



**NOTICE OF A REGULAR MEETING OF THE PLANNING COMMISSION
OF THE TOWN OF CLARKDALE
TUESDAY, MARCH 17, 2026 AT 4:30 PM**

In Person: Clark Memorial Clubhouse, 19 N. Ninth St., Clarkdale AZ

OR

Join Zoom Meeting

<https://zoom.us/j/87291252872>

Meeting ID: 872 9125 2872

Unless otherwise stated, the public will have physical access to the meeting place 15 minutes prior to the start of the meeting.

Town of Clarkdale Vision

The Town of Clarkdale connects our unique history, proximity to the Verde River, and small-town charm to a future with a vibrant economy.

We cultivate an environment where residents and businesses can thrive; providing services and jobs for our residents and capitalizing upon tourism.

We sustainably enhance our infrastructure, support the arts and education, and develop recreational opportunities to create a bright future for our entire community.

PURSUANT TO A.R.S. §38-431.02, NOTICE IS HEREBY GIVEN that the Planning Commission will hold a Regular Meeting open to the public on Tuesday, March 17, 2026, at 4:30 PM at 19 N. Ninth Street, Clarkdale, Arizona, Clark Memorial Clubhouse, Men's Lounge. A quorum of Town Council members may be present at this meeting; however, they will not deliberate or take action on any items. All members of the public are welcome to attend.

ALL ITEMS ON THIS AGENDA ARE SCHEDULED FOR DISCUSSION AND POSSIBLE ACTION, UNLESS OTHERWISE NOTED.

1. CALL TO ORDER

2. ROLL CALL

3. PUBLIC COMMENT

The Planning Commission invites the public to provide comments at this time. Members of the Planning Commission may not discuss items that are not specifically identified on the agenda. Therefore, pursuant to A.R.S. §38-431.01, action taken as a result of public comment will be limited to directing staff to study the matter, responding to any criticism, or scheduling the matter for further consideration and decision at a later date. Persons interested in making comments on a specific agenda item are asked to complete a brief form and submit it to the Clerk or liaison during the meeting. Each speaker is asked to limit their comments to three minutes unless a different amount of time is noted on the agenda or is determined by the Presiding Officer or by a majority

vote of the Council, Commission or Committee.

4. MINUTES

A. Approval of Minutes

Discuss, review, and act upon the draft minutes from the regular meeting on Feb. 17, 2026.

5. NEW BUSINESS

A. PUBLIC HEARING: Conditional Use Permit #250188 - Circle K Gas Station and Convenience Store

Public hearing to take comments on Conditional Use Permit #250188 - Circle K gas station and convenience store.

B. Conditional Use Permit #250188 – Circle K Gas Station and Convenience Store

Discuss, review, and act upon Conditional Use Permit #250188 – Circle K gas station and convenience store.

6. DISCUSSION ITEM ONLY - NO ACTION TAKEN

A. Design Standard Examples

Discussion only regarding Design Standard examples.

7. FUTURE AGENDA ITEMS

Planning Commission may propose items to be placed on a future agenda. This item is for discussion only.

8. ADJOURNMENT

Values

Values are the guiding principles that provide an organization with purpose and direction. The Town of Clarkdale's organizational values are:

COPPER

Customer focused

Open, transparent and equitable

Preserving our history, charm, and environment

Planning for a sustainable future

Economic and social resiliency

Resourceful and innovative

Mission

The Town of Clarkdale serves the community by providing amenities, infrastructure, services, and public safety to enhance quality of life. We are stewards of our history while we sustainably and resiliently plan for the future with an emphasis on community engagement and transparency.

Persons with a disability may request reasonable accommodations by contacting the Town Hall at (928) 639-2400 (TTY: 1-800-367-8939) at least 72 hours in advance of the meeting.



Staff Report

Item Number: 4.A.

<u>Agenda Item:</u>	Approval of Minutes Discuss, review, and act upon the draft minutes from the regular meeting on Feb. 17, 2026.
<u>Staff Contact:</u>	Scott Ellis, Community Development Director
<u>Meeting Date:</u>	March 17, 2026
<u>Strategic Goal:</u>	Not applicable.
<u>Background:</u>	Review of the draft minutes from the regular meeting on Feb. 17, 2026.
<u>Budget Impact:</u>	No budget impact.
<u>Recommendation:</u>	Staff recommends that the Planning Commission approve the draft minutes of the regular meeting held on Feb. 17, 2026. Recommended motion: "I motion to approve the draft minutes from the regular meeting held on Feb. 17, 2026."



**SUMMARIZED MINUTES OF A REGULAR MEETING OF THE PLANNING
COMMISSION OF THE TOWN OF CLARKDALE
TUESDAY, FEBRUARY 17, 2026 AT 4:30 PM**

(To listen to the full audio/video of the meeting,
please visit www.clarkdale.az.gov – agendas & minutes)

Members Present: *Chair de Blanc, Advisory member Johnson, Commissioner Spence, Commissioner Foutz, Commissioner Bayless.*

Members Absent: *Vice Chair Conk.*

Other Municipal Officials Present: *Community Development Director Scott Ellis, Community Development Senior Planner Clover Pinion, Community Development Technician Guss Espolt.*

Audience: *No members of the public were present.*

Zoom: *No members of the public were present.*

1. CALL TO ORDER *Chair de Blanc called the meeting to order at 4:30 p.m.*

2. ROLL CALL
See above.

3. PUBLIC COMMENT
No comment.

4. MINUTES

A. Approval of Minutes

Discuss, consider and act upon the draft minutes from the regular meeting on Dec. 16, 2025.

Motion: *Approve the draft minutes from the regular meeting on Dec. 16, 2025.*

First: *Spence*

Second: *Foutz*

Approved: *5-0*

Board Member

Chair de Blanc

Vice Chair Conk

Commissioner Foutz

Commissioner Spence

Commissioner Bayless

Advisory Johnson

Ayes/Nays

Aye

Absent

Aye

Aye

Aye

Aye

5. NEW BUSINESS

A. Selection of the Chair

Discuss, consider and act upon the selection of the Chair.

Motion: *I nominate to have Ida deBlanc to continue as Chair through the calendar year 2026.*

First: *Spence*

Second: *Foutz*

Approved: *5-0*

Board Member	Ayes/Nays
Chair de Blanc	Aye
Vice Chair Conk	Absent
Commissioner Foutz	Aye
Commissioner Spence	Aye
Commissioner Bayless	Aye
Advisory Johnson	Aye

B. Selection of the Vice Chair

Discuss, consider and act upon the selection of the Vice Chair.

Motion: *I nominate Amy Bayless as Vice Chair.*

First: *Foutz*

Second: *Spence*

Approved: *5-0*

Board Member	Ayes/Nays
Chair de Blanc	Aye
Vice Chair Conk	Absent
Commissioner Foutz	Aye
Commissioner Spence	Aye
Commissioner Bayless	Aye
Advisory Johnson	Aye

6. DISCUSSION ITEMS ONLY - NO ACTION TAKEN

A. Design Review Guidelines

Discussion only regarding what Design Guidelines could possibly be added to Chapter 11 - Design Review of Clarkdale's Zoning Code.

7. FUTURE AGENDA ITEMS

Planning Commission did not propose items to be placed on a future agenda. This item is for discussion only.

8. ADJOURNMENT

Motion: *I motion to adjourn.*

First: *Spence*

Second: *Johnson*

Approved: *5-0*

Board Member**Ayes/Nays**

Chair de Blanc

Aye

Vice Chair Conk

Absent

Commissioner Foutz

Aye

Commissioner Spence

Aye

Commissioner Bayless

Aye

Advisory Johnson

*Aye**Chair de Blanc adjourned the meeting without objection at 5:18 p.m.*

Ida Meri de Blanc, Chair

Scott Ellis, Community Development Director



Staff Report

Item Number: 5.A.

<u>Agenda Item:</u>	PUBLIC HEARING: Conditional Use Permit #250188 - Circle K Gas Station and Convenience Store Public hearing to take comments on Conditional Use Permit #250188 - Circle K gas station and convenience store.
<u>Staff Contact:</u>	Scott Ellis, Community Development Director
<u>Meeting Date:</u>	March 17, 2026
<u>Strategic Goal:</u>	This agenda item supports the following Clarkdale Strategic Goal Area: • Goal Area 1 - Enhance the quality of life for residents, businesses, and visitors to Clarkdale. • Goal Area 3 - Strengthen and diversify our economy through cultivating a business-friendly climate for business attraction and strategically capitalizing upon tourism.
<u>Background:</u>	Westwood Professional Services, Inc., on behalf of Circle K, has submitted a request for Conditional Use Permit (CUP) approval to construct and operate a Circle K convenience store with fuel sales on approximately 2.69 acres located at the northeast corner of State Route 89A and Lincoln Drive, 1192 State Route 89A. The subject property is currently vacant, zoned Commercial, and designated Neighborhood Commercial under the Town of Clarkdale General Plan. Attachments to consider are under Item 5.B.
<u>Budget Impact:</u>	No budget impact.
<u>Recommendation:</u>	Public hearing only. No recommendation.



Staff Report

Item Number: 5.B.

<u>Agenda Item:</u>	Conditional Use Permit #250188 – Circle K Gas Station and Convenience Store Discuss, review, and act upon Conditional Use Permit #250188 – Circle K gas station and convenience store.
<u>Staff Contact:</u>	Scott Ellis, Community Development Director
<u>Meeting Date:</u>	March 17, 2026
<u>Strategic Goal:</u>	This agenda item supports the following Clarkdale Strategic Goal Area: • Goal Area 1 - Enhance the quality of life for residents, businesses, and visitors to Clarkdale. • Goal Area 3 - Strengthen and diversify our economy through cultivating a business-friendly climate for business attraction and strategically capitalizing upon tourism.
<u>Background:</u>	The applicant, Westwood Professional Services, Inc., on behalf of Circle K, has submitted a request for Conditional Use Permit (CUP) approval to construct and operate a Circle K convenience store with fuel sales on approximately 2.69 acres located at the northeast corner of State Route 89A and Lincoln Drive, 1192 State Route 89A. The subject property is currently vacant, zoned Commercial, and designated Neighborhood Commercial under the Town of Clarkdale General Plan. The proposed development includes a ±5,200-square-foot convenience store building, an 18-foot 6-inch fuel canopy with 12 fueling positions, underground fuel storage tanks, associated parking, circulation, landscaping, a 6-foot wall the length of the east lot line, and site improvements. The store is proposed to operate 24 hours per day and is designed to serve both local residents and travelers along the State Route 89A corridor. The site plan provides 19 standard parking spaces, including two ADA-accessible spaces and eight truck/RV parking spaces, meeting the minimum parking required per code. Fuel sales are permitted in the Commercial District subject to approval of a Conditional Use Permit in accordance with Chapter 5 of the Clarkdale Zoning Code. Pursuant to Chapter 5, the Planning Commission is required to hold a public hearing and evaluate the request against the established findings for

approval before forwarding a recommendation to the Town Council.

Staff has reviewed the application materials, site plan, elevations, narrative and supporting technical documents for compliance with Chapter 5 and all applicable development standards. The applicant has demonstrated that the proposal satisfies the required findings, as summarized below:

Consistency with the General Plan:

The property carries a Neighborhood Commercial designation, which supports convenience goods and services intended to serve nearby residents and the traveling public. The proposed convenience store and fuel facility are consistent with this designation and the commercial character of the State Route 89A corridor.

Compliance with the Zoning Code:

The use is specifically identified as a conditional use within the Commercial zoning district. The proposal complies with applicable standards related to setbacks, building height, parking, lighting, landscaping and screening. Fuel storage is proposed underground in accordance with code and state environmental regulations.

Compatibility with Surrounding Uses:

Commercially zoned property lies to the south and west, with residential zoning to the north and east. The site design incorporates building orientation, landscape buffering, a 6-foot block wall the length of the east lot line, lighting controls and access management measures to reduce potential impacts to adjacent residential areas. Staff finds the use compatible with the surrounding area and consistent with the established commercial corridor pattern.

Public Health, Safety and Welfare:

The project includes modern underground fuel storage tanks, fire suppression systems, emergency shutoff features, spill containment protocols and compliant lighting. Access to the site as proposed, right-in/right-out movements designed to function safely with the existing roundabout configuration along SR 89A, have been approved by ADOT and meet the standards per the Town Code. The development will not be detrimental to the public's health, safety, or welfare.

Adequate Infrastructure and Services:

The site has access to public utilities, roadway infrastructure and emergency services. The applicant has demonstrated that adequate facilities are available to serve the proposed development.

Based on the materials submitted, and the analysis conducted, staff finds the applicant has met all required findings under Chapter 5 of the Clarkdale Zoning Code for approval of a Conditional Use Permit. We ask that the Planning Commission consider the request and forward a recommendation of approval to the Town Council for final action. The project shall conform to all applicable Town Standards, Town Codes and Zoning Ordinances, including but

not limited to Chapter 3 - Zoning Districts, Chapter 4 - General Provisions, Chapter 7 - Signs, Chapter 8 - Outdoor Lighting Code, and Chapter 9 - Landscape Design Standards.

Stipulations:

1. A building permit shall have been issued within one year of the effective date of the Conditional Use Permit and substantial construction occurred. Any use permit issued by the Town Council shall be considered null and void if construction does not conform to the originally approved site plan.
2. The project/applicant/owner shall follow all processes as outlined in Chapter 5, if any of the following should occur:
 - A. Revocation
 - B. Renewal
 - C. Abandonment
 - D. Modification
 - E. Expansion
3. Design Review approval by the Community Development Director is required.
4. All department comments shall be addressed as required.

Budget Impact: No budget impact.

Recommendation: Staff recommend that the Planning Commission approve a Conditional Use Permit (CUP) to construct and operate a Circle K convenience store with fuel sales and forward it to the Town Council with a recommendation of the same.

Recommended motion with NO additional stipulations: "I motion to recommend approval to Town Council for a Conditional Use Permit (CUP) to construct and operate a Circle K convenience store with fuel sales, in accordance with the stipulations as stated in the staff report."

Recommended motion with additional stipulations: "I motion to recommend approval to Town Council for a Conditional Use Permit (CUP) to construct and operate a Circle K convenience store with fuel sales, in accordance with the stipulations as stated in the staff report, including the additional stipulation/s..... "

**TOWN OF CLARKDALE**

890 Main Street
Clarkdale, AZ 86324
(928) 639-2500

Please email completed form to:
communitydevelopment@Clarkdale.az.gov

**COMMUNITY DEVELOPMENT
DEPARTMENT
PLANNING COMMISSION
APPLICATION**

PLEASE PRINT

Date Received: 11-17-25
By: CE
Project # 250-188
Proj. Mtg. Date: _____
Parcel # 406-26-300B
Zoning Commercial

IMPORTANT INFORMATION**STEPS FOR COMPLETING THE APPLICATION PROCESS:**

1. Review submittal deadlines and requirements HERE.
2. Complete this application.
3. Contact our office at (928) 639-2500 to schedule the required Pre-Application Meeting.
4. Work with staff to determine all information required for submittal.
5. Submit your completed application.
6. Pay fee at the time of application submittal.

