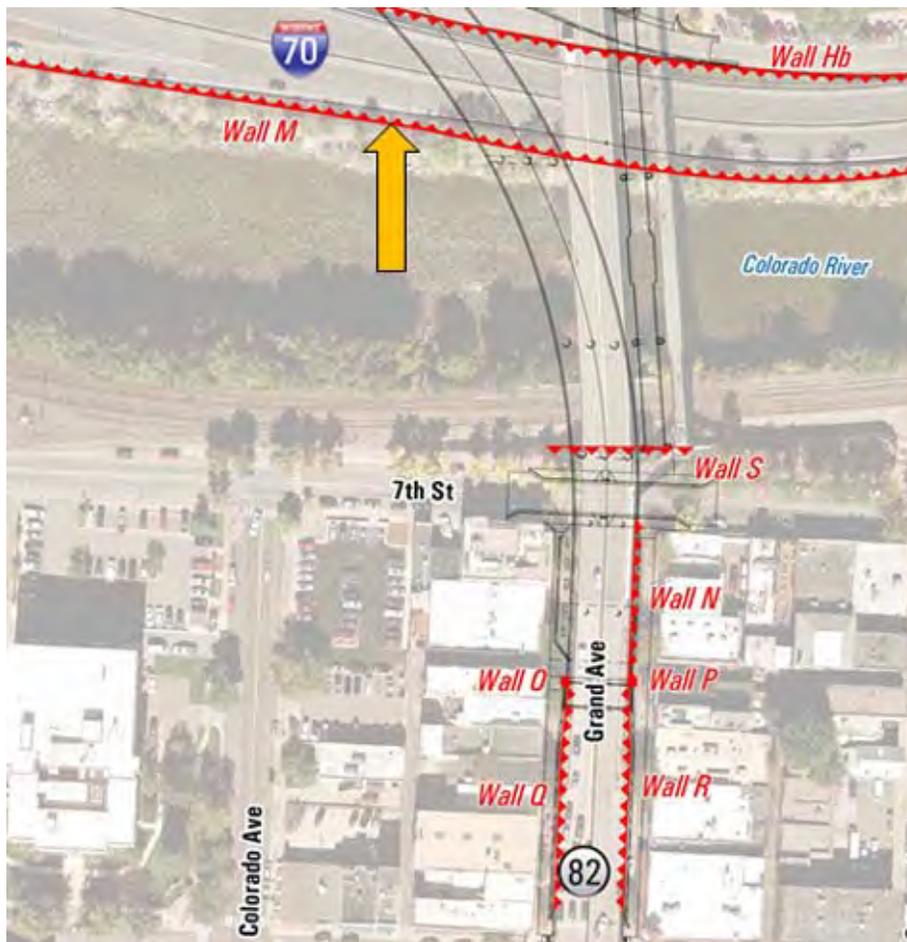
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North Side Walls

