



SANTA RITA CONNECTION

Chris Ortiz y Pino – Project Manager - Siting, Outreach, & Engagement

January 2026

Agenda

-  1 How Power Gets to you

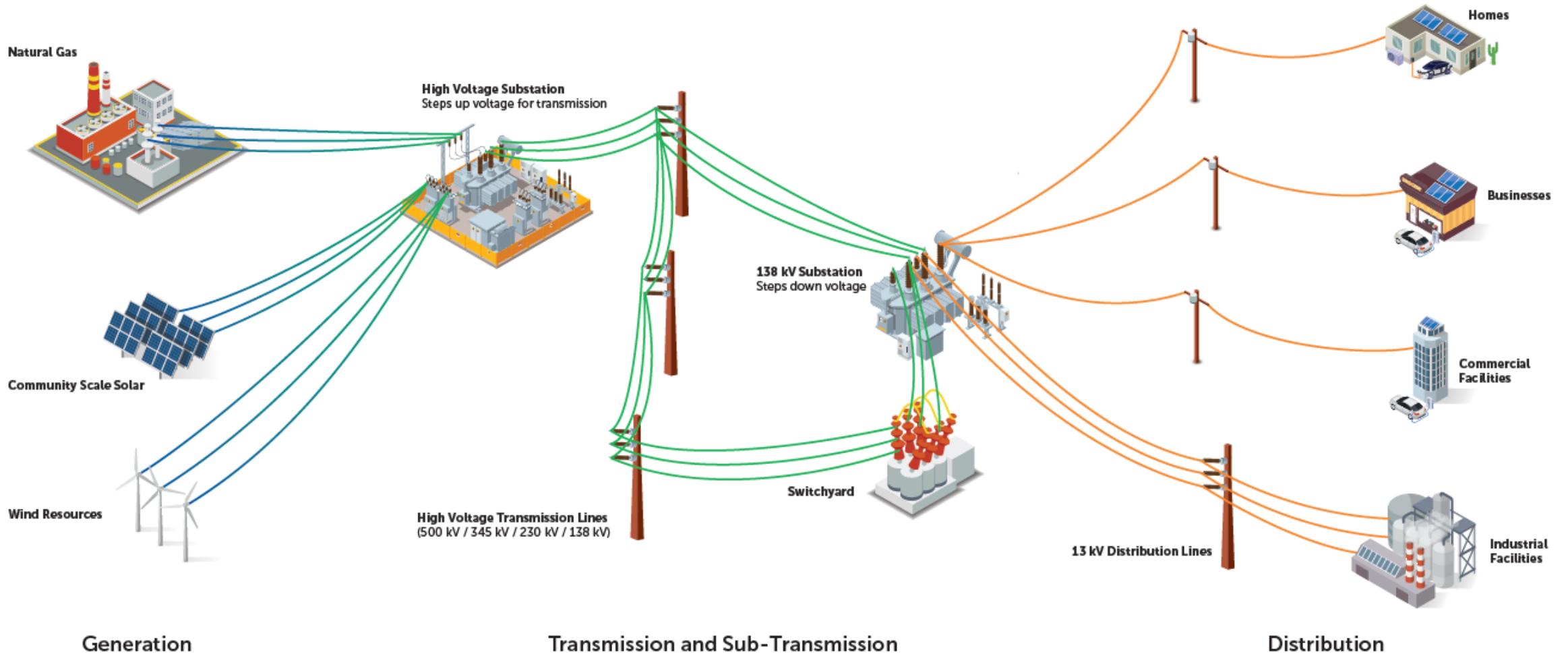
-  2 Project Description, Purpose, and Need

-  3 Overview of Planning and Siting Process

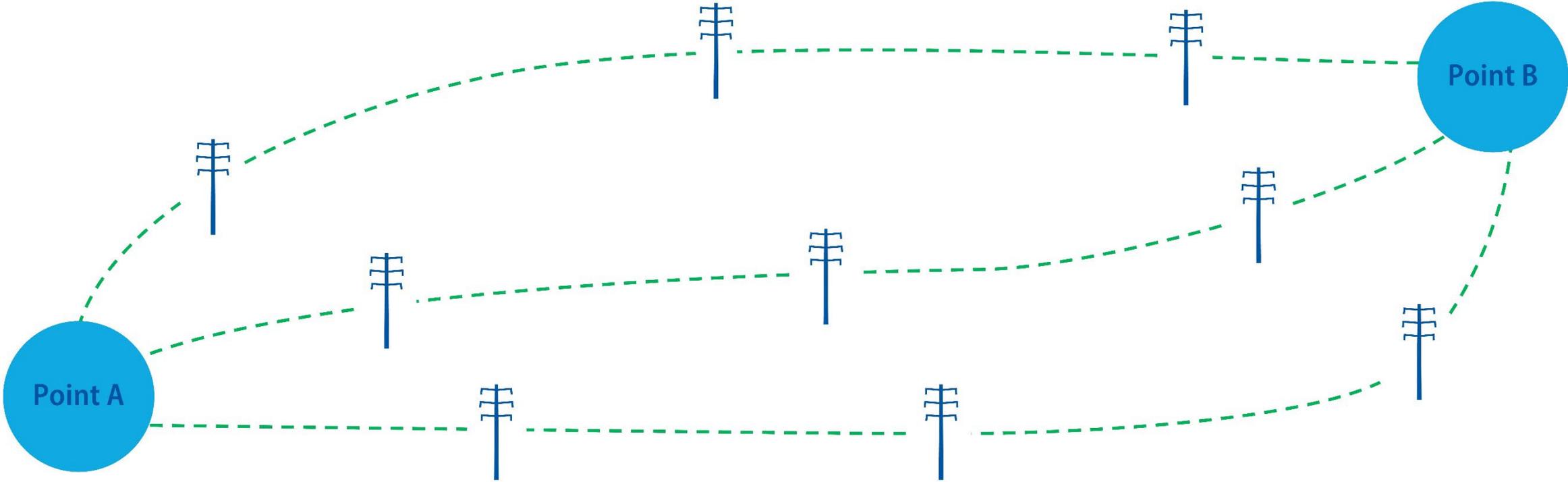
-  4 Suitability Assessment – Refined Segments

-  5 Required Approvals & Timeline

How Power Gets to You



What is Siting?