Paid on 11-20-2025 PAYROC

Potentially
Jan 20th 2026

Submittal Deadline Hearing Date

12/8/2024	1/7/2025
1/5/2025	2/4/2025
2/2/2025	3/4/2025
3/2/2025	4/1/2025
4/6/2025	5/6/2025
5/4/2025	6/3/2025
6/1/2025	7/1/2025
7/6/2025	8/8/2025
8/3/2025	9/2/2025
9/7/2025	10/7/2025
10/5/2025	11/4/2025
11/2/2025	12/2/2025

Please note: If the Town requires review from outside consultants, a deposit as initial payment towards the consultant's fees shall be paid by the applicant to the Town upon submittal of any development application. (Per Town Code, Section 3-5-3)

APPLICANT INFORMATION

CURRENT ZONING C-Comme PROPOSED ZONING _____ GENERAL PLAN DESIGNATION NC-Neighborhood Commercial

PLEASE CHECK ALL THAT YOU ARE APPLYING FOR:

☒ **CONDITIONAL USE PERMIT** = \$800.00 ☐ **SUBDIVISION** ☐ **ZONE CHANGE REQUEST** ☒ **DESIGN REVIEW** = \$350.00

THE APPLICANT WILL BE THE ONLY PERSON NOTIFIED BY THE TOWN OF THE MEETING SCHEDULE. IT WILL BE HIS OR HER RESPONSIBILITY TO NOTIFY OTHER PARTIES WHO MAY BE INVOLVED.

PROPERTY ADDRESS NE corner of SR 89A and Lincoln Drive (1192 State Route 89A)

APPLICANT NAME(S) Waldy Coronado, Westwood Professional Services, Inc.

APPLICANT PHONE 480-495-8632 APPLICANT E-MAIL waldy.coronado@westwoodps.com

APPLICANT'S RELATIONSHIP TO PROPERTY OWNER Civil Engineer for the proposed Circle K Store project.

OWNER INFORMATION AND CERTIFICATION

PLEASE COMPLETE IF THE APPLICANT IS NOT THE PROPERTY OWNER.

PROPERTY OWNER'S NAME ISAACSON STEEN CHILDREN LTD

PROPERTY OWNER'S PHONE 615 828 2684 PROPERTY OWNER'S EMAIL Randy Isaacson @ Earthlink.net

I certify I am an owner authorized to conduct business related to this property and the information and exhibits herewith are true and correct to the best of my knowledge in filling out this application. I am acting with the knowledge and consent of all persons in interest and understand that without the consent of all persons in interest the requested action cannot lawfully be accomplished. I give my permission for authorized officials of the Town of Clarkdale to enter the premises described in this application as necessary to determine the suitability of the request and to ascertain compliance with all applicable Town Codes.

SIGNATURE [Signature]

DATE 11/4/2025



CONDITIONAL USE PERMIT NARRATIVE

Circle K Gas Station and Convenience Store

NE Corner of SR 89A and Lincoln Drive, Clarkdale, Arizona

APN: 406-26-300B

PROJECT SUMMARY

Applicant: Circle K Stores Inc.

Site Address: NE corner of SR 89A and Lincoln Drive

APN: 406-26-300B

Lot Size: 2 Acres

Current Use: Undeveloped

Proposed Use: Circle K Gas Station with 5,200 sq ft convenience store

Current Zoning: Commercial

Current LU Designation: Neighborhood Commercial

PROJECT DESCRIPTION

Circle K Stores Inc. requests approval of a Conditional Use Permit to construct and operate a modern gas station and convenience store facility on a 2.001-acre portion of a larger 5.41-acre undeveloped parcel located at the northeast corner of SR 89A and Lincoln Drive in Clarkdale, Arizona. The proposed development will include a 5,200 square foot convenience store building with an associated fuel canopy housing 6 fuel dispenser (12 fueling positions) and two 20,000 gallon underground storage tanks.

GENERAL PLAN AND ZONING COMPLIANCE

General Plan Compliance

The subject property is designated as Neighborhood Commercial in the Town's General Plan, which allows for convenient goods and services for residential access intended to serve the local market and meet the daily needs of residents. The proposed Circle K facility directly aligns with this designation by providing essential services including:

- Fuel for local residents and travelers along SR 89A
- Convenience store items for daily needs
- 24-hour accessibility for emergency fuel needs
- Quick-stop retail services reducing trips to distant commercial centers

Zoning Compliance

The property is zoned Commercial, and the proposed use is specifically permitted as a conditional use under Chapter 3, Zoning Districts, Section 3-100 Commercial, Subsection C, which allows "Convenience stores/filling stations provided bulk storage of inflammable liquids is underground" (3-10 (B) (5)). The proposed development fully complies with this requirement, as all fuel storage will be in modern underground storage tanks meeting or exceeding current environmental and safety standards.

CONDITIONAL USE PERMIT JUSTIFICATION

Public Need and Convenience

The proposed Circle K facility addresses a demonstrated public need in the Clarkdale community:

1. Strategic Location: Positioned at the intersection of SR 89A (a major state highway) and Lincoln Drive, the facility will serve both local residents and regional travelers
2. Service Gap: Reduces Travel time for local residents
3. Emergency Services: 24-hour fuel availability enhances community safety and emergency preparedness
4. Economic Benefit: Provides local employment opportunities and increases tax revenue for the Town

Compatibility with Surrounding Area

Adjacent Land Uses: The proposed Circle K is appropriately located to serve as a transition between different land uses:

- North: R4 (Manufactured Home Residential) zoning with existing residential development
- East: R4 (Manufactured Home Residential) zoning with existing residential development
- South: Commercial zoning, currently undeveloped
- West: Commercial zoning with existing retail development

Land Use Compatibility: The proposed use serves as an appropriate buffer between the residential neighborhoods to the north and east and the commercial corridor along SR 89A. The facility will provide convenient services to nearby residents while maintaining compatibility through:

- Quality architectural design and materials
- Appropriate setbacks from residential properties (48+ feet)
- Professional landscaping and screening
- Controlled access design that minimizes traffic impacts on residential streets

Landscaping and Design Compatibility

The development incorporates high-quality architectural design and landscaping to ensure compatibility with the surrounding area

Landscaping Plan

A comprehensive landscape plan has been prepared that meets all Town code requirements for commercial development, including appropriate plant materials, irrigation systems, and screening of service areas.

Architectural Design

The convenience store features contemporary design with quality materials including:

- Nichiha fiber cement panels in coordinated earth tones
- "Tuff Block" panels in "Morning Fog" and "Drift of Mist" colors
- Canyon Brick in "Shale Brown" accent
- Dark bronze anodized storefront system
- All roof-top HVAC will be screened from public view.

Site Amenities

The development includes customer amenities such as:

- Dedicated seating area
- Bike rack for alternative transportation users
- Air/water station for public use

Site Adequacy

The 2.001-acre development area provides ample space for the proposed use with a building footprint of 5,200 square feet, representing minimal lot coverage and allowing for substantial landscaping and circulation areas.

Building Height

The convenience store building reaches a maximum height of 22 feet (to parapet) with the fuel canopy at 18'-6" to top of fascia, both well within commercial zoning height limits.

Setbacks

The development exceeds all required setbacks:

- Front yard (SR 89A): 30 feet required, 48 feet provided
- Rear yard: 20 feet required, 48 feet provided
- Side yards: 0 feet required, substantial setbacks provided

Parking

The site provides 17 standard parking spaces (16 regular + 1 ADA) plus 8 RV parking spaces and 12 fueling positions, exceeding the 15 spaces required by code (1 space per 200 SF of building area).

Traffic Impacts

Circle K is working to complete a Traffic Impact Analysis (TIA) which will be reviewed/approved by both ADOT and the Town of Clarkdale to ensure all traffic safety measures are properly addressed.

Fuel Canopy Design

The fuel canopy features matching architectural elements and materials, creating a cohesive design aesthetic.

Access Design

The development features right-in/right-out access points designed to work safely with ADOT's roundabout configuration and minimize conflicts with through traffic on SR 89A.

Internal Circulation

The site layout provides efficient internal circulation with:

- 24-foot drive aisles meeting code requirements

- Adequate stacking space at fuel dispensers to prevent backup onto public streets
- Separate truck delivery access that accommodates weekly fuel and merchandise deliveries
- Clear sight lines and turning radii for all vehicle types

Explosion and Fire Prevention

The facility incorporates comprehensive safety systems:

- Modern underground storage tanks with double-wall construction and leak detection
- Emergency fuel shut-off switches accessible from multiple locations
- Fire suppression systems throughout the convenience store
- Automatic fire sprinkler system per code requirements
- Fire department connection

Environmental Protection

- All fuel storage in underground tanks meeting Arizona Department of Environmental Quality standards
- Vapor recovery systems on all fuel dispensers to minimize air quality impacts
- Spill containment and cleanup protocols
- Underground grease interceptor for food service operations

Noise Control

Operations will minimize noise impacts through:

- Modern fuel dispensers with quiet operation
- Building orientation to minimize noise toward residential areas

Odor and Air Quality

- Proper ventilation systems throughout the facility
- Regular maintenance protocols to prevent odor issues

Lighting

Photometric lighting plan ensures adequate illumination for safety while minimizing impacts:

- Downward facing LED lighting fixtures. Follow Dark sky ordinance.
- Full cut-off fixtures to prevent glare and light trespass
- Appropriate illumination levels for security without over-lighting

Signage

Signage plan adheres to Town code requirements for size, placement, and illumination.

Hours of Operation

The facility will operate 24 hours a day, 7 days a week, providing essential fuel and convenience services to the community around the clock.

Staffing

The store will maintain 2-4 employees per shift, ensuring adequate customer service and security coverage at all times.

Deliveries

Fuel and merchandise deliveries are typically scheduled during morning hours on a weekly basis, with truck movements designed to work with ADOT's roundabout configuration without disrupting traffic flow.

Access Management

The site design provides controlled access through right-in/right-out movements that integrate safely with the existing transportation infrastructure.

Positive Economic Effects

- Creation of local employment opportunities (estimated 15-20 full and part-time positions)
- Increased property tax revenue for the Town
- Sales tax generation from fuel and convenience store sales
- Attraction of additional commercial development to the area
- Reduced travel costs for residents accessing fuel and convenience items

Property Values

The professionally designed and maintained facility will:

- Enhance the commercial corridor's appearance
- Provide convenient services that increase area desirability
- Maintain compatibility with surrounding land uses
- Include quality architectural design and landscaping

CONDITIONAL USE PERMIT FINDINGS

Finding 1: Compatibility with General Plan

The proposed Circle K gas station and convenience store is fully consistent with the Neighborhood Commercial land use designation, providing convenient goods and services intended to serve the local market and meet daily resident needs.

Finding 2: Zoning Compliance

The proposed use is specifically listed as a conditional use in the Commercial zoning district, and all operational requirements (including underground fuel storage) will be met.

Finding 3: Public Health, Safety, and Welfare

The proposed development incorporates comprehensive safety measures, environmental protections, and operational standards that protect public health, safety, and welfare. Modern equipment, professional management, and regulatory compliance ensure safe operation.

Finding 4: No Adverse Impact on Surrounding Properties

The proposed use is compatible with the commercial corridor location and will not adversely impact surrounding properties due to:

- Appropriate site design and layout
- Quality architectural treatment
- Comprehensive landscaping and screening
- Professional operation and maintenance standards

Finding 5: Adequate Public Facilities

The site has access to adequate public facilities including:

- Public water and sewer systems

- Electrical power
- Telecommunications infrastructure
- Emergency services access
- Transportation infrastructure (SR 89A and Lincoln Drive)

COMMUNITY ENGAGEMENT

Circle K Stores Inc. is committed to being a positive community partner and welcomes input from Clarkdale residents and the organized neighborhood groups. We are prepared to:

- Address community concerns where possible
- Maintain open communication throughout the development process
- Operate as a responsible corporate citizen

CONCLUSION

The proposed Circle K gas station and convenience store represents a beneficial addition to the Clarkdale community that:

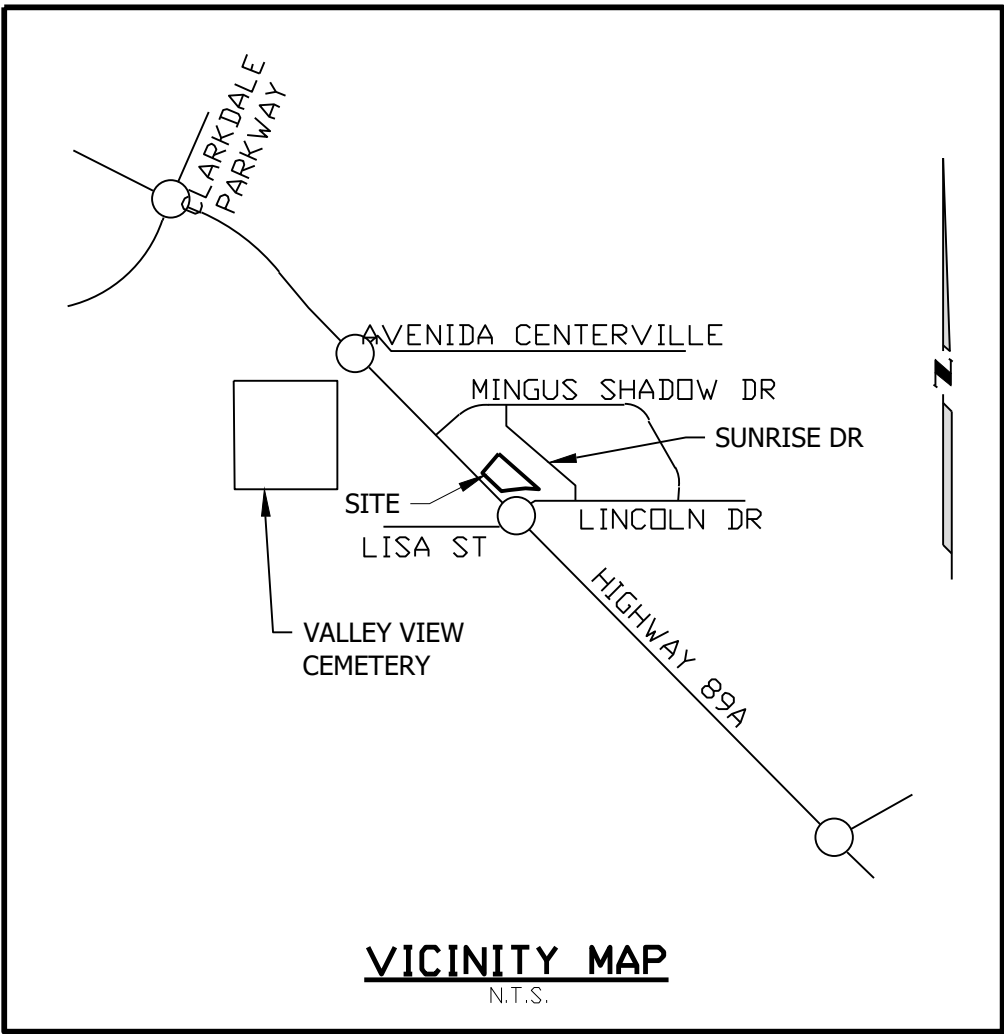
1. Meets a demonstrated public need for convenient fuel and retail services
2. Complies with all applicable zoning and general plan requirements
3. Incorporates appropriate safety and environmental protection measures
4. Enhances the economic vitality of the SR 89A commercial corridor
5. Provides quality design that respects community character

The project satisfies all requirements for Conditional Use Permit approval and will serve as a valuable community asset. We respectfully request the Planning Commission's recommendation for approval and the Town Council's authorization of this Conditional Use Permit.