- Walls on the north side
 - Glenwood Canyon form liner or sandblast

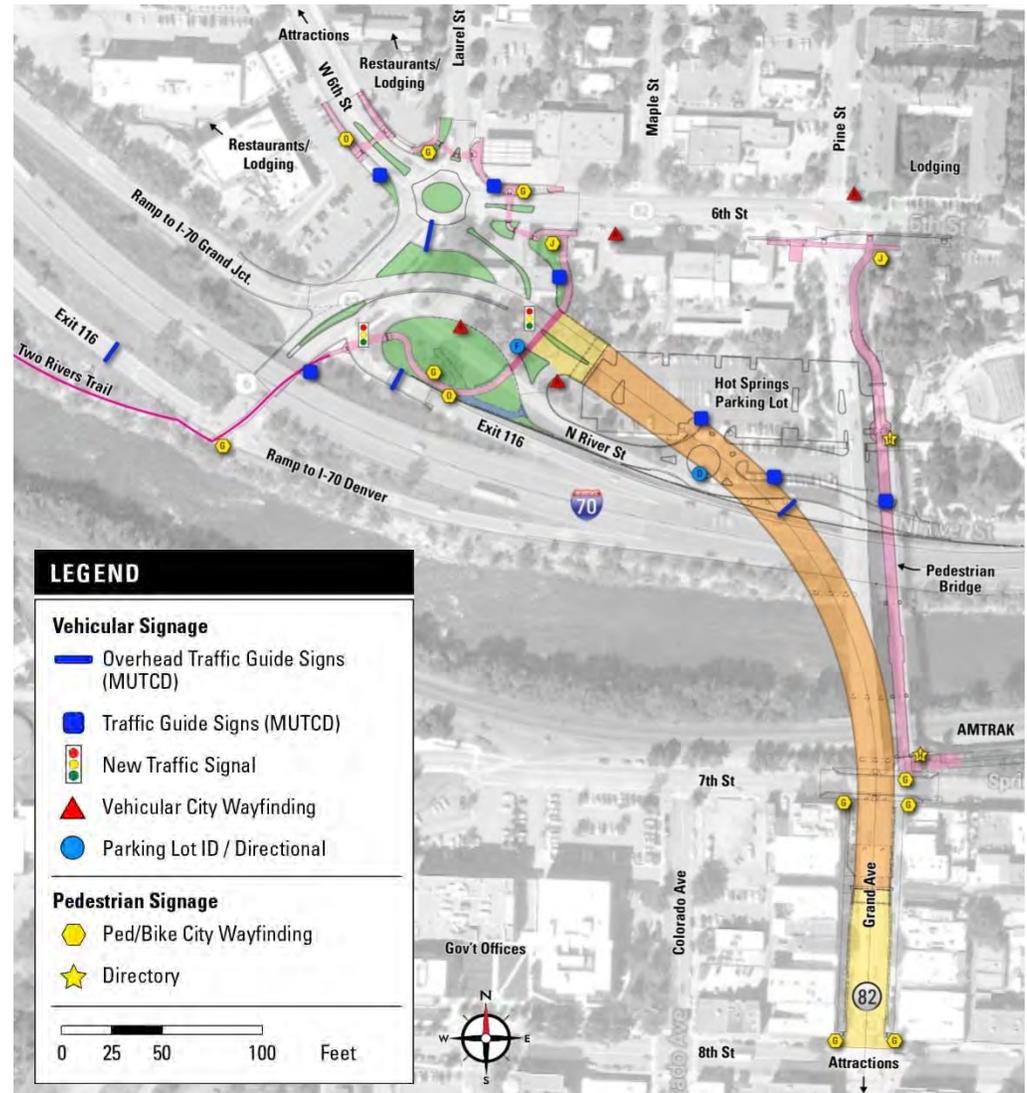


- Walls on the south side
 - Glenwood Canyon form liner or sandblast



Wayfinding

- Traffic guide signs (MUTCD)
- City wayfinding / parking
- Pedestrian / bicycle
- Wayfinding



■ Traffic guide signs (MUTCD)

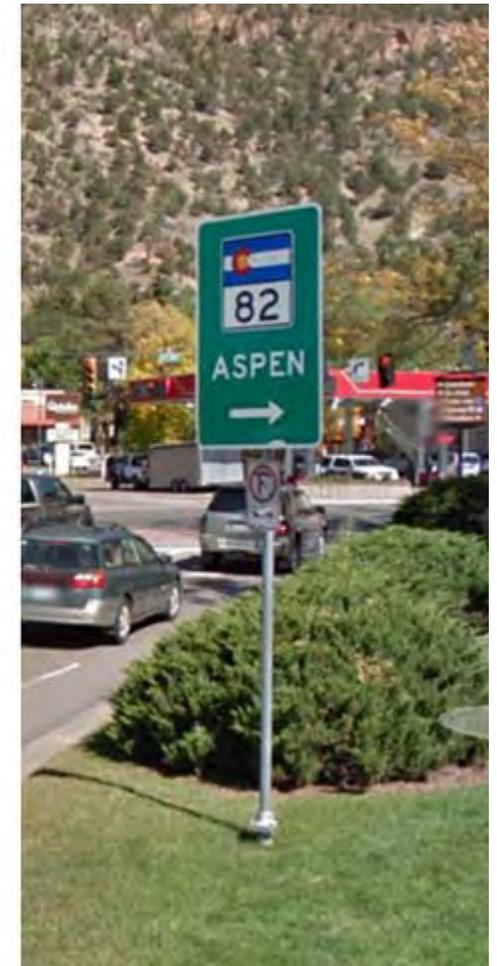
SIGN CONTENT

Routes

- I-70 Denver
- I-70 Grand Junction
- Hwy 82 / Grand Ave.
- 6th St

Destinations

- Glenwood Springs
- Aspen
- Denver
- Ski Areas
- Parking
- Lodging
- Attractions