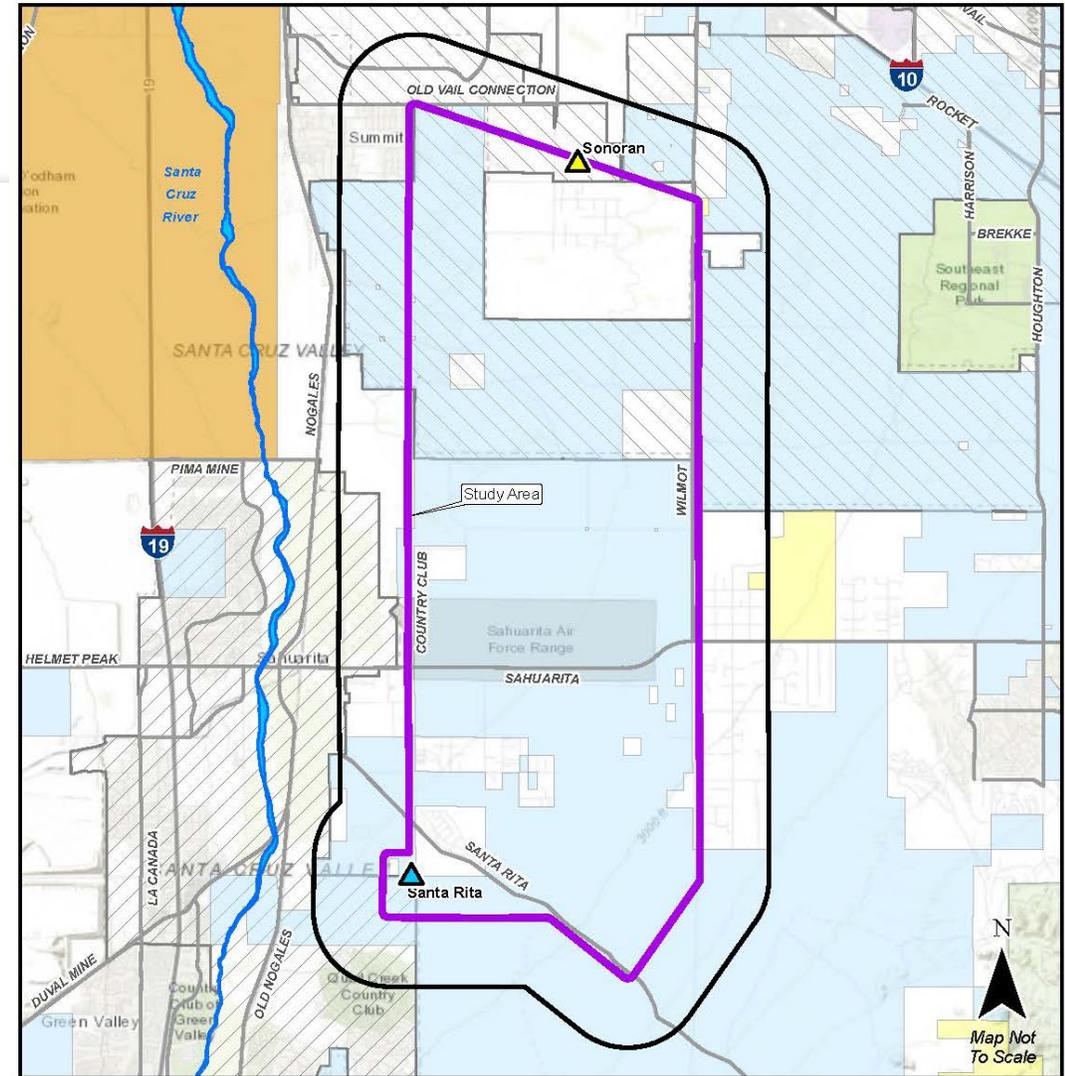


Santa Rita Connection

A new transmission line from the existing Sonoran Substation to the planned Santa Rita Substation.