SITE PLAN

CIRCLE K - CLARKDALE

BEING A PORTION OF THE SOUTHWEST QUARTER OF
SECTION 29, TOWNSHIP 16 NORTH, RANGE 3 EAST,
OF THE GILA & SALT RIVER MERIDIAN
YAVAPAI COUNTY, ARIZONA



LEGEND

	PROPERTY LINE	T.O.C.	TOWN OF CLARKDALE
	RIGHT OF WAY LINE	R.O.W.	RIGHT OF WAY
	SECTION LINE	M.C.R.	MARICOPA COUNTY RECORDER OFFICE
	CENTER LINE	A.P.N.	ASSESSOR PARCEL NUMBER
	EASEMENT LINE	P.U.E.	PUBLIC UTILITY EASEMENT
	HIGH WATER LINE	B/C	BACK CURB
	CONTOUR LINE	F/C	FACE CURB
	EXISTING CONTOUR LINE	B/W	BACK WALK
	UNDERGROUND UTILITY	F/W	FACE WALK
	EDGE OF PAVEMENT	TC	TOP CURB ELEVATION
	SURVEY MONUMENT IN HANDHOLE	G	GUTTER ELEVATION
	SURVEY MONUMENT FLUSH	P	PAVEMENT ELEVATION
	FOUND SURVEY MONUMENT	C	CONCRETE ELEVATION
	SIGN	NG	NATURAL GROUND
	CABLE TV	INV	INVERT
	UNDERGROUND ELECTRIC	VG	VALLEY GUTTER
	CABLE TV RISER	BOT	BOTTOM BANK
	OVERHEAD ELECTRIC	TW	TOP WALL
	SEWER	S.V.T.	SIGHT VISIBILITY TRIANGLE
	SEWER MANHOLE	T.VLT.	TELEPHONE VAULT
	GAS VALVE	T.R.	TELEPHONE RISER
	UNDERGROUND WATER	T	UNDERGROUND
	WATER VALVE	OHE	OVERHEAD ELECTRIC
	FIRE HYDRANT	D.G.	DOWN GUY
	POWER POLE W/LIGHT	P.P.	POWER POLE
	POWER POLE W/LIGHT	E	UNDERGROUND ELECTRIC
	UNDERGROUND GAS	CTV	UNDERGROUND CABLE TV
	UNDERGROUND FIBER	CT J.B.	CABLE TV J-BOX
	OPTIC DOWN GUY	T.S.J.B.	TRAFFIC SIGNAL J-BOX
	POWER POLE	T.S.C.B.	TRAFFIC SIGNAL CONTROL BOX
	ADA COMPLIANT PATH	TRAFFIC SIGNAL	TRAFFIC SIGNAL

LEGAL DESCRIPTION

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE COUNTY OF YAVAPAI, STATE OF ARIZONA AND IS DESCRIBED AS FOLLOWS:
TRACT A, REVERSIONARY PLAT OF TRACTS B THROUGH K, MINGUS SHADOW, UNIT 3, ACCORDING TO THE PLAT RECORDED IN BOOK 34 OF MAPS, PAGE 37, RECORDS OF YAVAPAI COUNTY, ARIZONA.

EXCEPT THAT PART THEREOF DEEDED TO THE STATE OF ARIZONA, BY AND THROUGH IT'S DEPARTMENT OF TRANSPORTATION RECORDED IN BOOK 4538 OF OFFICIAL RECORDS, PAGE 726, RECORDS OF YAVAPAI COUNTY, ARIZONA WHICH LIES BETWEEN THE EXISTING NORTHEASTERLY RIGHT OF WAY LINE OF STATE ROUTE 89A (PRESCOTT-FLAGSTAFF HIGHWAY) AND THE FOLLOWING DESCRIBED "NEW RIGHT OF WAY LINE" NEW RIGHT OF WAY LINE DESCRIPTION:

COMMENCING AT A 3 ½ INCH BRASS CAP MARKING THE CENTER QUARTER CORNER OF SAID SECTION 29, TOWNSHIP 29 NORTH, RANGE 3 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, YAVAPAI COUNTY, ARIZONA, BEING NORTH 89 DEGREES 49 MINUTES 23 SECONDS EAST, A DISTANCE OF 2657.16 FEET FROM A 3 ½ INCH BRASS CAP MARKING THE WEST QUARTER OF SAID SECTION 29; THENCE ALONG THE EAST-WEST MID SECTION LINE OF SAID SECTION 29, SOUTH 89 DEGREES 49 MINUTES 23 SECONDS WEST, A DISTANCE OF 141.38 FEET TO THE EXISTING RIGHT OF WAY CENTER LINE OF SAID STATE ROUTE 89A; THENCE ALONG SAID EXISTING RIGHT OF WAY CENTERLINE NORTH 44 DEGREES 34 MINUTES 35 SECONDS WEST, A DISTANCE OF 1027.71 FEET; THENCE NORTH 45 DEGREES 25 MINUTES 25 SECONDS EAST, A DISTANCE OF 86.00 FEET TO THE POINT OF BEGINNING ON THE EXISTING SOUTHEASTERLY RIGHT OF WAY LINE OF MINGUS SHADOWS DRIVE, BEING THE NORTHWESTERLY LINE OF SAID TRACT A, TOWN OF CLARKDALE REVERSIONARY PLAT; THENCE SOUTH 44 DEGREES 34 MINUTES 35 SECONDS EAST, A DISTANCE OF 738.82 FEET; THENCE SOUTH 76 DEGREES 11 MINUTES 02 SECONDS EAST, A DISTANCE OF 122.11 FEET; THENCE NORTH 71 DEGREES 59 MINUTES 19 SECONDS EAST, A DISTANCE OF 134.16 FEET; THENCE SOUTH 73 DEGREES 31 MINUTES 29 SECONDS EAST, A DISTANCE OF 154.95 FEET TO THE POINT OF ENDING ON THE EXISTING NORTHERLY RIGHT OF WAY LINE OF LINCOLN DRIVE, BEING THE SOUTHEASTERLY LINE OF SAID TRACT A, OF TOWN OF CLARKDALE REVERSIONARY PLAT.

BENCHMARK

ELEVATIONS AND GROUND CONTOURS SHOWN HEREON ARE BASED ON A LOCAL VERTICAL DATUM RELATIVE TO NGS MONUMENT PANORAMA: WHICH HAS AN ELEVATION OF 3936.50 FEET.

BASIS OF BEARING

THE SOUTH LINE OF THE NORTHWEST QUARTER OF SECTION 29, T. 16 NORTH, R. 3 EAST, G.&S.R.M. WHICH BEARS SOUTH 89°49'42" WEST (ASSUMED).

FLOOD ZONE

THE SUBJECT PROPERTY IS LOCATED WITHIN SHADED ZONE "IX" DEFINED AS "AREAS OF 0.2% ANNUAL CHANCE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREA PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD; PER FIRM MAP NO. 04025C1393H DATED OCTOBER 16, 2015.

SHEET INDEX

COVER SHEET	1
SITE PLAN	2
SITE PLAN (CONT.)	3
SITE DETAILS	SD1.2
SITE DETAILS	SD1.3

PROJECT INFORMATION

EXISTING ZONING: NC - NEIGHBORHOOD COMMERCIAL

PROPERTY AREA: 116,954 S.F. (2.69 AC)

PROPOSED OPEN SPACE:
REQUIRED 25% OF OVERALL LOT
PROPOSED 44,499 S.F. (38% OF OVERALL LOT)

CURRENT LAND USE: UNDEVELOPED

BUILDING SETBACK PER CODE:	REQUIRED	PROVIDED
FRONT	30 FT.	171 FT.
SIDE	0 FT.	182 FT.
REAR	20 FT.	48 FT.

LANDSPACE SETBACK:
STREET RIGHT-OF-WAY
REQUIRED 15'
PROVIDED 15'

BUILDING HEIGHT:
MAX. HEIGHT 35 FT. MAX.
PROVIDED 25 FT.

PARKING SETBACK:
99' = FRONT AND ROW
10' = SIDE AND REAR

PARKING SPACE/DRIVE AISLE:
REQUIRED 9 FT. WIDE X 20 FT. LONG, 24 FT. AISLE
PROVIDED 9.5 FT. WIDE X 20 FT. LONG, 24 FT. AISLE

PARKING RATIO REQUIREMENT
CONVENIENT STATION 1 SPACE / 200 S.F. OF BUILDING
BUILDING TOTAL S.F. 5,200 S.F.
BUILDING PUBLIC AREAS S.F. 2,957 S.F.
BUILDING NON PUBLIC AREAS S.F. 2,243 S.F.

TOTAL SPACES REQUIRED 15 SPACES (5,200/200=26)
ADA SPACES REQUIRED 2 SPACES

PARKING PROVIDED: 27
STANDARD SPACES 17
ADA SPACES 2
RV PARKING 8

PARKING PROVIDED COMPLIES WITH THE FOLLOWING STAFF RECOMMENDATION:
1 PARKING PER 200 S.F. OF RETAIL (MIXED USE)
5,200 S.F. / 200 S.F. = 26 PARKING SPACES

LOT COVERAGE:
ALLOWED N/A
PROVIDED 4.4%
*NOTE LOT COVERAGE = BUILDING FOOTPRINT

SITE ADDRESS

HIGHWAY 89A & LINCOLN DR
TOWN OF CLARKDALE, ARIZONA

SITE AREA

NET AREA = 116,954 SQ. FT. OR 2.69 ACRES MORE OR LESS

ASSESSORS PARCEL NUMBER

A.P.N. 406-26-300B

ZONING

THE SUBJECT PROPERTY IS CURRENTLY SHOWN AS ZONED COMMERCIAL PER THE TOWN OF CLARKDALE ZONING MAP DATED MAY 28TH, 2025.

UTILITY NOTE

UNDERGROUND UTILITIES & STORM DRAIN LOCATIONS SHOWN HEREON ARE BASED ON FIELD OBSERVATIONS AND "BLUE STAKE" MARKINGS AND AVAILABLE MAPS OBTAINED FROM UTILITY COMPANIES AND THE TOWN OF CLARKDALE, ARIZONA. ACTUAL LOCATIONS MAY VARY FROM LOCATIONS SHOWN HEREON.

OWNER / DEVLOPER

CIRCLE K STORES, INC.
1130 WEST WARNER ROAD
TEMPE, AZ 85284
CONTACT: JORDAN RIDBERG, REAL ESTATE DEVELOPMENT MANAGER
EMAIL: JORDAN.RIDBERG@CIRCLEK.COM

ENGINEER

WESTWOOD PROFESSIONAL SERVICES
6909 EAST GREENWAY PARKWAY, SUITE 250
SCOTTSDALE, AZ 85254
TELE: 480-747-6558
CONTACT: MICHAEL CAYLOR, PE
EMAIL: MICHAEL.CAYLOR@WESTWOODPS.COM

INITIAL ISSUE

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SHEET NUMBER: 1 OF 5

DATE: 2026-03-02
PROJ: 0058494.00

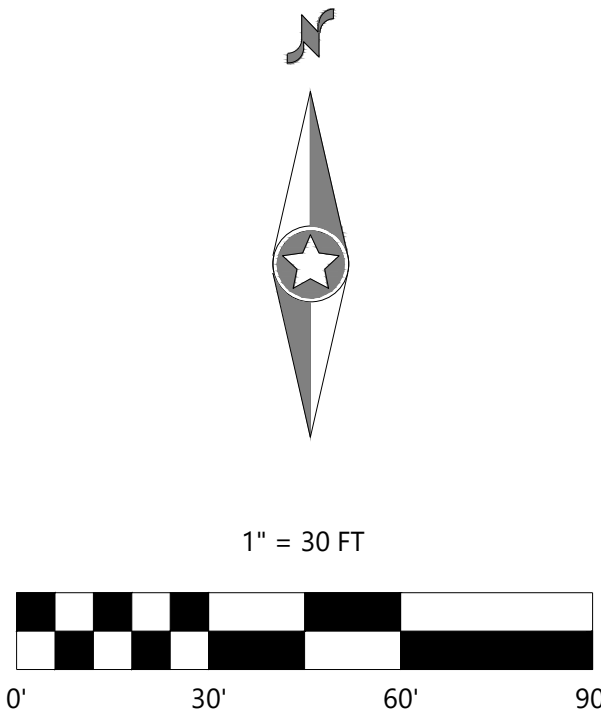
COVER SHEET

CIRCLE K - CLARKDALE
HIGHWAY 89A & LINCOLN DR
TOWN OF CLARKDALE, ARIZONA

WESTWOOD PROFESSIONAL SERVICES, INC.
25960
MICHAEL JAMES
CAYLOR
REGISTERED PROFESSIONAL ENGINEER
STATE OF ARIZONA
U.S.A.

Contract Arizona 811 at least two full working days before you begin excavation
ARIZONA
Call 811 or click Arizona811.com

Page 21 of 108



SITE PLAN NOTES

- 1 ASPHALT/CONCRETE PAVING. SEE PRELIMINARY GRADING AND DRAINAGE PLANS.
- 2 LANDSCAPING.
- 3 CONCRETE SIDEWALK.
- 4 6" VERTICAL CONCRETE CURB AND GUTTER, TYP.
- 5 PROPOSED DOUBLE REFUSE TRASH ENCLOSURE WITH GATES FOR SCREENING. REFER TO DETAILS ON ARCHITECTURAL PLANS SHEET SD1.3.
- 6 NEW ACCESSIBLE PARKING SPACE. ACCESSIBLE SIGN AND HANDICAPPED PARKING SIGN.
- 7 PROPOSED ADA RAMP.
- 8 BRICK PAVERS CROSS WALK.
- 9 PROPOSED BIKE RACK.
- 10 15.5 FT. HEIGHT CANOPY FOR PUMP STATIONS.
- 11 UNDERGROUND GASOLINE AND DIESEL TANKS.
- 12 CONCRETE VALLEY GUTTER.
- 13 ADA COMPLIANT DRIVEWAY.
- 14 FLUSHED CONCRETE SIDEWALK.
- 15 PROPOSED FIRE HYDRANT.
- 16 PROPOSED BOLLARDS.
- 17 PROPOSED ELECTRICAL CABINET.
- 18 CATCH BASIN.
- 19 ROOF DRAINS.
- 20 STORMDRAIN PIPE.
- 21 DRYWELL.
- 22 HSD DISPENSER.
- 23 MASONRY RETAINING WALL 5' MAX WITH 6' HIGH SCREEN WALL ON TOP.
- 24 MONUMENT SIGN.
- 25 AIR + WATER.
- 26 PROPOSED LANDSCAPE ISLAND.
- 27 RETENTION BASIN.
- 28 UNDERGROUND RETENTION SYSTEM.
- 29 STORMDRAIN/ACCESS MANHOLE.
- 30 UST VENTS.
- 31 SEATING AREA.
- 32 6" SINGLE CURB, TYP.
- 33 EXISTING ASPHALT PAVEMENT.
- 34 EXISTING RETENTION BASIN.
- 35 EXISTING CONCRETE SCUPPER.
- 36 EXISTING CURB AND GUTTER.
- 37 SITE LIGHTING.
- 38 EXISTING RESIDENTIAL PERIMETER WALL.
- 39 SES PANEL.
- 40 CURB OPENING.
- 41 6' HIGH SCREEN WALL. REFER TO DETAILS ON ARCHITECTURAL PLANS SHEET SD1.2.
- 42 PROPOSED HANDRAIL.
- 43 PROPOSED RIGHT TURN LANE.
- XX PARKING COUNT: 17 STANDARD SPACES + 2 ADA SPACES + 8 RV PARKING SPACES