■ City vehicular signage

SIGN CONTENT

Routes

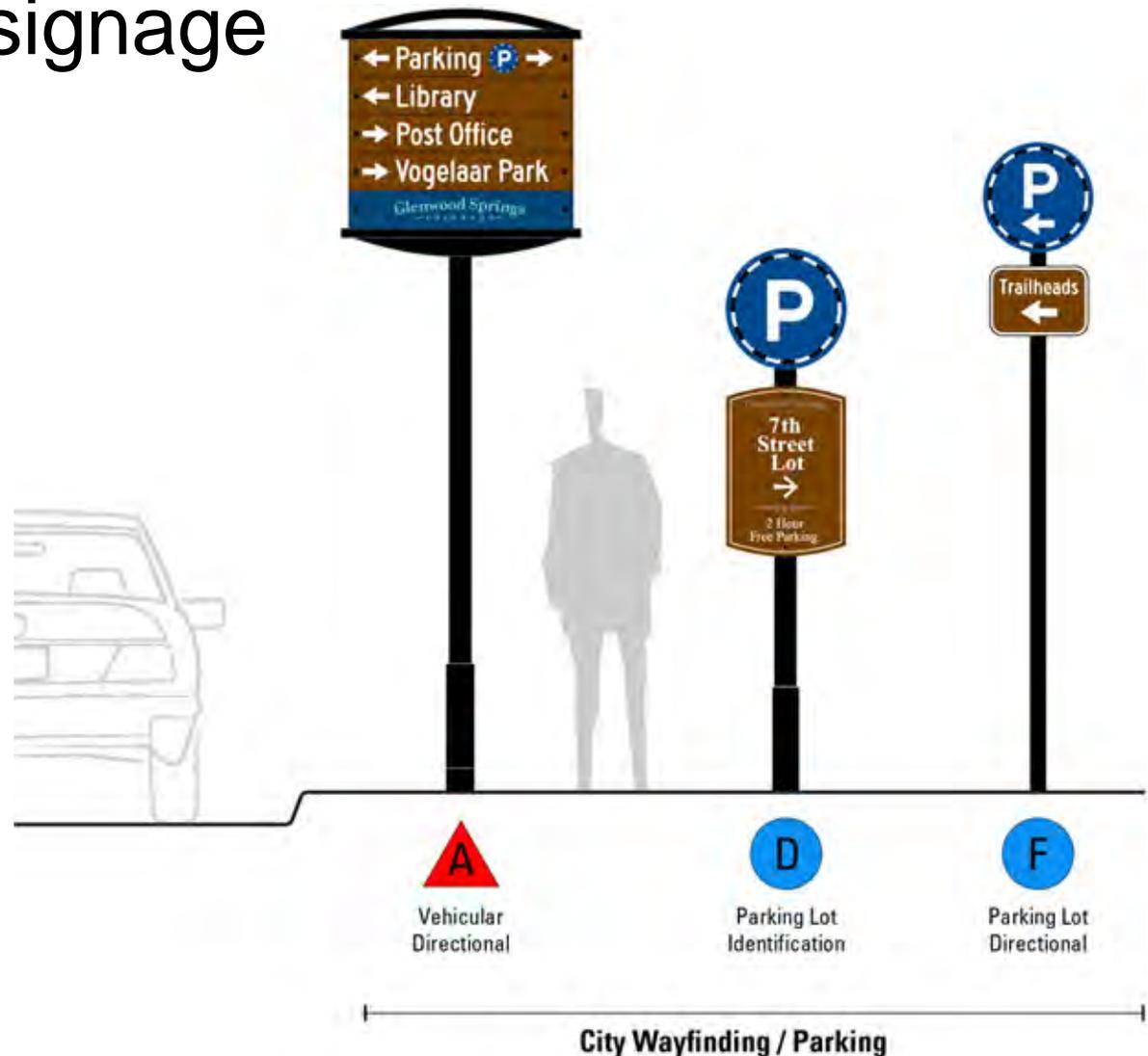
- I-70 Denver / Grand Junction
- Hwy 82 / Grand Ave.
- W. 6th St.