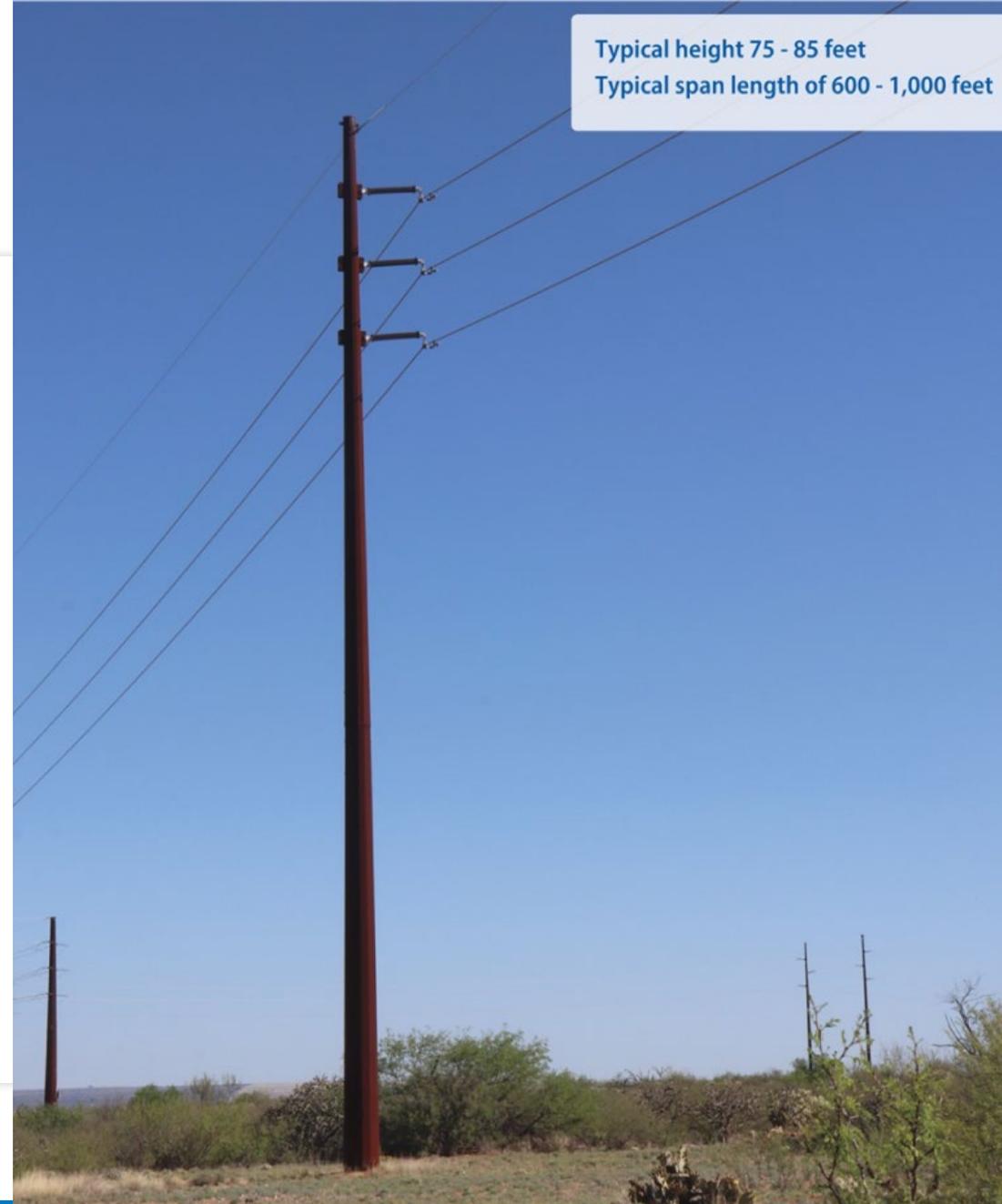
Purpose and Need

- To accommodate future load growth in the area south of Tucson
- Enhance the regional grid providing redundancy and stability
- Allow for the retirement of older 46-kV substation and removal of temporary substation at La Villita Rd and Sahuarita Rd



Example Pole Structure

- Tubular
- Weathering Steel
- Monopoles



Typical height 75 - 85 feet
Typical span length of 600 - 1,000 feet

Planning & Siting Process Flowchart

Phase 1: Pre-Analysis

- Conduct Field Visits
- Develop Study Area
- Identify Opportunities and Constraints
- Conduct Public and Stakeholder Outreach
- Develop Preliminary Segments

Phase 2: Data Inventory

- Conduct Research and Collect Data

Phase 3: Suitability Assessment

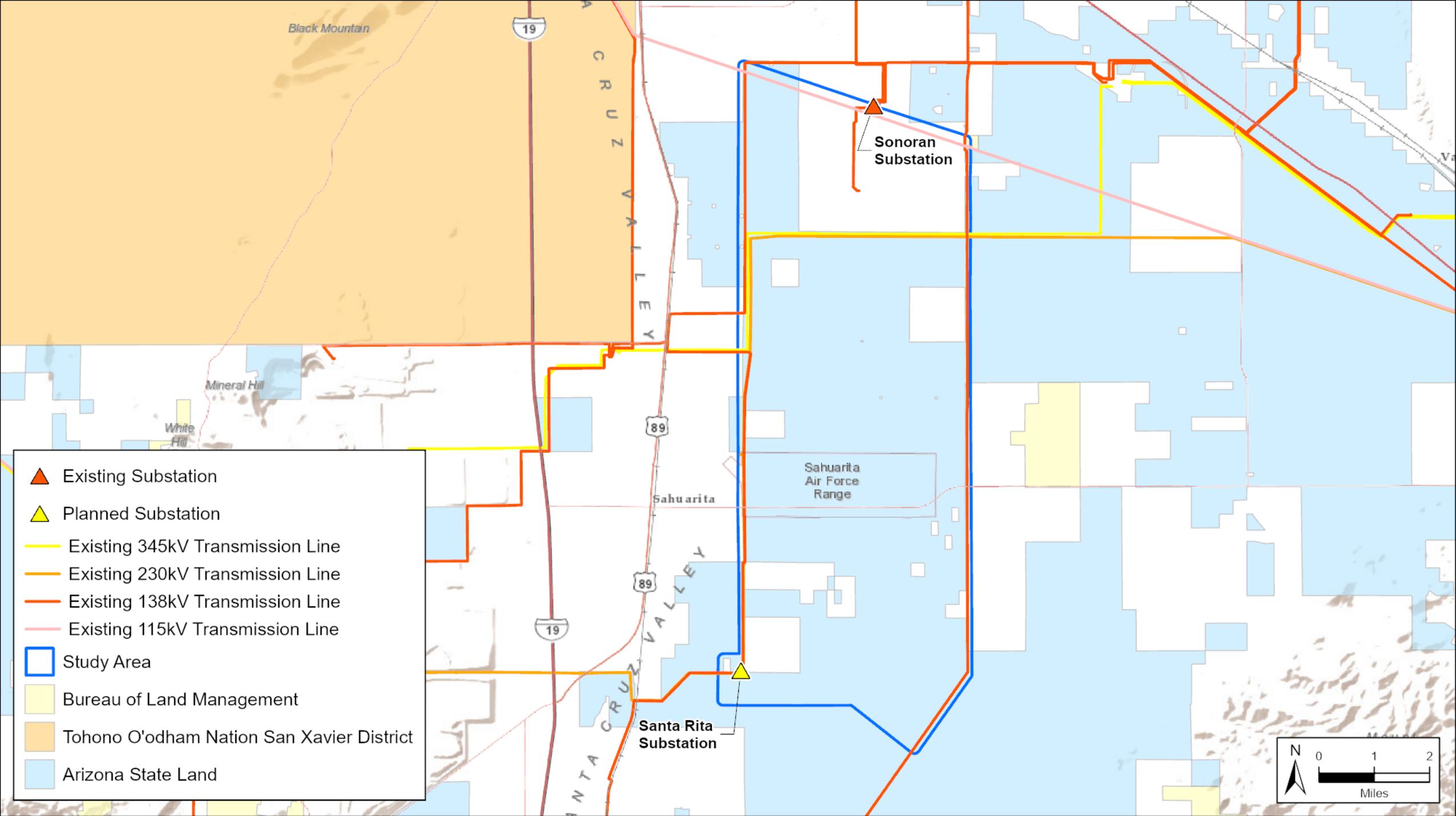
- Develop Suitability Models
- Conduct Suitability Assessment
- Field Review
- Refine Segments
- Public and Stakeholder Outreach