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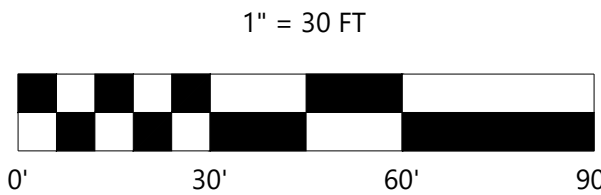
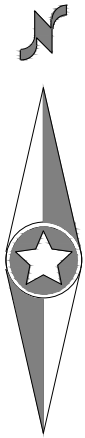
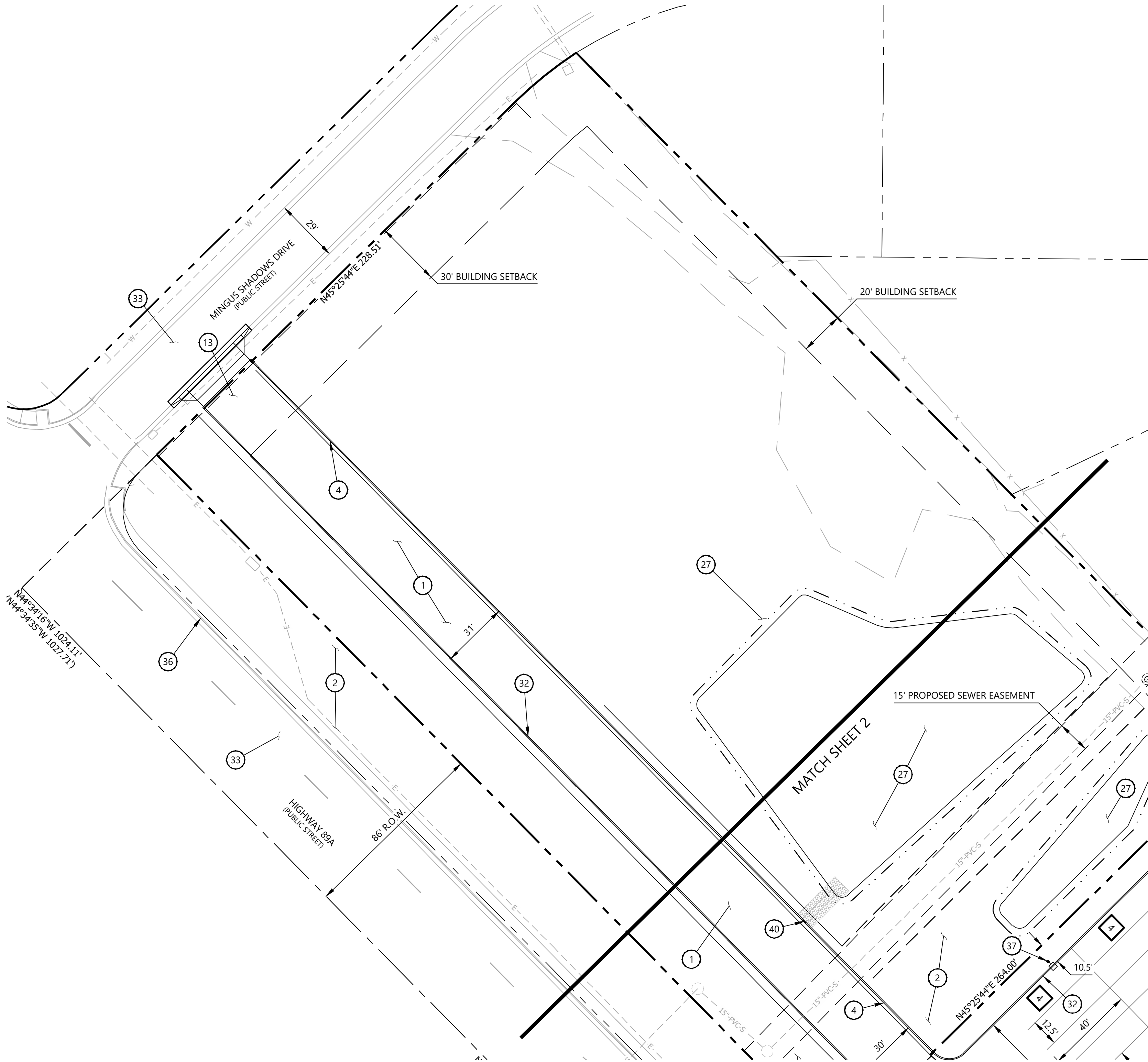
Westwood
6009 East Greenway Parkway, Suite 250
Clarkdale, AZ 85304
Phone (480) 747-6558
Fax (480) 367-6025
westwoodps.com
Westwood Professional Services, Inc.

SITE PLAN
CIRCLE K - CLARKDALE
HIGHWAY 89A & LINCOLN DR
TOWN OF CLARKDALE, ARIZONA



SHEET NUMBER: 2 OF 5
DATE: 2026-03-02
PROJ: 0058494.00





SITE PLAN NOTES

- 1 ASPHALT/CONCRETE PAVING. SEE PRELIMINARY GRADING AND DRAINAGE PLANS.
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SHEET NUMBER:

3 OF 5

DATE: 2026-03-02
PROJ: 0058494.00

SITE PLAN (CONT.)
CIRCLE K - CLARKDALE
HIGHWAY 89A & LINCOLN DR
TOWN OF CLARKDALE, ARIZONA

Westwood

6009 East Greenway Parkway, Suite 250
Clarkdale, AZ 86014
Phone (480) 747-6558
Fax (480) 367-6025
westwoodps.com

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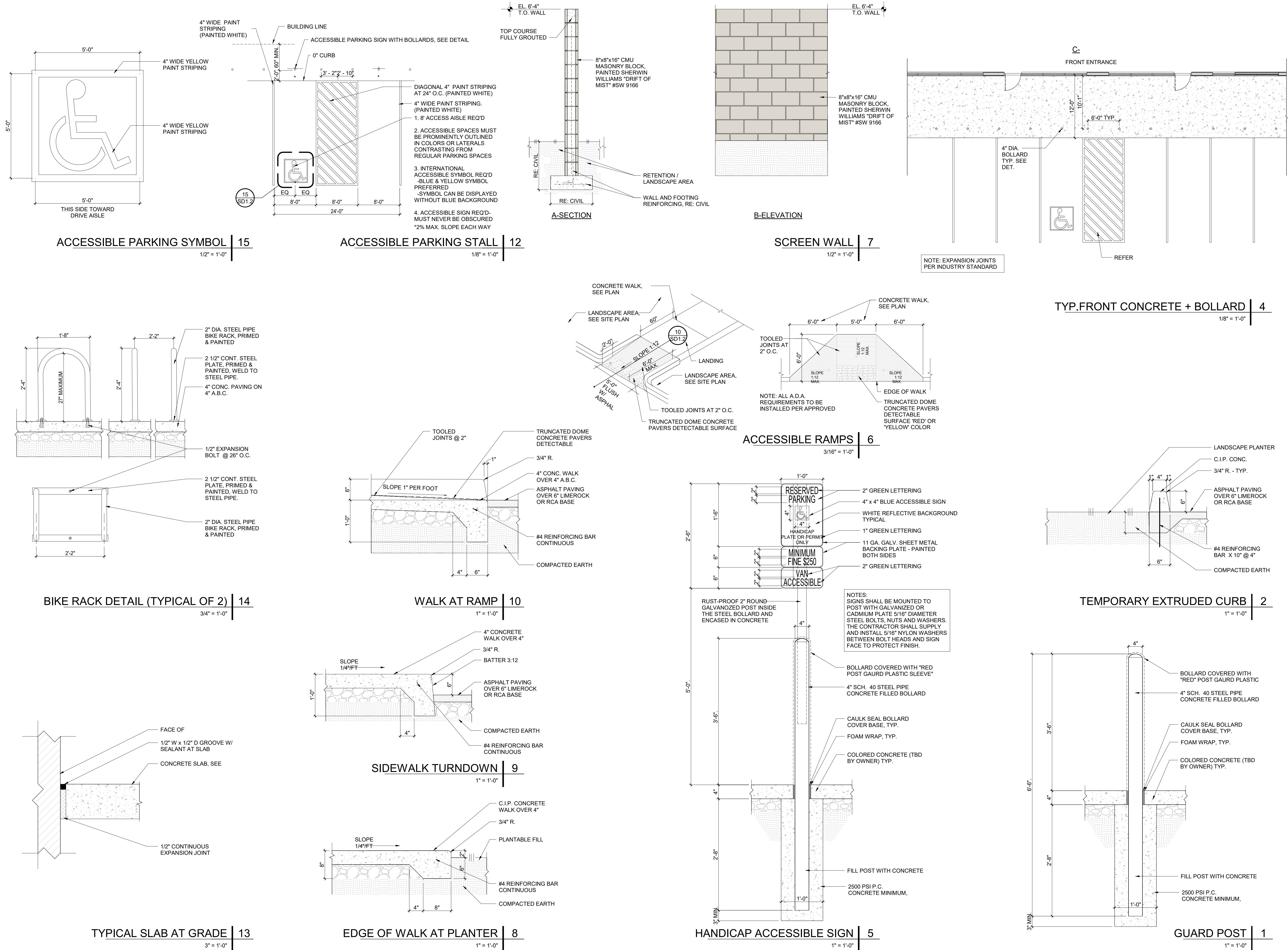
PROJECT

R 89A & LINCOLN, DR.
CLARKDALE, AZ



SITE DETAILS

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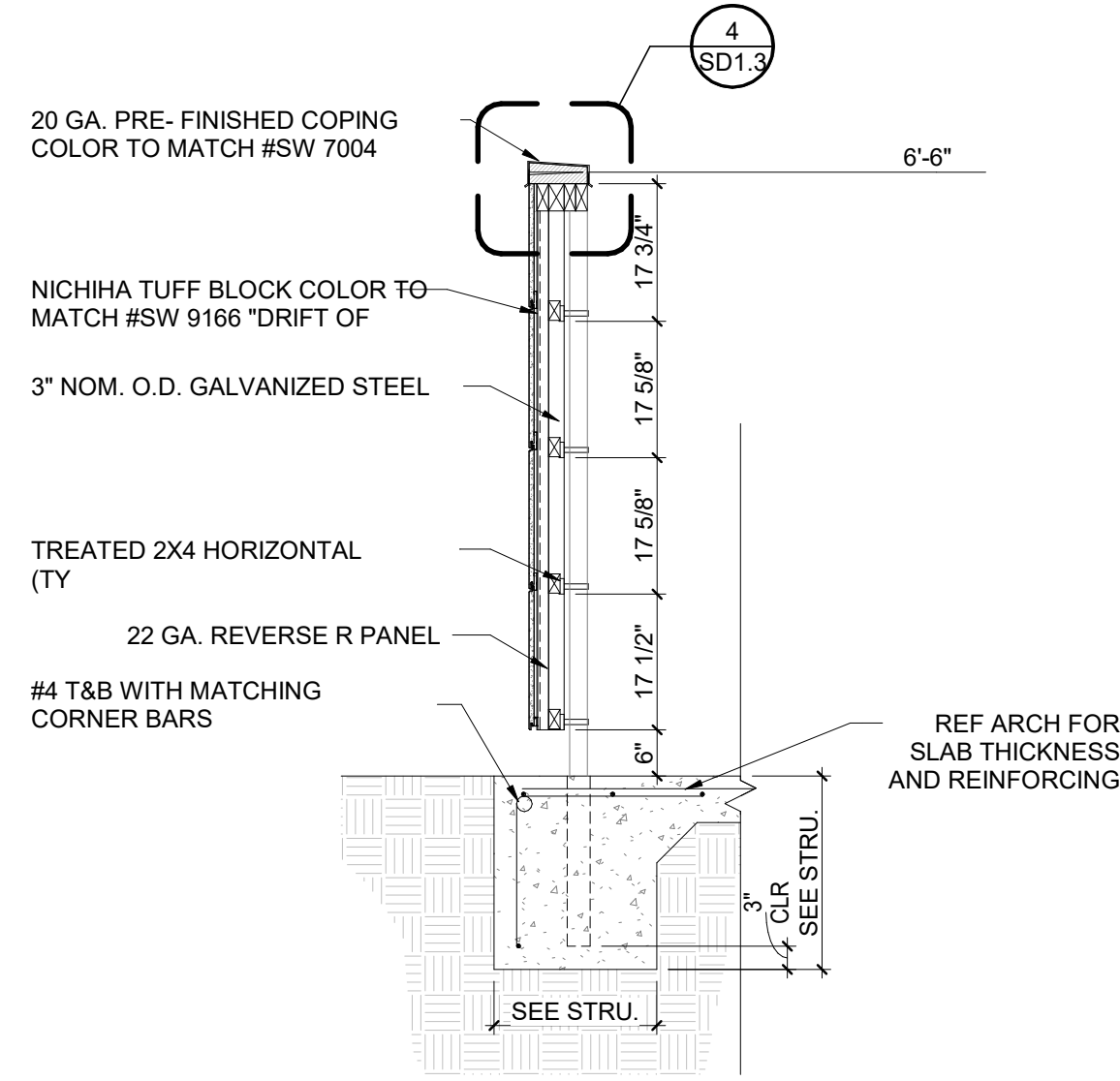