Destinations

- Visitor Info
- Parking
- Amtrak
- Hot Springs
- Trailheads
- Restaurants/Lodging
- Attractions

Parks & Trailheads

- Two Rivers Park
- Vogelaar Park
- Centennial Park
- Two Rivers Trail
- River Trail



■ Pedestrian/bicyclist signage

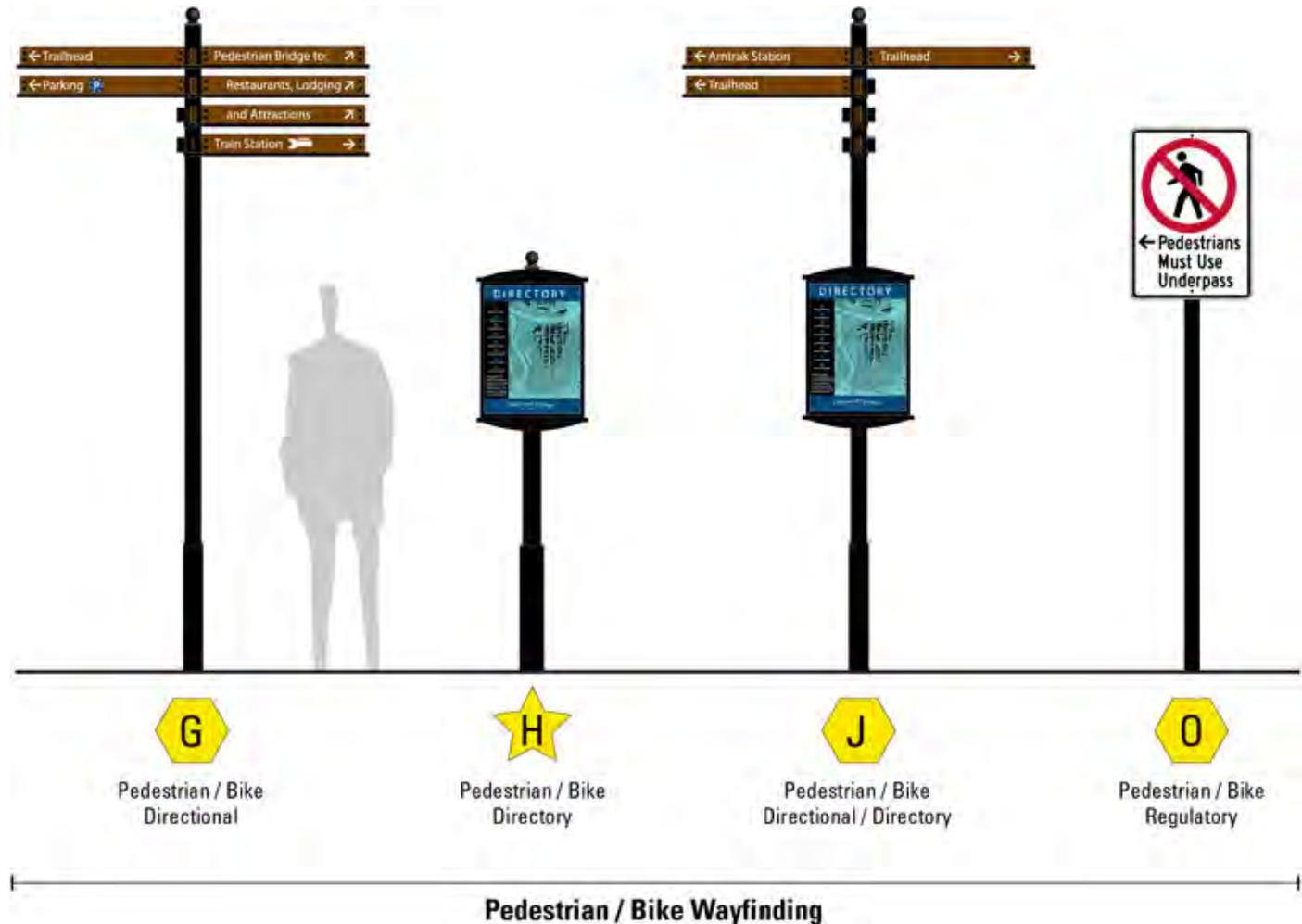
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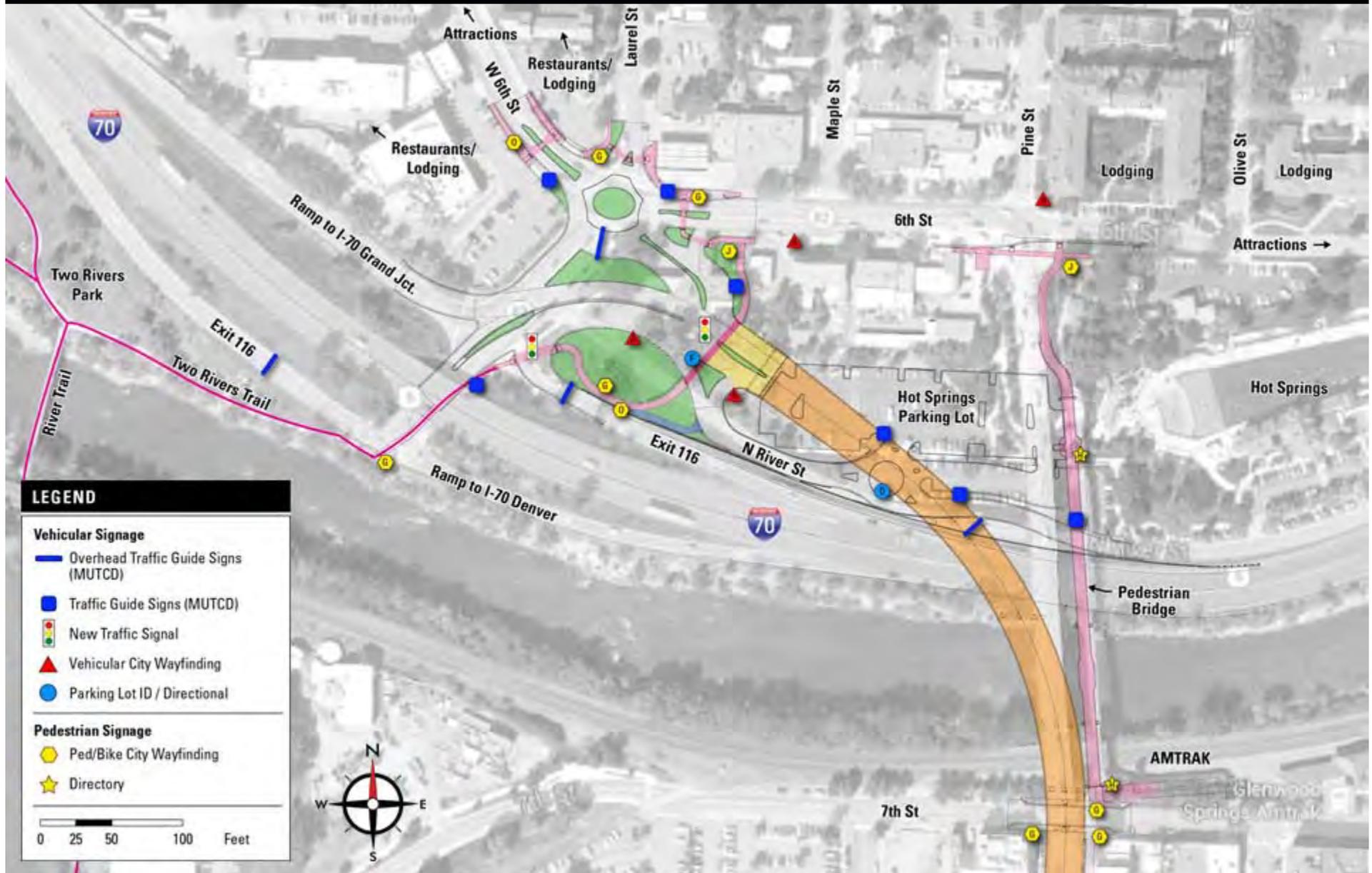
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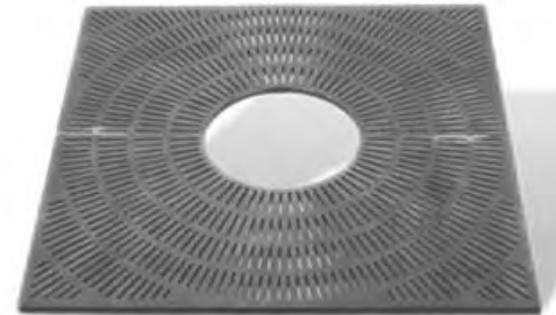


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North Side Aesthetics

- Streetscape
 - Furniture
 - Lighting



- City Council package following ITF and SWG/public input
- Additional revisions based on input
- PWG meeting on April 21
 - Decisions about what to incorporate into design documents
- Communication of PWG decisions and what is in design
 - Press releases
 - Website
 - Exhibits
 - Physical model updated – at City Hall
 - Presentations to groups as requested
- June - 60% design documents