Phase 4: Compatibility Analysis

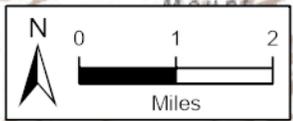
- Conduct Compatibility Analysis
- Develop Route Alternatives
- Field Review

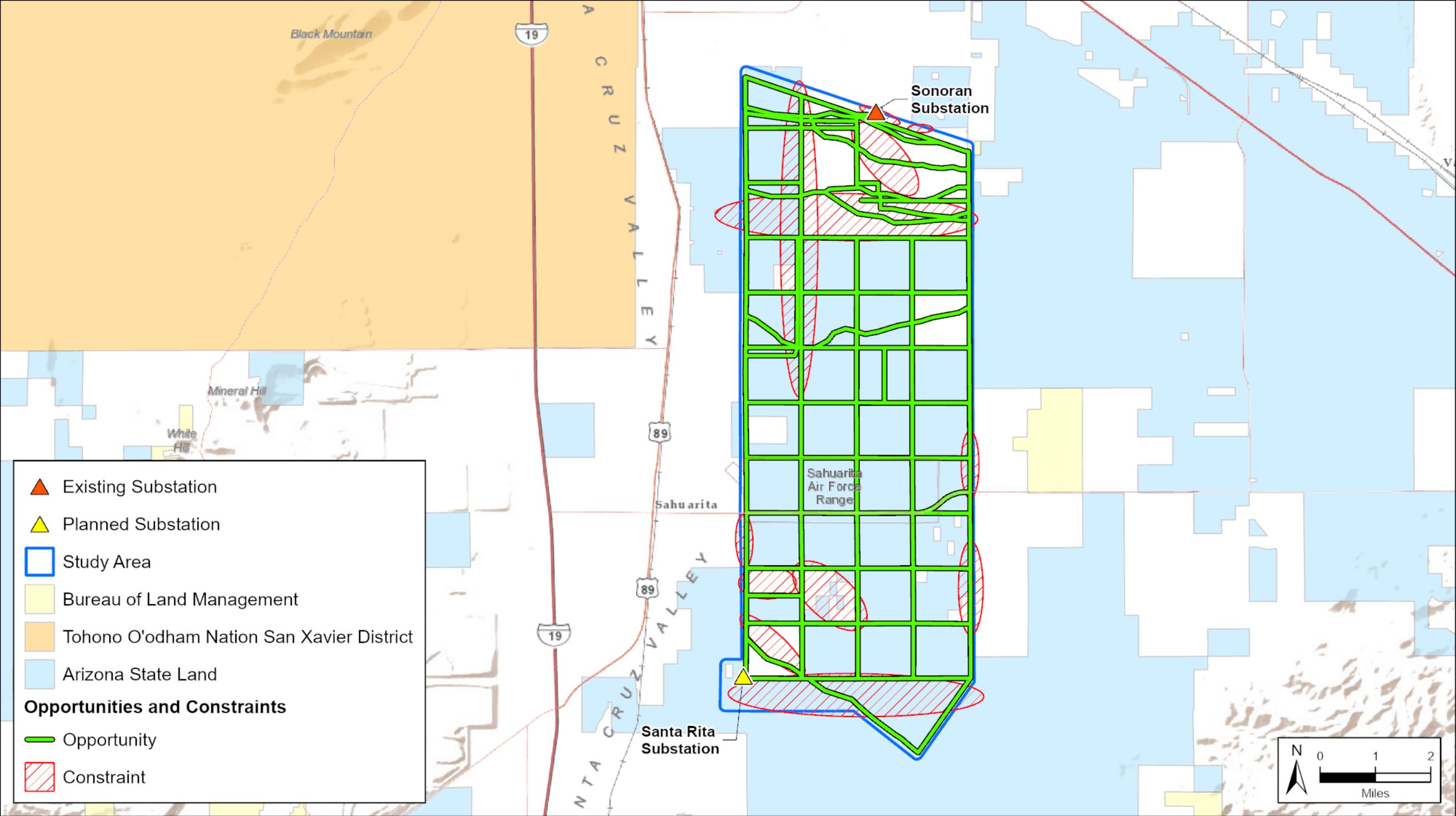
Phase 5: Concept Evaluation

- Public and Stakeholder Outreach
- Identify Preferred Route
- Submit CEC Application
- Public Notification and Hearing



- ▲ Existing Substation
- ▲ Planned Substation
- Existing 345kV Transmission Line
- Existing 230kV Transmission Line
- Existing 138kV Transmission Line
- Existing 115kV Transmission Line
- Study Area
- Bureau of Land Management
- Tohono O'odham Nation San Xavier District
- Arizona State Land