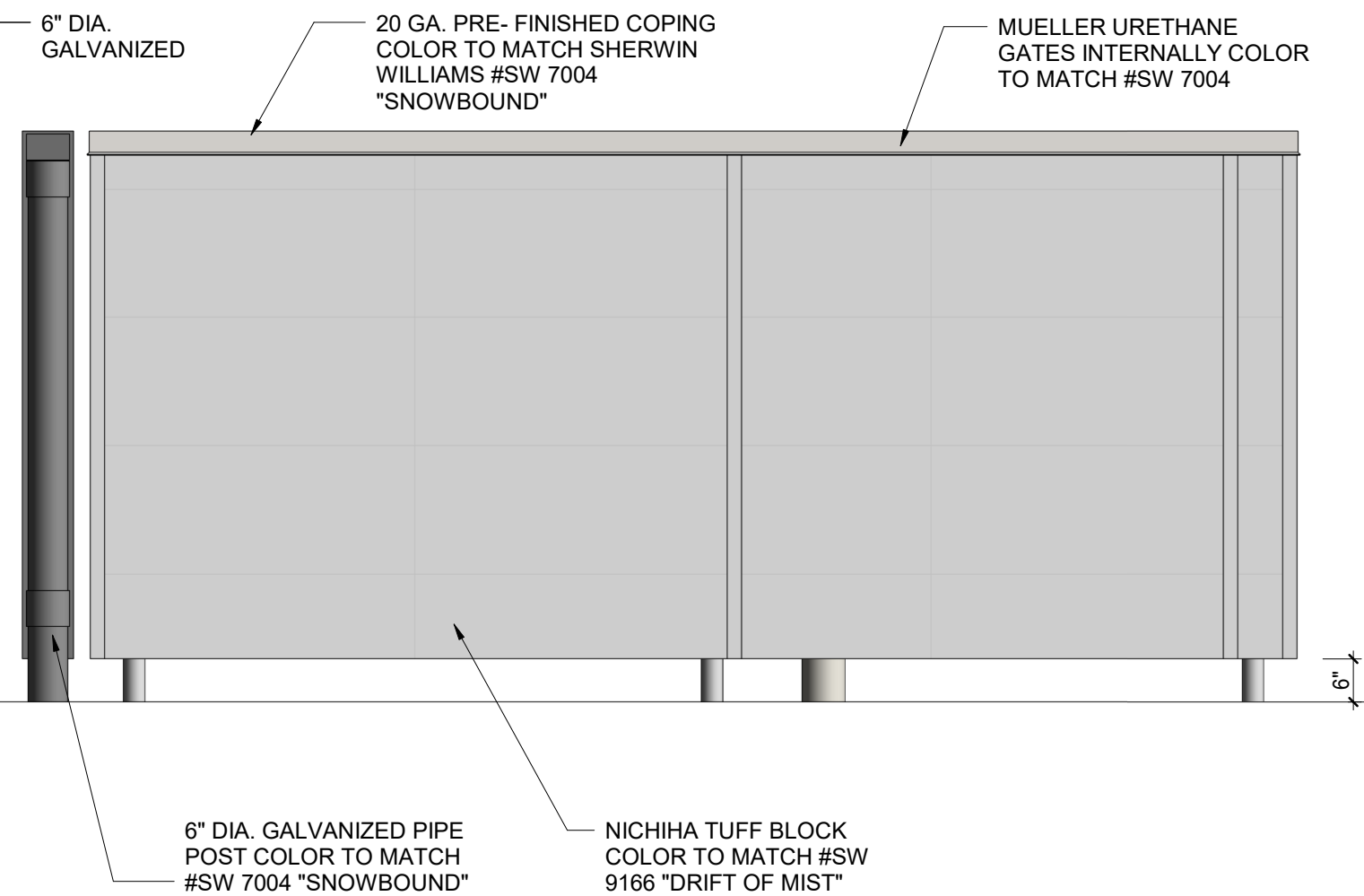
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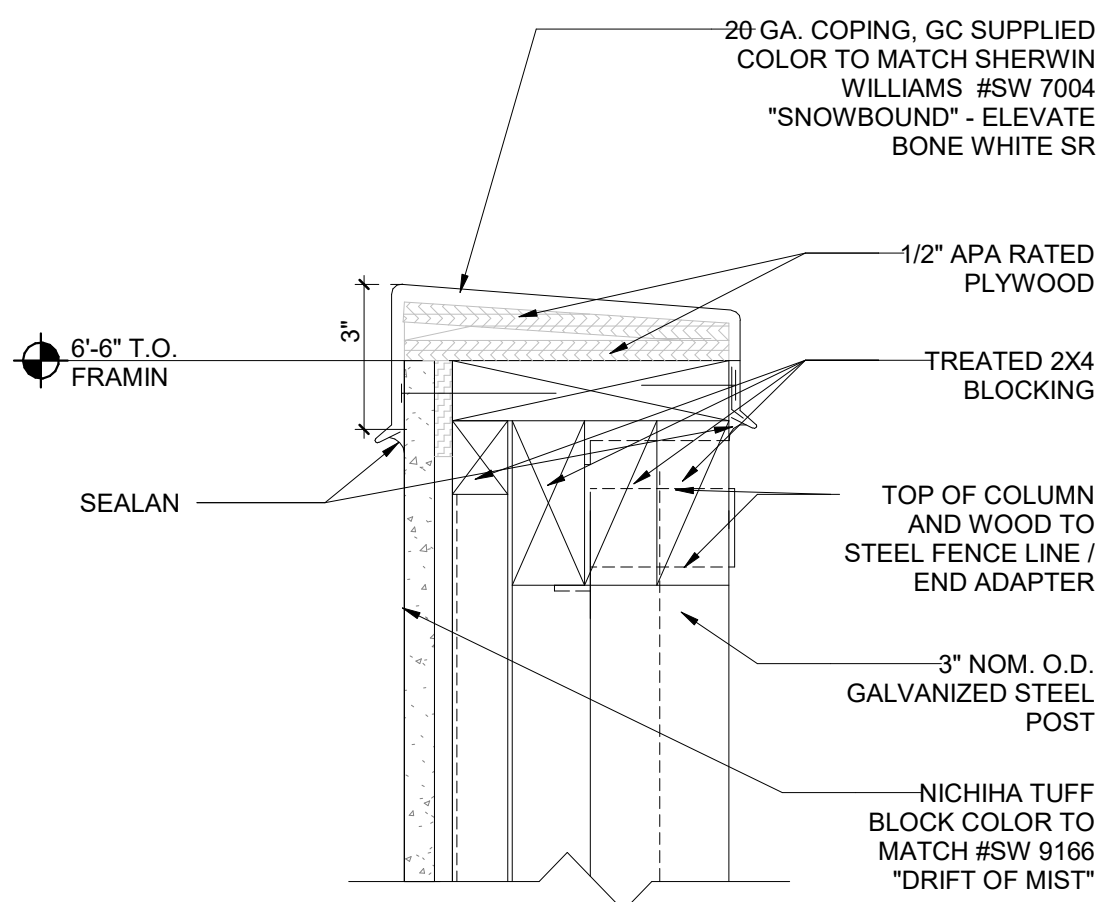
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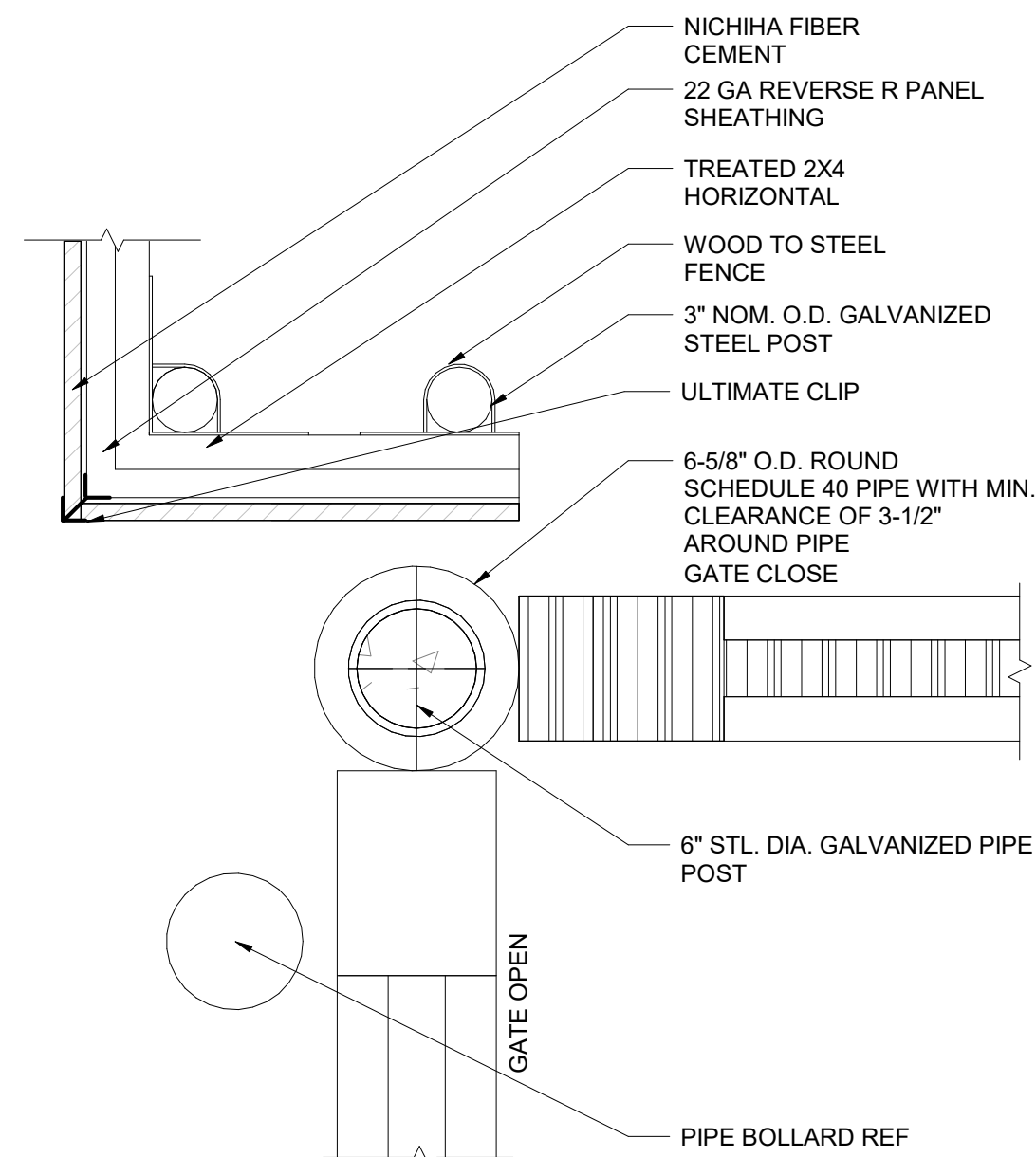
TRASH ENCLOSURE WALL SECTION	3
1/2" = 1'-0"	



TRASH ENCLOSURE SIDE ELEVATION	2
1/2" = 1'-0"	



DETAIL COPING	4
3" = 1'-0"	

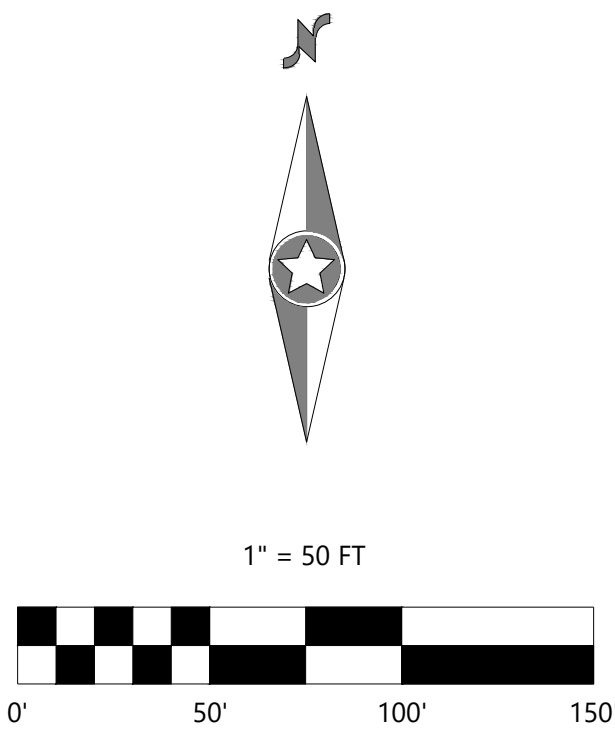
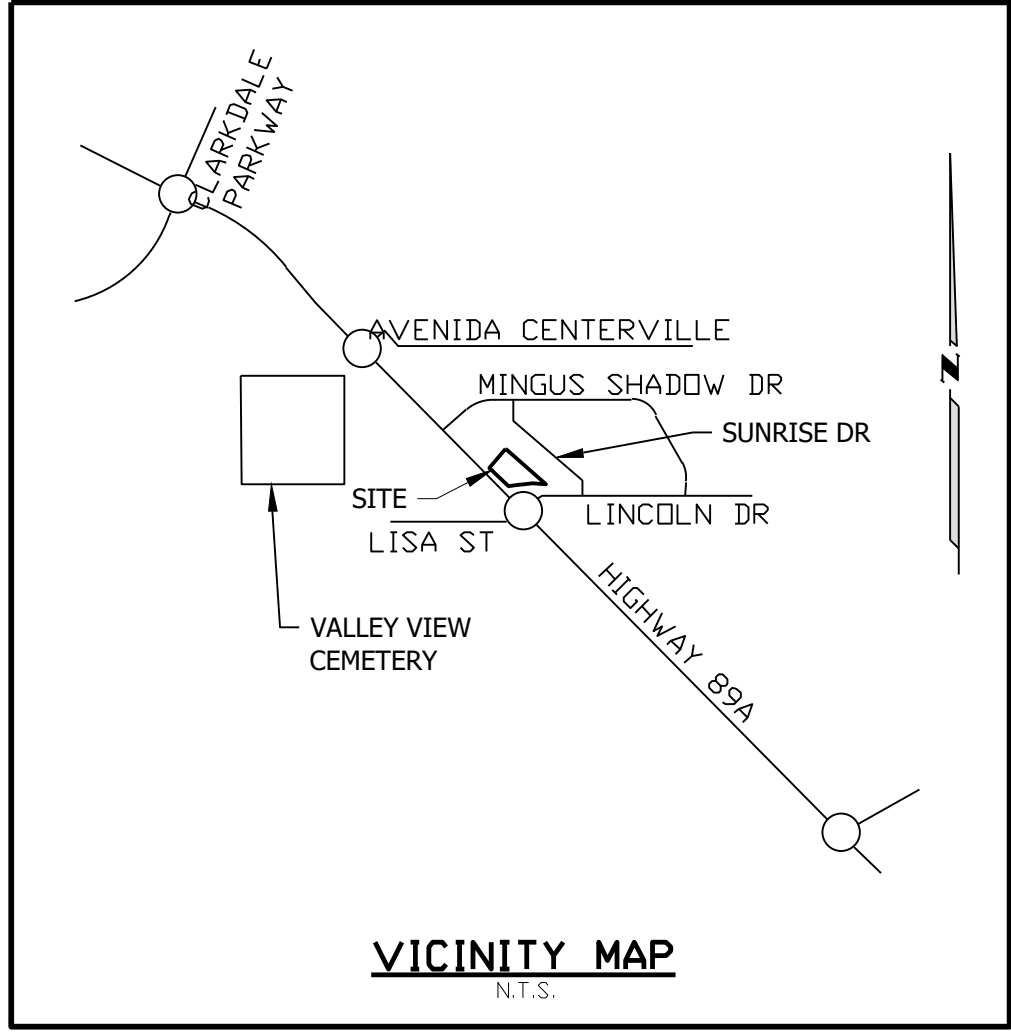
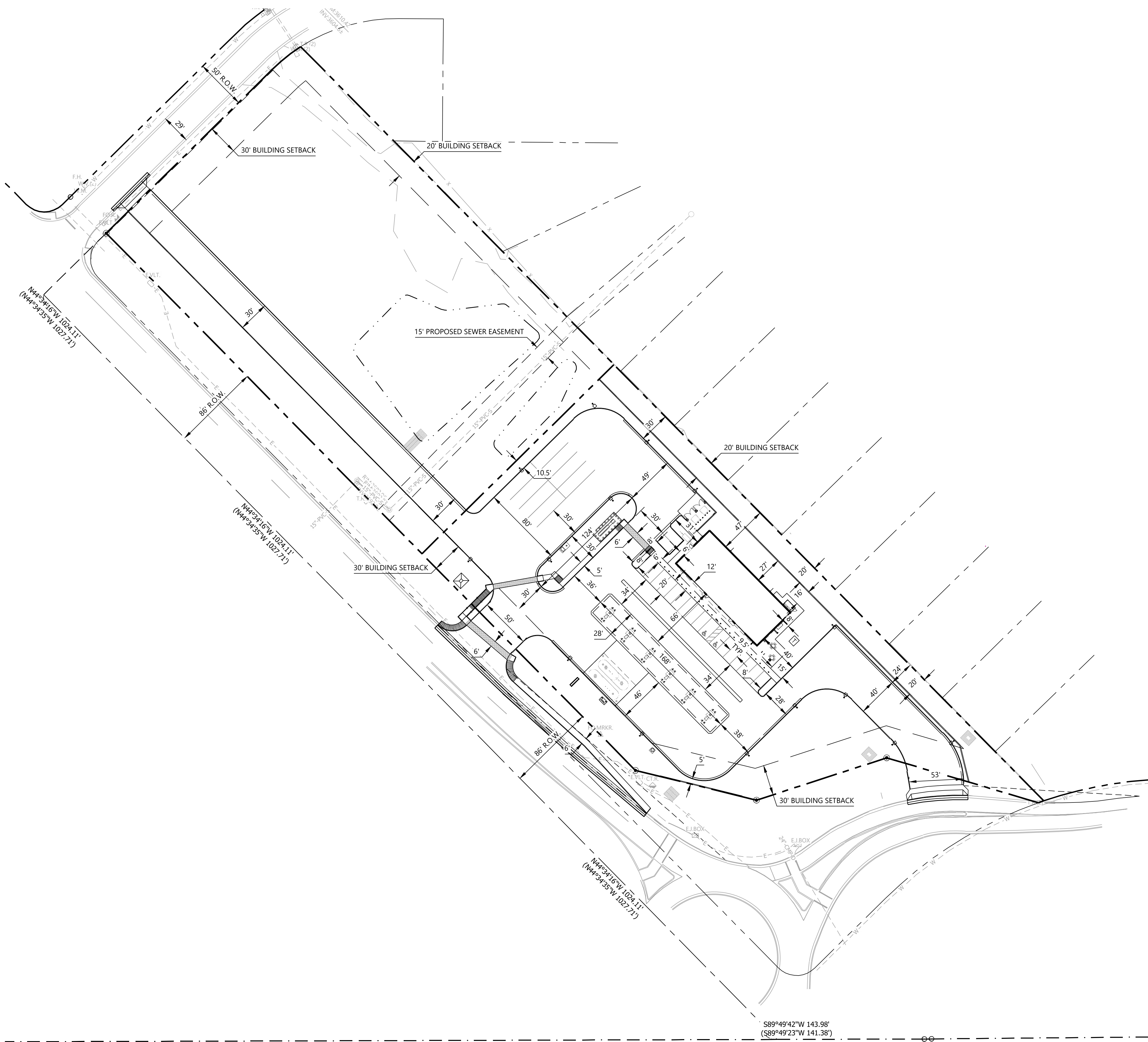


ENCLOSURE GATE HINGE	1
1 1/2" = 1'-0"	

SITE PLAN EXHIBIT

CIRCLE K - CLARKDALE

BEING A PORTION OF THE SOUTHWEST QUARTER OF SECTION 29, TOWNSHIP 16 NORTH, RANGE 3 EAST,
OF THE GILA & SALT RIVER MERIDIAN, YAVAPAI COUNTY, ARIZONA



OWNER / DEVELOPER

CIRCLE K STORES, INC.
1130 WEST WARNER ROAD
TEMPE, AZ 85284
CONTACT: JORDAN RIDBERG, REAL ESTATE DEVELOPMENT MANAGER
EMAIL: JORDAN.RIDBERG@CIRCLEK.COM

ENGINEER

WESTWOOD PROFESSIONAL SERVICES
6909 EAST GREENWAY PARKWAY, SUITE 250
SCOTTSDALE, AZ 85254
TELE: 480-747-6558
CONTACT: MICHAEL CAYLOR, P.E.
EMAIL: MICHAEL.CAYLOR@WESTWOODPS.COM

PROJECT INFORMATION

PROJECT NAME: CIRCLE K - CLARKDALE
PROJECT ADDRESS: HIGHWAY 89A & LINCOLN DR, TOWN OF CLARKDALE, ARIZONA
SITE AREA: 116,954 S2Q. FT. OR 2.69 ACRES MORE OR LESS
A.P.N.#: 406-26-300B



SHEET NUMBER:

1 OF 1

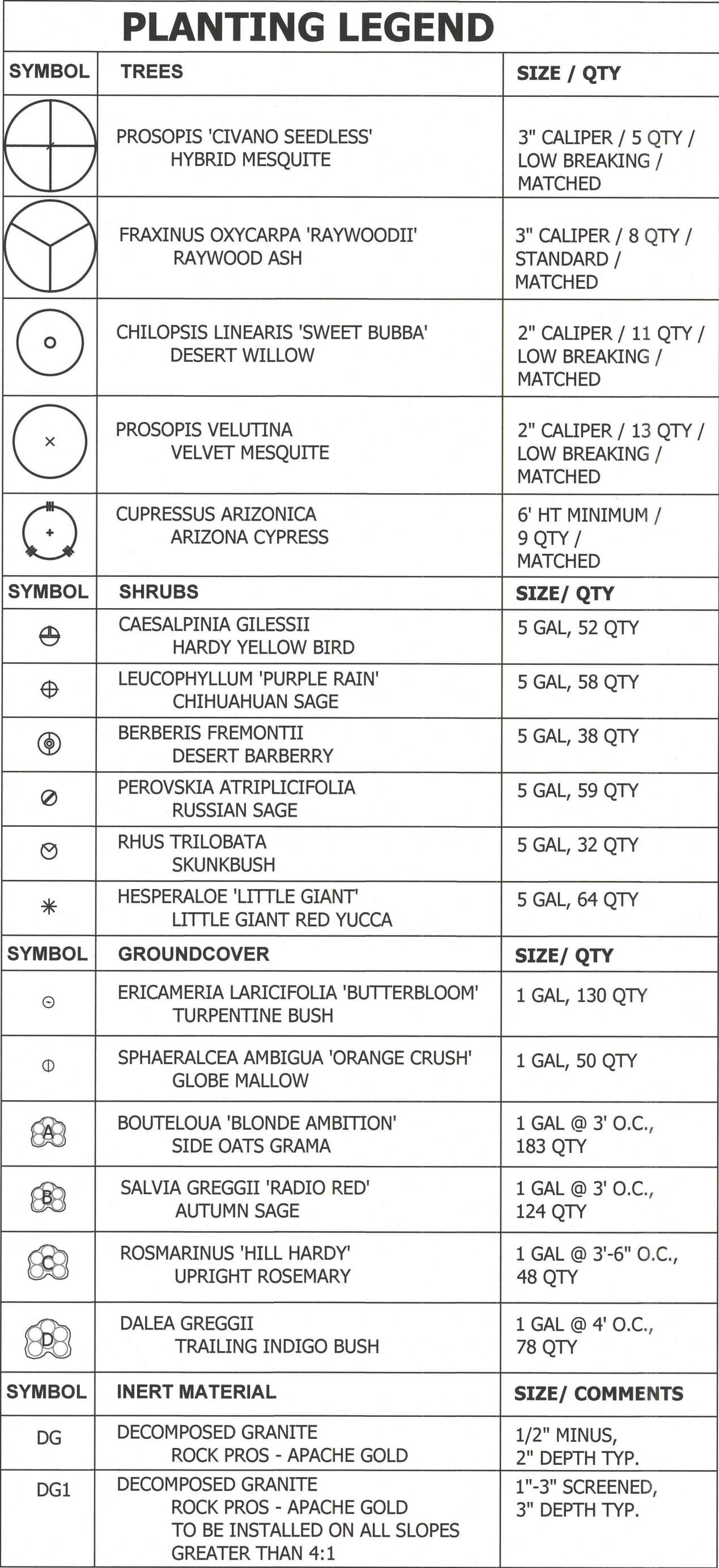
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PROJ: 005849400

SITE PLAN
CIRCLE K - CLARKDALE
HIGHWAY 89A & LINCOLN DR
TOWN OF CLARKDALE, ARIZONA

Westwood

6909 East Greenway Parkway, Suite 250
Scottsdale, AZ 85254
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SCALE: 1" = 50'	VERTICAL		



1. CONTRACTOR IS RESPONSIBLE TO VERIFY ALL SITE CONDITIONS PRIOR TO BIDDING AND THE START OF CONSTRUCTION / INSTALLATION.
2. ANY DISCREPANCIES AND CONFLICTS BETWEEN THE CONSTRUCTION DRAWINGS AND THE SITE ARE TO BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT.
3. CONTRACTOR IS TO BE RESPONSIBLE FOR ALL MATERIAL SHOWN PER PLAN AND IS RESPONSIBLE TO SUBMIT DOCUMENTATION OF ALL MATERIAL TO BE USED.
4. ALL SUBSTITUTIONS AND ALTERNATIVES PROPOSED MUST BE REQUESTED AND SUBMITTED IN WRITING.
5. ALL SUBSTITUTIONS MUST BE APPROVED BY THE LANDSCAPE ARCHITECT AND THE GOVERNING AGENCY PRIOR TO CONSTRUCTION / INSTALLATION.
6. LANDSCAPE CONTRACTOR IS RESPONSIBLE TO TAKE PRECAUTIONS TO PROTECT ANY EXISTING IMPROVEMENTS.
7. THE FINISHED GRADE OF ALL LANDSCAPE AREAS IS TO BE 1" BELOW ANY PAVING, HARDSCAPE, ETC.
8. ALL SITE GRADING IS TO BE DONE SO THAT ALL WATER DRAINS OFF AND AWAY FROM HARDSCAPES AND STRUCTURES.
9. ALL PLANTING AREAS ARE TO HAVE A TOP DRESSING OF DECOMPOSED GRANITE OR DECORATIVE ROCK AS CALLED FOR PER PLAN. DECOMPOSED GRANITE / DECORATIVE ROCK TO BE INSTALLED AT A MINIMUM DEPTH OF 2".
10. CONTRACTOR TO APPLY PRE-EMERGENT TO ALL LANDSCAPE AREAS PRIOR TO INSTALLATION OF DECOMPOSED GRANITE / DECORATIVE ROCK. CONTRACTOR RESPONSIBLE FOR A MINIMUM OF 2 PRE-EMERGENT APPLICATIONS PER MANUFACTURER SPECIFICATIONS.

1. ALL PLANT MATERIAL IS TO CONFORM TO THE ARIZONA NURSERY ASSOCIATION STANDARD FOR NURSERY STOCK.
2. ORGANIC COMPOST AND SOIL AMENDMENT IS TO BE ADDED AND TILLED INTO THE EXISTING SOIL AS REQUIRED AND RECOMMENDED BY THE SOILS REPORT.
3. ALL ARID / DESERT CLIMATE TREES ARE TO HAVE A LOW-BREAKING / BRANCHING HABIT WITH MULTIPLE TRUNKS BRANCHING OFF OF ONE TRUNK BETWEEN THE ROOT FLARE AND +/- 12" ABOVE GRADE.
4. ALL DECIDUOUS TREES SHALL HAVE FULL, WELL SHAPED HEADS.
5. ALL EVERGREEN TREES SHALL BE UNSHEARED AND FULL UNLESS OTHERWISE SPECIFIED.
6. TREES WITH CENTRAL LEADERS WILL NOT BE ACCEPTED IF LEADER IS DAMAGED OR REMOVED.
7. CONTRACTOR TO THOROUGHLY SETTLE PLANTS BY WATERING.
8. CONTRACTOR TO PRUNE ALL DAMAGED TWIGS AFTER PLANTING.
9. ALL PLANT MATERIAL WITHIN A SPECIES SHALL HAVE SIMILAR SIZE AND SHAPE.
10. CONTRACTOR IS TO SUBMIT PHOTOS FROM THE NURSERIES OF THE PROPOSED TREES PRIOR TO PLANTING.
11. LANDSCAPE ARCHITECT RESERVES THE RIGHT TO REFUSE ANY PLANT MATERIAL THEY FIND UNACCEPTABLE.

1. ALL PLANT MATERIAL IDENTIFIED AS "EXISTING TO REMAIN" SHALL BE PROTECTED IN PLACE DURING ALL PHASES OF CONSTRUCTION.
2. LANDSCAPE AREAS DISTURBED BY CONSTRUCTION SHALL BE REPAIRED AND REPLACED WITH NEW DECOMPOSED GRANITE / DECORATIVE ROCK MATCHING EXISTING.

1. ALL UNDERGROUND CONDUITS, PIPES, AND UTILITIES ARE TO BE LOCATED PRIOR TO DIGGING.
2. THE LANDSCAPE CONTRACTOR IS REQUIRED TO CONTACT THE CITY PUBLIC WORKS DEPARTMENT, AND ANY OTHER PUBLIC OR PRIVATE AGENCY NECESSARY FOR UTILITY LOCATION PRIOR TO ANY CONSTRUCTION.
3. THIS DRAWING IS A PART OF A COMPLETE SET OF BID DOCUMENTS, SPECIFICATIONS, ADDITIONAL DRAWINGS, AND EXHIBITS. UNDER NO CIRCUMSTANCES SHOULD THESE PLANS BE USED FOR CONSTRUCTION PURPOSES WITHOUT EXAMINING ACTUAL LOCATIONS OF UTILITIES ON SITE, AND REVIEWING ALL RELATED DOCUMENTS.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL DAMAGE TO EXISTING UTILITIES OR DISRUPTION OF SERVICE CAUSED BY EXCAVATION.