Black Mountain

19

A
C
R
U
Z
V
A
L
L
E
Y

Sonoran
Substation

Mineral Hill

White
Hill

89

Sahuarita
Air Force
Range

Sahuarita

89

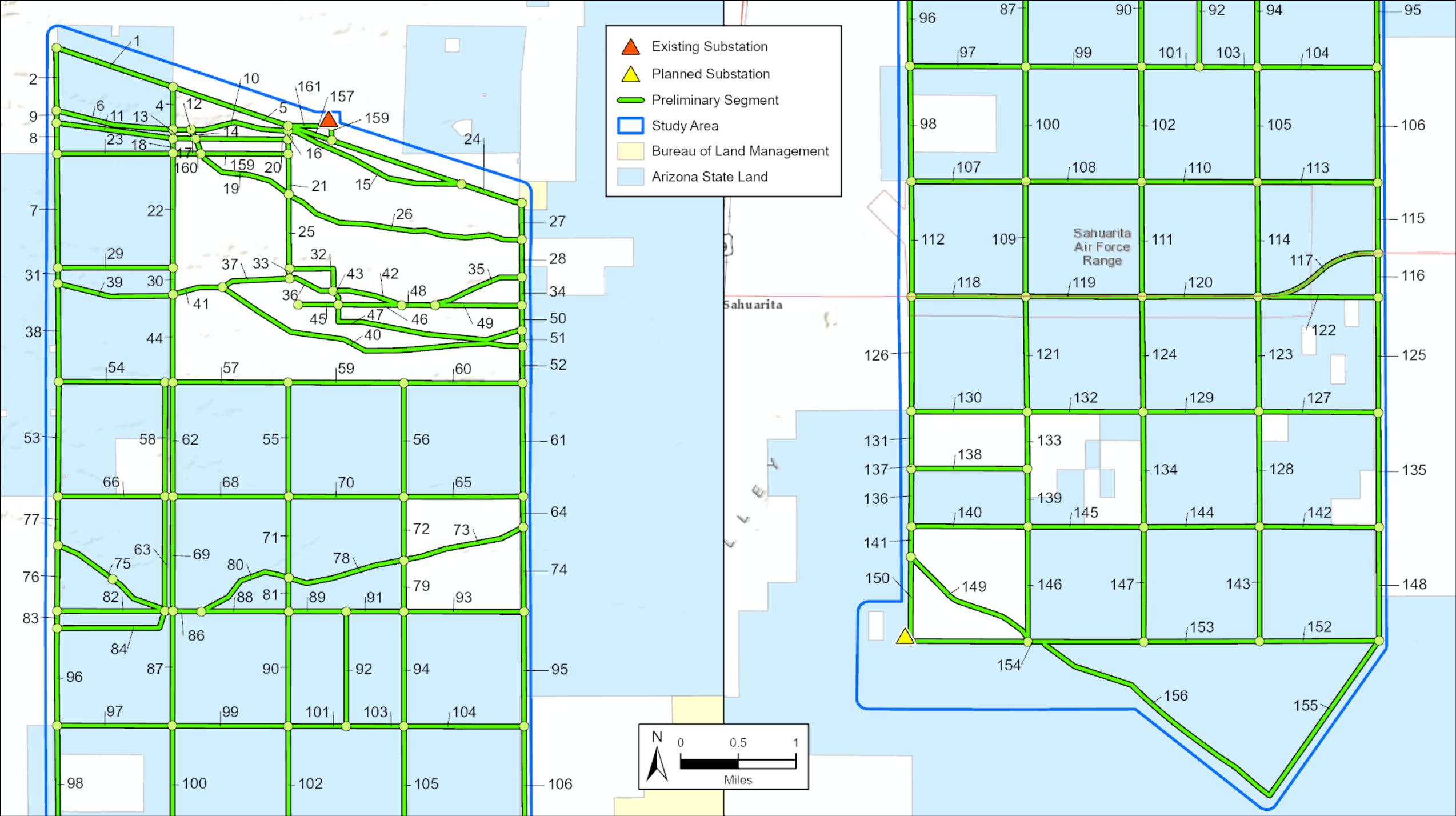
19

S
A
N
T
A
C
R
U
Z
V
A
L
L
E
Y

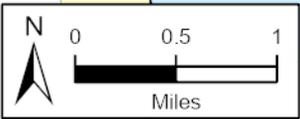
Santa Rita
Substation

-  Existing Substation
-  Planned Substation
-  Study Area
-  Bureau of Land Management
-  Tohono O'odham Nation San Xavier District
-  Arizona State Land
- Opportunities and Constraints**
-  Opportunity
-  Constraint





- ▲ Existing Substation
- ▲ Planned Substation
- Preliminary Segment
- Study Area
- Bureau of Land Management
- Arizona State Land

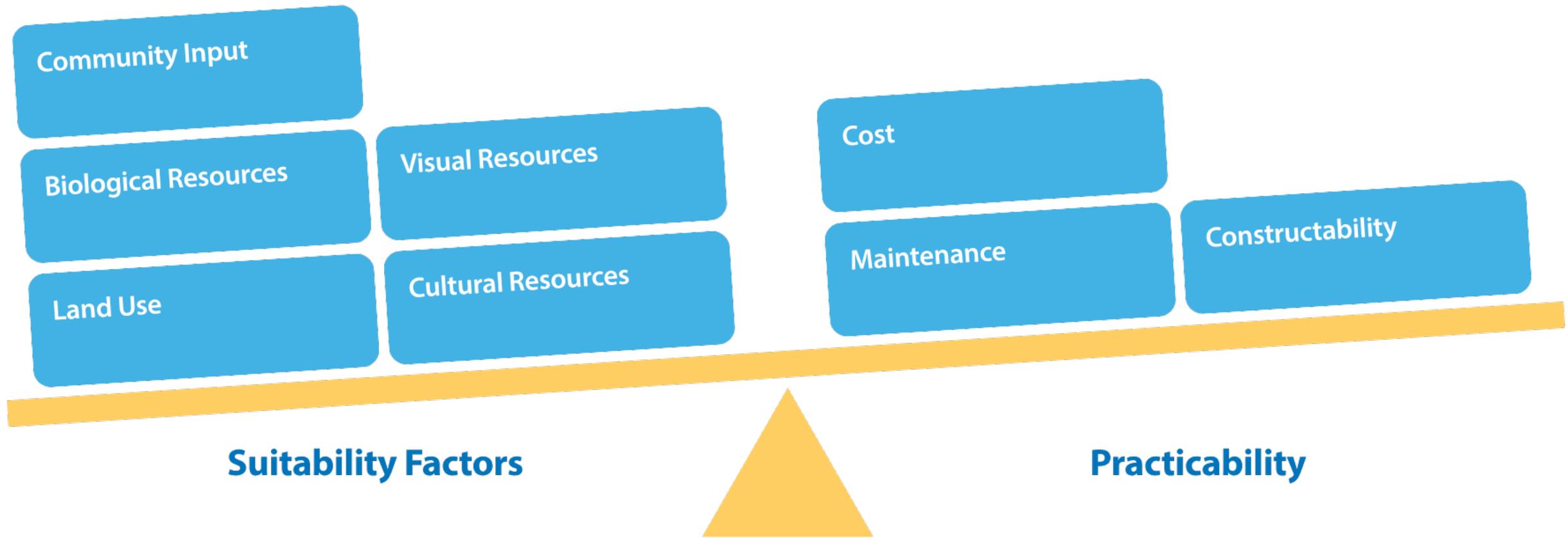


Sahuarita
Air Force
Range

Sahuarita

ALLEY

Project Route Development & Evaluation



Project Route Development & Evaluation

Criteria Models

- Existing Plans
- Biological Resources
- Noise and Communication
- Cultural and Historic Resources
- Visual Resources
- Total Environment
- Existing and Future Residential
- Wildfire Risk
- Engineer, Construction and Maintenance

Composite Models

- Balanced Compatability Model
- Environmentally Preferred Model
- Construction & Maintenance Preferred Model
- Public Stakeholder & Agency Preferred Model

Suitability Assessment

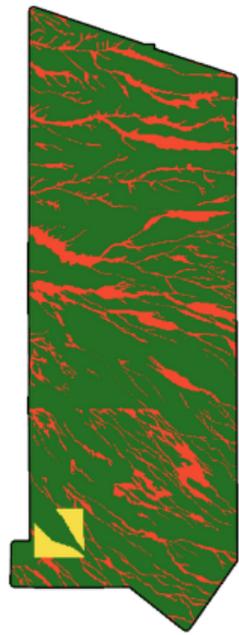
- Highest Suitability Path
- Apply Constraints
- Visual Comparison

Field Verification

- Ground Truthing

Refined Segments

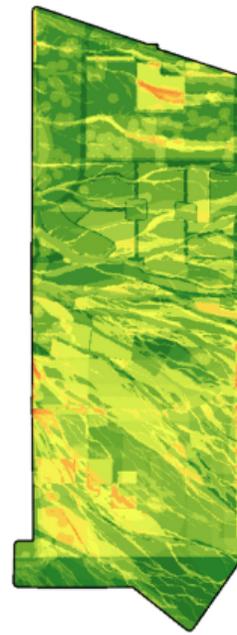
- Eliminate Less Suitable Segments
- Carried Forward for Further Evaluation



Criteria 1.
Biological
Resources



Criteria 2.
Noise &
Communication



Criteria 3.
Total
Environment



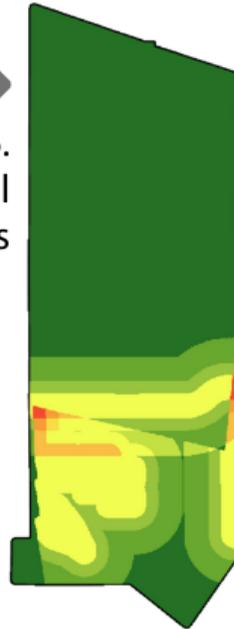
Criteria 4.
Existing & Future
Residential