TOTAL SITE AREA:	116,954 SQ FT (2.69 AC)
LANDSCAPE AREA REQUIRED:	35,086 SQ FT (30%)
LANDSCAPE AREA PROVIDED:	43,645 SQ FT (37%)
PARKING LOT AREA:	7,740 SQ FT
PARKING LOT LANDSCAPE REQUIRED:	774 SQ FT (10%)
PARKING LOT LANDSCAPE PROVIDED:	858 SQ FT (11%)

CIRCLE K
NEC HIGHWAY 89A & LINCOLN DRIVE
CLARKDALE, ARIZONA 86324

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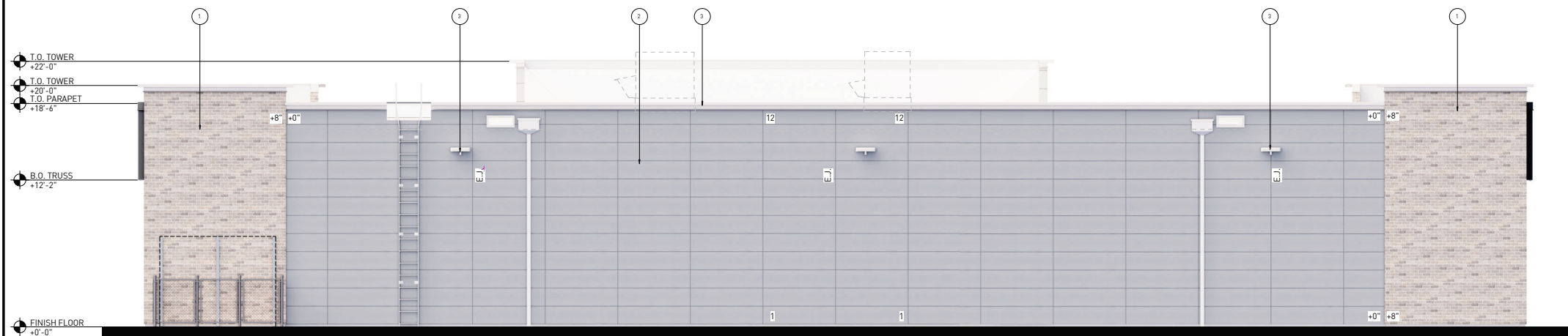
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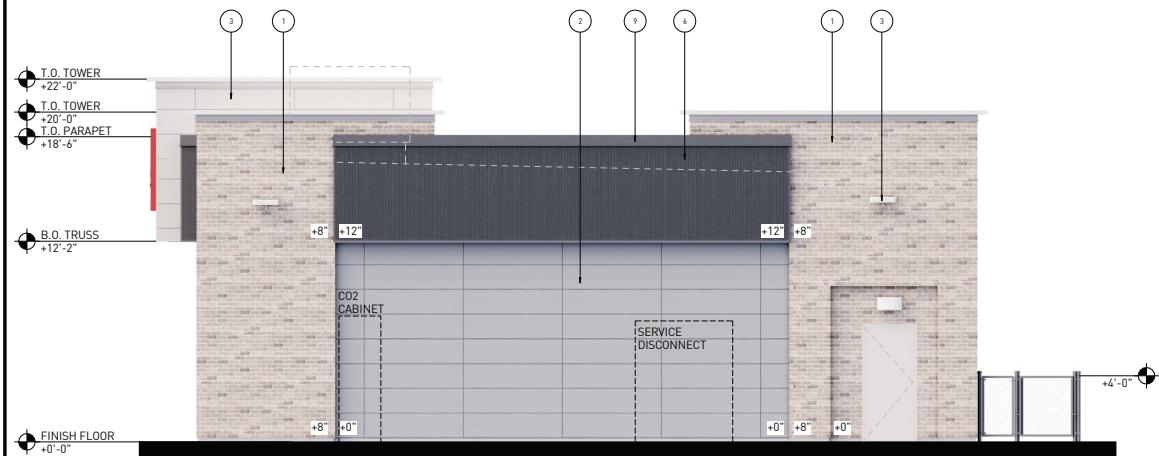
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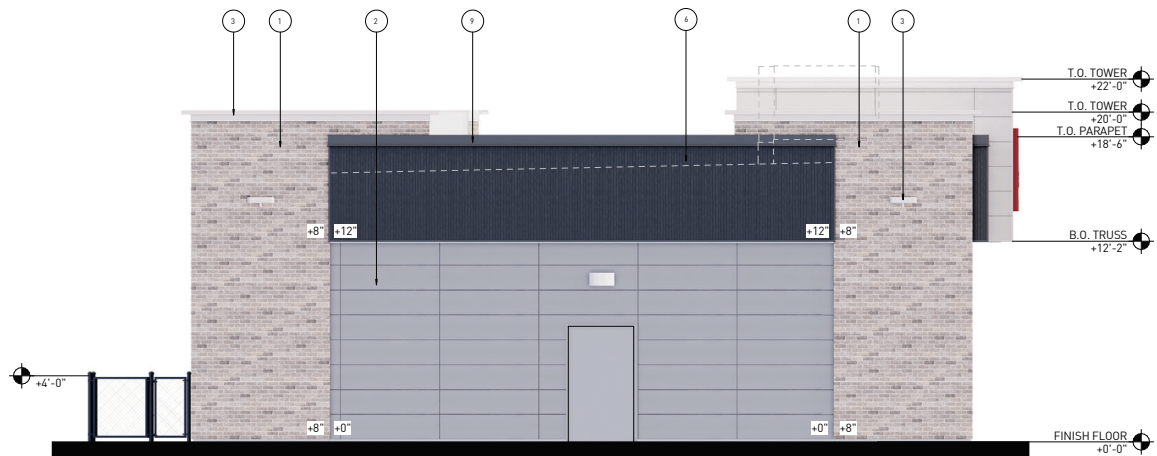
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12" = 1'-0"



REAR ELEVATION (SOUTH) | 2
12" = 1'-0"



SIDE ELEVATION (EAST) | 3
12" = 1'-0"



SIDE ELEVATION (WEST) | 4
12" = 1'-0"

9. METAL COPING, CORNICE AND GUTTER
SHERWIN WILLIAMS T015 "WEB GRAY"
8. NICHHA TUFFBLOCK
SHERWIN WILLIAMS T116 "DRIFT OF MIST"
7. SPANDREL GLASS
6. NICHHA RIBBED
SHERWIN WILLIAMS T015 "WEB GRAY"
5. ANODIZED WINDOW AND DOOR FRAMING
COLOR: DUNE BRONZE
4. 1" INSULATED CLEAR GLASS
3. METAL COPING, CORNICE AND GUTTER
SHERWIN WILLIAMS T011 "SNOWBOUND"
2. NICHHA TUFFBLOCK
SHERWIN WILLIAMS T011 "SNOWBOUND"
1. NICHHA CANYONBRICK
"DUNE BRONZE"

MATERIAL LEGEND |
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REVISIONS

ISSUE	DATE
R0	01/10/25

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XX

QUALITY CONTROL

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PROJECT NAME

CIRCLE K
STORES, INC.

1234 STREET ADDRESS
ANYTOWN, US STATE

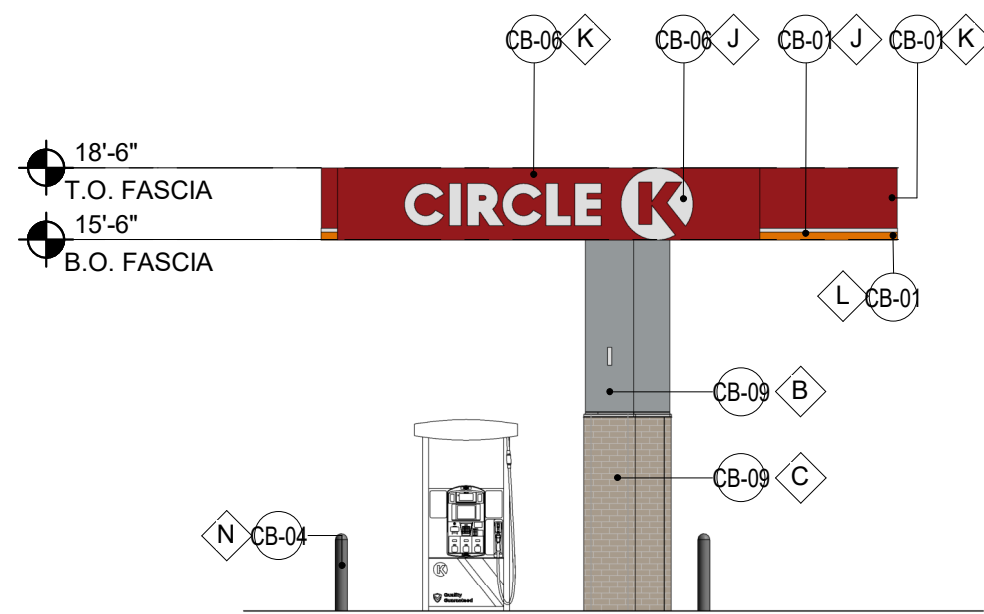
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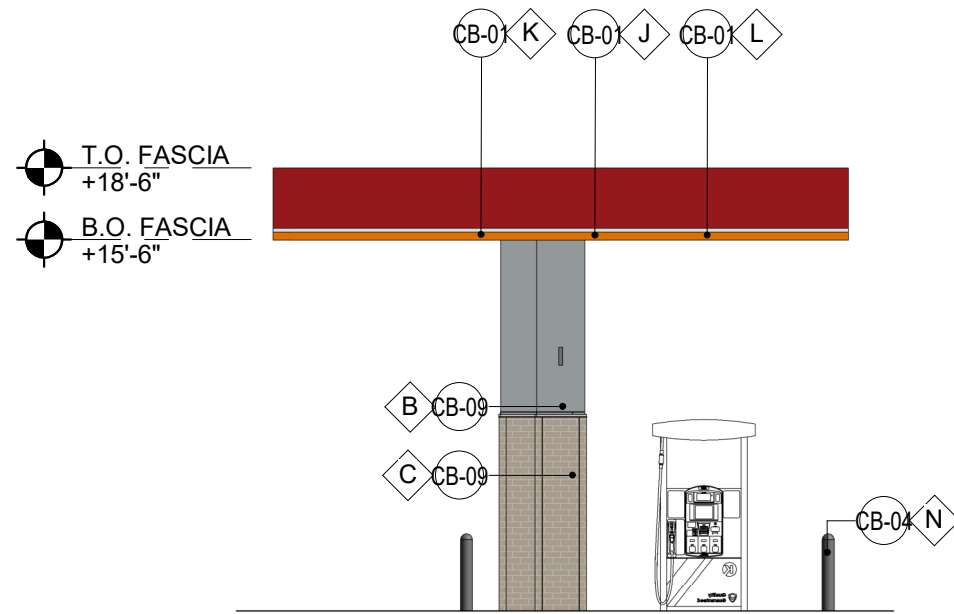
CIRCLE K STORES, INC.

PROJECT NUMBER: XXXX

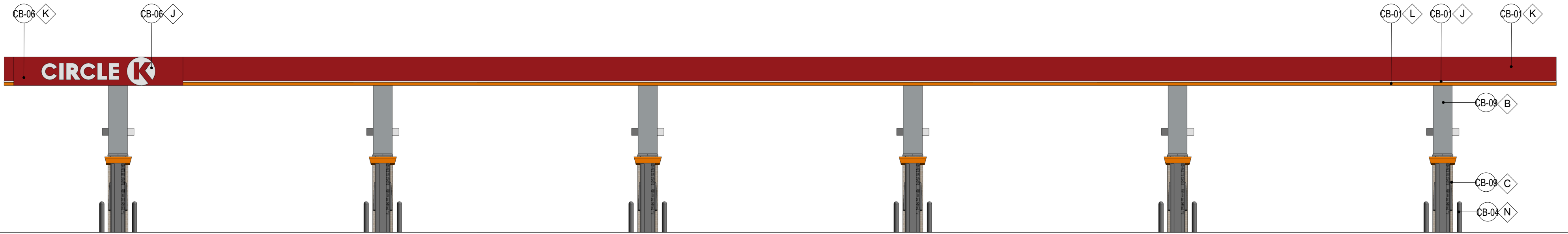
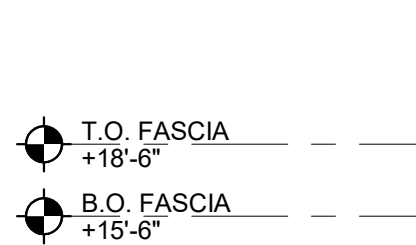
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ELEVATIONS



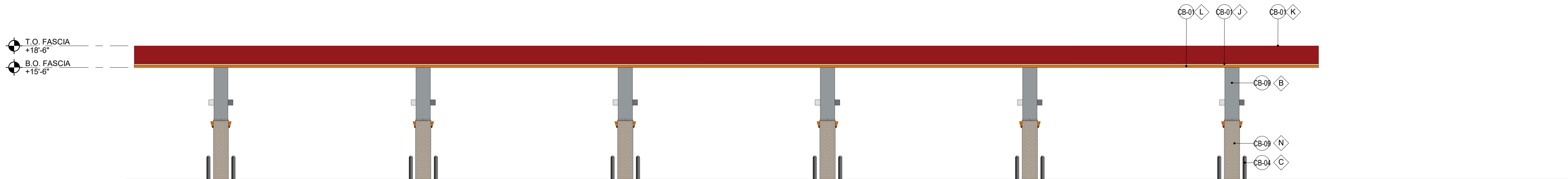
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1/8" = 1'-0"



SIDE ELEVATION (WEST) | 4
1/8" = 1'-0"



FRONT ELEVATION (SOUTH) | 2
1/8" = 1'-0"



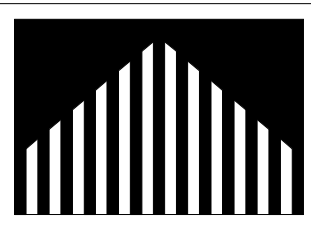
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CLASS A COLUMN FINISH

KEY	
NUMBER	DESCRIPTION
CB-01	ACM PANEL "TEX-COTE"
CB-04	6"O BOLLARD, 36" HIGH
CB-06	INTERNALLY ILLUMINATED SIGN UNDER SEPARATE PERMIT
CB-09	NICHIHA FIBER CEMENT WALL PANEL SYTEM

FINISH	
B	- ***NICHHA TUFF BLOCK - COLOR TO MATCH #SW 6255 "MORNING FOG"
C	- - ***NICHHA CANYONBRICK - SHALE BROWN
F	- "SHERWIN WILLIAMS #SW 6255 "MORNING FOG"
J	- "SHERWIN WILLIAMS #SW 7005 - CIRCLE K WHITE
K	- "SHERWIN WILLIAMS #SW 4081 - SAFETY RED
L	- CIRCLE K ORANGE #PMS 144
M	- SHERWIN WILLIAMS - SW6236 - GRAYS HARBOR
N	-PVC BOLLARD SLEEVE - DARK GREY
O	- RAL9016 SHELL WARM WHITE

NOTES:
1. COLORS SHOWN ON THESE ELEVATIONS ARE FOR ILLUSTRATION PURPOSES ONLY. FOR ACTUAL COLORS, REFER TO MANUFACTURER'S SAMPLES.
2. THE FASCIA PANELS ARE PRE-FINISHED BY SIGNAGE VENDOR
3. ALL SIGNS REQUIRE A SEPARATE SUBMITTAL.
4. ALL LIGHTING ON CANOPY TO BE FLUSH MOUNTED WITH FASCIA



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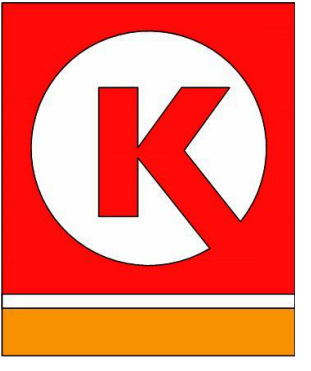
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PROJECT

CIRCLE K
STORES, INC.