Criteria 5.
Cultural
Resources



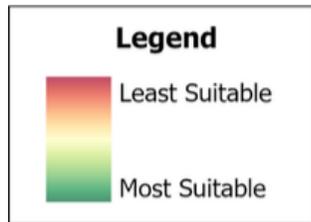
Criteria 6.
Scenic & Visual
Resources



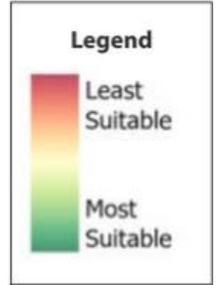
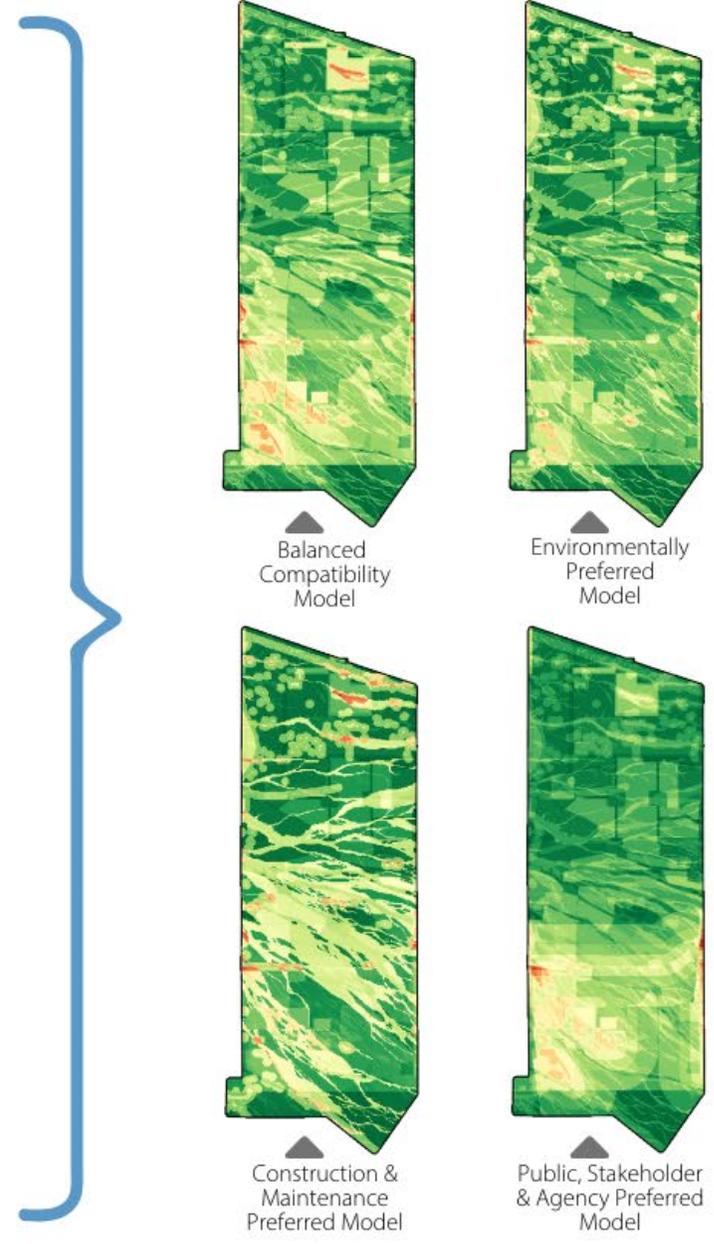
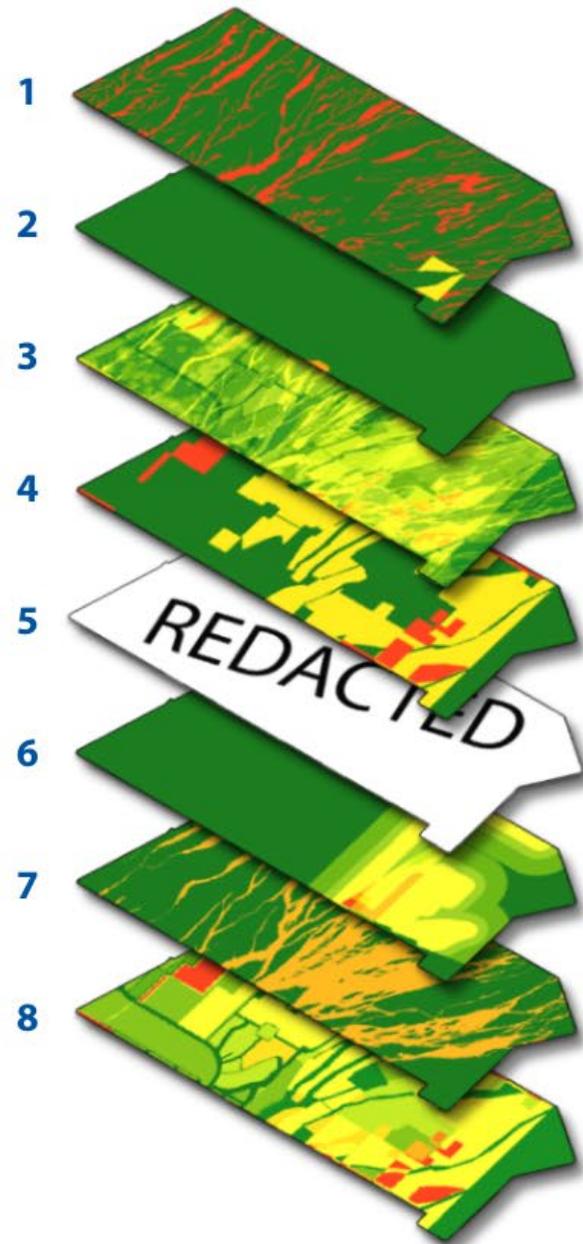
Criteria 7.
Construction &
Maintenance

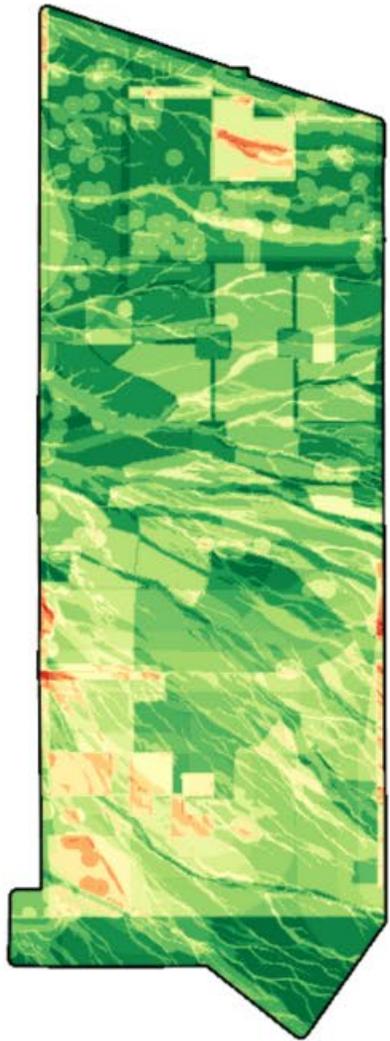


Criteria 8.
Existing Plans



- Criteria 1: Biological Resources
- Criteria 2: Noise & Communication
- Criteria 3: Total Environment
- Criteria 4: Existing & Future Residential
- Criteria 5: Cultural Resources
- Criteria 6: Scenic & Visual Resources
- Criteria 7: Construction & Maintenance
- Criteria 8: Existing Plans





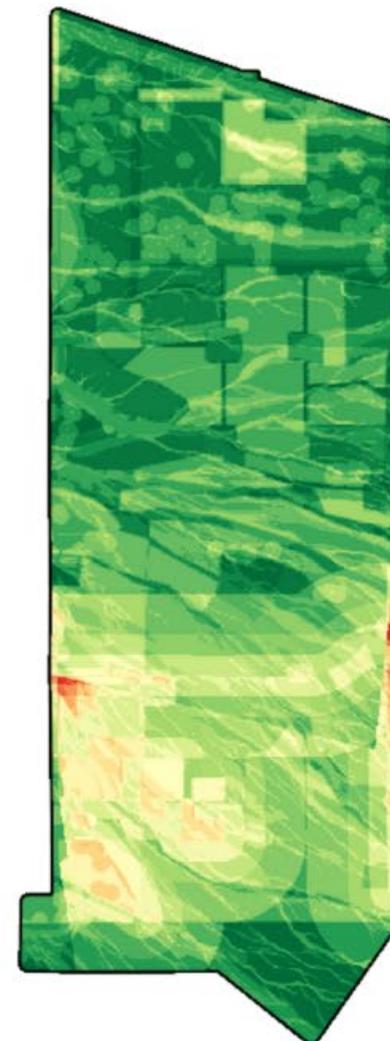
Balanced
Compatibility
Model



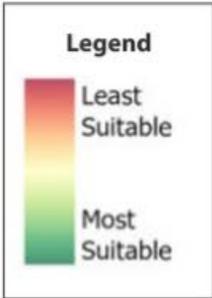
Environmentally
Preferred
Model

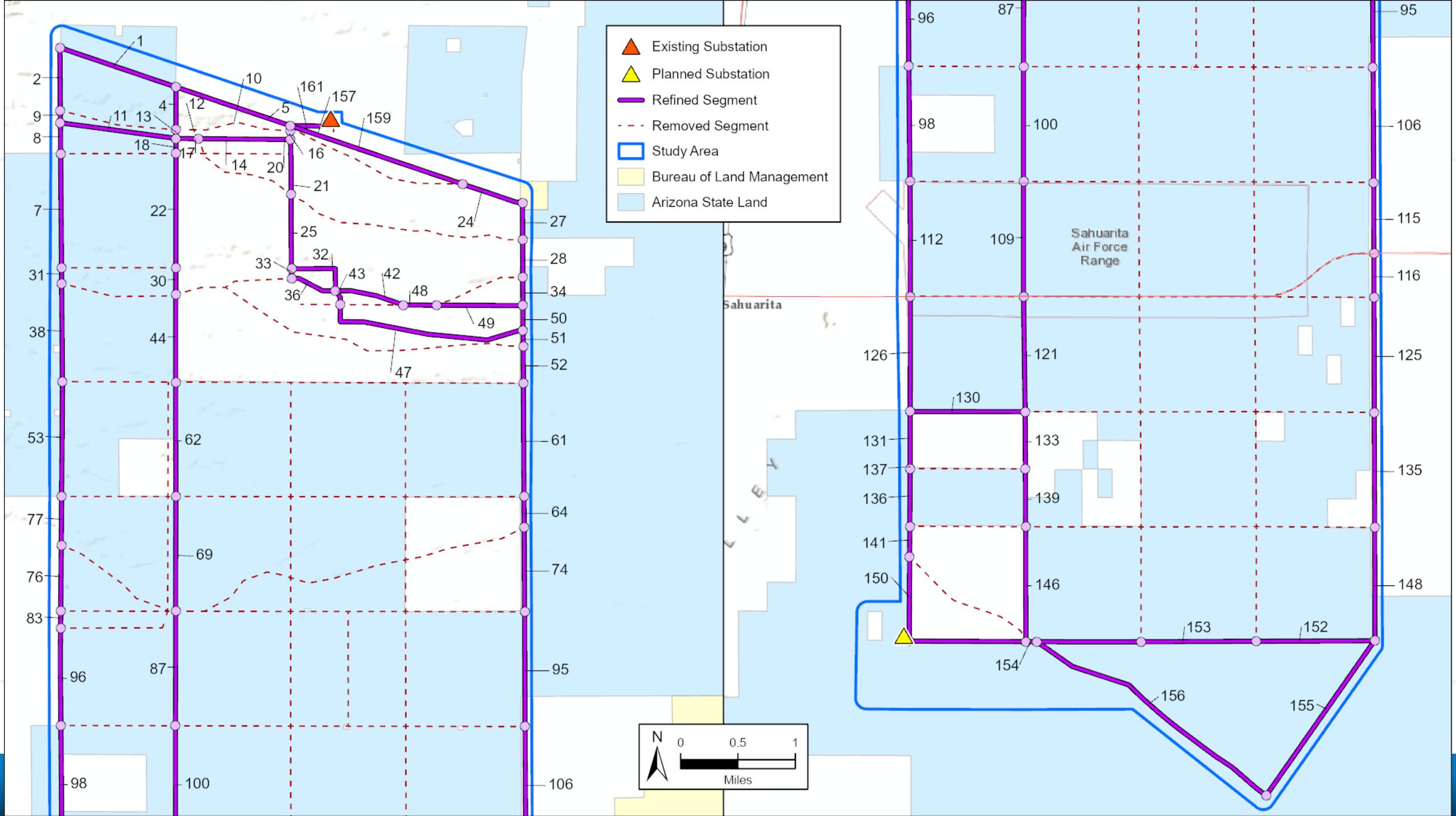


Construction &
Maintenance
Preferred Model



Public, Stakeholder
& Agency Preferred
Model





Project Schedule



Santa Rita Connection projected in service date 2029
(In service date subject to change)



Public Open House

March 4, 2026

6:00 – 8:00pm

Desert Diamond Casino - Sahuarita

1100 W Pima Mine Road

Sahuarita, AZ 85629

TEP