SR 89A & LINCOLN, DR.
CLARKDALE, AZ

PROTOCOL # R0



CIRCLE K STORES,
PROJECT NUMBER:
202407-141

FUEL CANOPY
ELEVATIONS







ADOT USE ONLY							
Encroachment Permits Tracking Id.	T132567	Date:	10.14.25	Permit Type	GENA	Review Type	Substantive
Date submittal received:(PT)	10.07.25	Requested Return Date		10.28.25	Comments To applicant		
Route(s).	SR 89A		Milepost	350.19			
Encroachment Owner & Contact		Circle K					
Engineer & Contact		Odyssey Services Group					
Contractor(s)/Applicant:							
Work Description- Permit Purpose:							
Installation of one driveway on SR 89a with a northbound right turn lane. Installation of one driveway on Lincoln Drive.							
Request for reviews from:		Name of Reviewer:		Request for reviews from:		Name of Reviewer:	
	District Admin. - Engineer				Permits Supervisor		
X	Regional Traffic Engineer	Ryan Wolff			Signing & Striping		
	Roadway Eng.				Construction		
	Environmental Coord.				Right of way		
	Traffic Control				Traffic Operations		
	Landscape				Bridge		
Attachments. If not attached available at Drive - Use link below:							
	Construction Plans		Traffic Control Plans		Drainage Report		Application
X	Permit Tech. Comments	X	Traffic Study		Landscape Plans		Other:
	Other:		Other:		Other:		Other:
	ADOT Share Folder Web Link:						
Return Comments to:							
	Yvonne Giltner Supervisor		Rebekah Wilkes Technician		"Sky" Skylene Crank Technician	X	Chuck King Technician

	928-779-7529 Ygiltner@azdot.gov		928-779-7549 Rwilkes@azdot.gov		928-779-7520 Scranks@azdot.gov		928-779-7558 Cking2@azdot.gov
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Plan or Document & Page No.	Review Comment No.	ADOT Comments	Applicants Response
Name of Reviewer: Chuck King Date of Review: _____ Hours Spent on Review: _____			
Application	1	Provide a revised application with the contractors contact information.	.
	2	Provide the contractors Certificate of Insurance (COI) with all of the documents, all of the endorsements policy numbers on the endorsements, additional insured, waiver of subrogation, completed insurance checklist. Insurance information is attached.	
	3	Provide a detailed Traffic Control Plan (TCP) with the Traffic Control contact information on the application.	
Plans	1	Provide the complete set of plans for review.	
Name of Reviewer: Ryan Wolff Date of Review: _____ Hours Spent on Review: _____			
		The TIA is approved.	



TRAFFIC IMPACT ANALYSIS

LINCOLN 89 CIRCLE K

LINCOLN DRIVE/STATE ROUTE 89A

12 MAY 2025



PREPARED FOR

CIRCLE K STORES

1120 WEST WARNER ROAD

PHOENIX, ARIZONA 85284

SOUTHWEST TRAFFIC ENGINEERING, LLC
3838 NORTH CENTRAL AVENUE, SUITE 1810
PHOENIX, AZ 85012
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Appendix

Traffic Counts

Trip Generation Calculations

Capacity Calculations

Turn Lane Calculations

Prepared By:

Matthew Reeg, PE, PTOE

Andrew Smigielski, PE, PTOE, PTP



LINCOLN 89 CIRCLE K LINCOLN DRIVE/STATE ROUTE 89A (SR 89A) TRAFFIC IMPACT ANALYSIS

Executive Summary

The purpose of this traffic study is to evaluate the current and future transportation system within the project study area surrounding the site without and with the proposed project.

For the purposes of the analysis presented in this report, State Route 89A (SR 89A) is considered to function as a north-south aligned roadway.

Existing Traffic Operations

The intersection of Lincoln Drive/SR 89A currently operates at an adequate level of service (LOS) during the weekday AM, MIDDAY and PM peak hours.

Future Traffic Operations Without Project

The intersection of Lincoln Drive/SR 89A is expected to continue to operate at an adequate LOS during the weekday AM, MIDDAY and PM peak hours in 2027 and 2030 without the project.

Future Traffic Operations With Project

All of the study intersections are expected to operate at an adequate LOS during the weekday AM, MIDDAY and PM peak hours in 2027 and 2030 without and with the project.

Turn Lane Analysis

A northbound right turn lane is warranted at the intersection of West Access/SR 89A.

While an eastbound left turn lane is warranted at the intersection of South Access/Lincoln Drive, the eastbound left turn/through movement is expected to operate at a LOS A (with less than 10 seconds of delay) during the weekday AM, MIDDAY and PM peak hours in 2030 with the project, and is not recommended due to the relatively low traffic volumes on westbound Lincoln Drive, as Lincoln Drive ends approximately ¼ mile east of the South Access, and low speed nature of Lincoln Drive.

The westbound approach to the intersection of Lincoln Drive/SR 89A is expected to experience a queue of 25 feet, the northbound right turn lane at the intersection of West Access/SR 89A is not expected to generate a queue and the eastbound left turn movement at the intersection of South Access/SR 89A is anticipated to generate a queue of 25 feet in 2030 with the project. These turning movements are not expected to overlap with the adjacent study intersections.

The warranted northbound right turn lane at the intersection of West Access/SR 89A needs to be constructed to provide 115 feet of storage with a 90 foot taper to satisfy ADOT's right turn lane requirements.



Recommendations

A northbound right turn lane should be constructed at the intersection of West Access/SR 89A and be maximized with the available space between the West Access and Lincoln Drive/SR 89A intersection.



LINCOLN 89 CIRCLE K LINCOLN DRIVE/STATE ROUTE 89A (SR 89A) TRAFFIC IMPACT ANALYSIS

Project Description

Circle K Stores is proposing a new twelve (12) fueling station gas station, with convenience store, on the northeast corner of Lincoln Drive/State Route 89A (SR 89A) in Clarkdale, Arizona. The vicinity of the project is shown in **Figure 1**. The site is located as shown in **Figure 2**. The project will be served by two proposed access points.

The purpose of this traffic impact analysis is to:

- Evaluate the current and future operational characteristics of the adjacent roadway network surrounding the project site.
- Estimate the traffic generation associated with the project and assign that traffic to the existing roadway system.
- Analyze future traffic operations at one existing study intersection and two proposed access points serving the project area.
- Determine the need for auxiliary turn lanes at the proposed driveways that will serve the project site.

The author of this report is a registered professional engineer (civil) in the State of Arizona having specific expertise and experience in the preparation of traffic impact analyses.

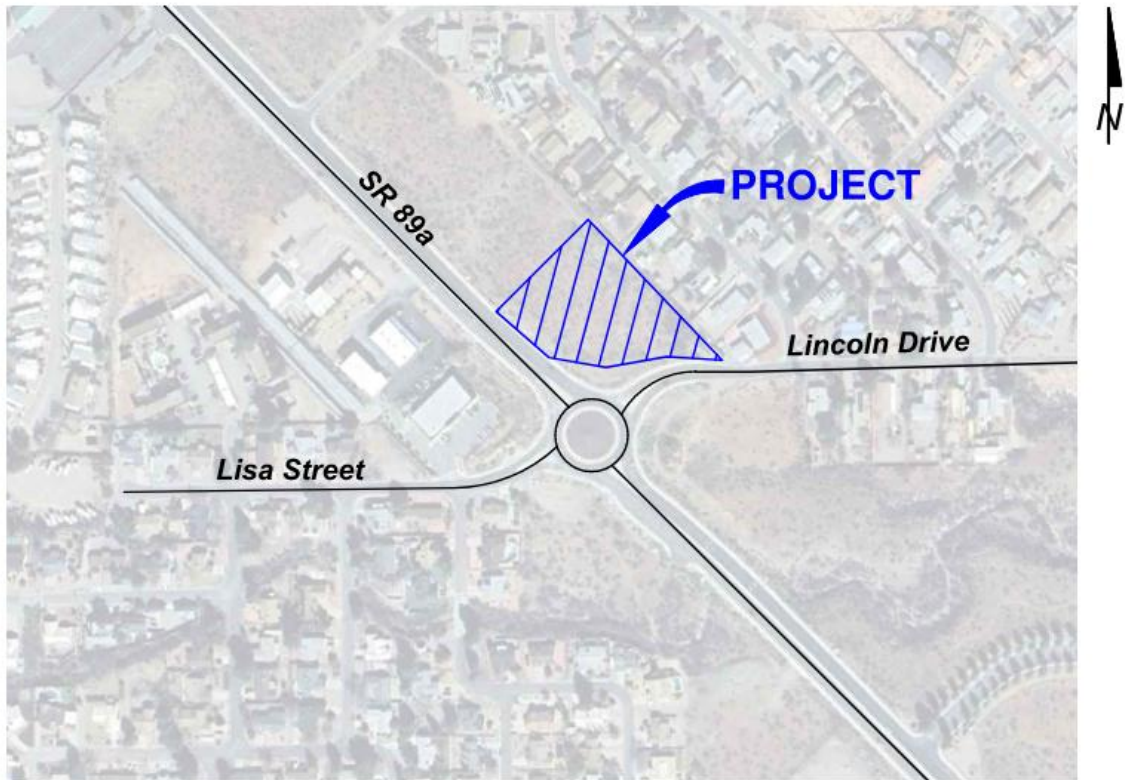
Study Methodology

In order to analyze and evaluate the potential traffic impacts of the proposed development, the following tasks were undertaken:

- Field observation of the proposed site and surrounding area was conducted to evaluate the existing physical and operational characteristics of the adjacent roadway network.
- Site traffic volumes generated by the proposed site were calculated using the *Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition, 2021*.
- Calculated site traffic was distributed based on existing traffic patterns and assigned to the primary roadways within the project study limits.
- Capacity analyses were performed for the existing conditions and future conditions without and with the project based on an opening year of 2027 and a horizon year of 2030 using methodology presented in the *2016 Highway Capacity Manual (HCM 6)*.
- The need for auxiliary turn lanes at the study access points was evaluated based on ADOT guidelines.



Figure 1 – Vicinity Map



LEGEND:

— = Existing Road

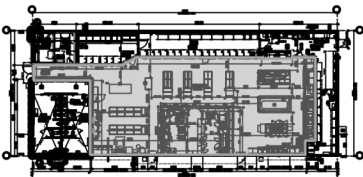
 = Project Site

Figure 2 - Site Plan

SITE DEVELOPMENT SUMMARY

EXISTING ZONING:	C, COMMERCIAL
PROPOSED ZONING:	C, COMMERCIAL
PROPERTY AREA:	235, 659.6 SF (5.41 AC)
OVERALL:	87,170 SF (2.001 AC)
CIRCLE K:	
CURRENT LAND USE	UNDEVELOPED
BUILDING SETBACK PER CODE:	30'=FRONT 0'=SIDE 20'=REAR
PARKING SETBACK:	X'=FRONT AND ROW X'=SIDE AND REAR
PARKING SPACE/DRIVE AISLE:	9' WIDE X 20' LONG, 24' AISLE
REQUIRED:	9.5' WIDE X 20' LONG, 24' AISLE
PROVIDED:	
PARKING RATIO REQUIREMENT	CITY OF CLARKDALE AZ
CONVENIENCE STATION:	1 SPACE / 200 SF OF BLDG
TOTAL SPACES REQUIRED:	15 SPACES (2957/200=14.79)*
ADA SPACES REQUIRED:	1 SPACE
PARKING PROVIDED:	17 + 8 RV & 12 PUMP SPACES
STANDARD SPACES	16
ADA SPACES	1
EV CHARGING SPACES	0
PUMP PARKING	12
RV PARKING	8

- *- CALCULATED BASED ON RETAIL SPACE
PLAN REVIEW NOTES
- LANDSCAPE ISLANDS AREN'T DEPICTED. FINAL CONSTRUCTION DRAWINGS MAY REQUIRE ISLANDS AND THIS WOULD IMPACT THE LAYOUT AND PARKING COUNT.
 - BACKGROUND INFORMATION FOR THIS PROJECT PROVIDED BY OTHERS + AERIAL.
 - THIS CONCEPT SITE PLAN DOES NOT GUARANTEE ALL REQUIREMENTS FROM ZONNING ISSUES, NOR SIGNAGE, STORM DRAINAGE, GRADING, UTILITIES, EASEMENTS, AND THE LIKE ARE PROPERLY ADDRESSED AT THE TIME. THE ABOVE REQUIREMENTS CAN AFFECT THE SITE LAYOUT. ALL REQUIREMENTS ASSUMED WITH THIS LAYOUT ARE TENATIVE AND SUBJECT TO CHANGE AS MAY BE DIRECTED BY THE CLIENT, ARCHITECT, JOINT DEVELOPER, OR ANY OF THE GOVERNMENTAL PERMITTING AGENCIES.



SHADED AREA= 2,957 SF OF RETAIL SPACE



\\WESTWOODPS\\LOCAL\\GLOBAL PROJECTS\\0058494.00\\DWG\\CONCEPT\\0058494XB03.1.DWG

INITIAL:	081224
REV1:	101424
REV2:	101824
REV3:	050725
REV4:	

PREPARED FOR:

ODYSSEY SERVICES
GROUP, LLC

9540 GARLAND RD STE. 381-188
DALLAS, TX 75218

CIRCLE K
NTI - NEC

SR 89A + LINCOLN DR
CLARKDALE, AZ

Westwood

Phone (952) 937-5150 12701 Whitewater Drive, Suite #300
Fax (952) 937-5822 Minnetonka, MN 55343
Toll Free (888) 937-5150 www.westwoodps.com
Westwood Professional Services, Inc.

CONCEPTUAL SITE PLAN-
SITE CONCEPT

PROJECT NUMBER: 0058494.00

SHEET NUMBER:

CSP 3.1W

DATE: 04/24/2025

CIRCLE K_CLARKDALE_SR89



Existing Conditions

The proposed project will be located on the northeast corner of Lincoln Drive/SR 89A in Clarkdale, Arizona.

SR 89A is a north/south aligned, four-lane roadway with a raised median that provides regional access between Prescott and Flagstaff, Arizona. Curb, gutter, and sidewalk are provided along both sides of the SR 89A. The posted speed limit on SR 89A is 45 miles per hour (mph).

Lincoln Drive is a two-lane roadway that provides access to residential homes east of the proposed site. Lincoln Drive has a posted speed limit of 25 mph and dead ends approximately one quarter mile east of SR 89A.

The intersection of Lincoln Drive/SR 89A is a four leg, roundabout intersection. The eastbound and westbound approaches to the intersection of Lincoln Drive/SR 98A offer a shared left turn/through/right turn lane while northbound and southbound traffic is offered a shared left turn/through lane and a shared through/right turn lane at the intersection.

The study intersection locations, lane configurations, and intersection control are shown in **Figure 3**.

Existing Traffic Data

In order to form a basis for analysis of the project impacts, weekday 24-hour turning movement counts were conducted at the intersection of Lincoln Drive/SR 89A in February 2025, while school was in session.

The weekday 24-hour turning movement counts conducted at the intersection of Lincoln Drive/SR 89A were reviewed to identify the weekday AM, MIDDAY and PM peak hours, as shown below;

- Weekday AM Peak Hour – 7:30 am to 8:30 am
- Weekday MIDDAY Peak Hour – 2:00 pm to 3:00 pm
- Weekday PM Peak Hour – 3:15 pm to 4:15 pm

The existing weekday AM, MIDDAY and PM peak hour traffic volumes are shown in **Figure 4**. Complete traffic count data can be found in the Appendix.



Figure 3 – Existing Lane Configurations and Traffic Control



LEGEND:



= YIELD (R1-2) Sign



= Speed Limit

— = Existing Road

⇒ = Existing Movement

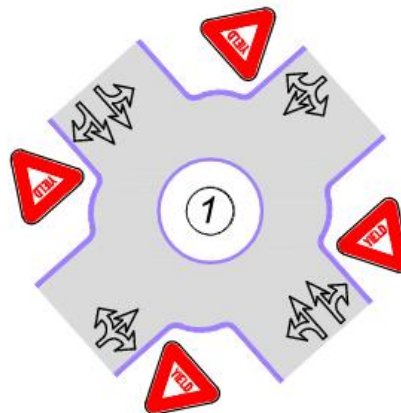




Figure 4 – Existing Weekday Peak Hour Traffic Volumes

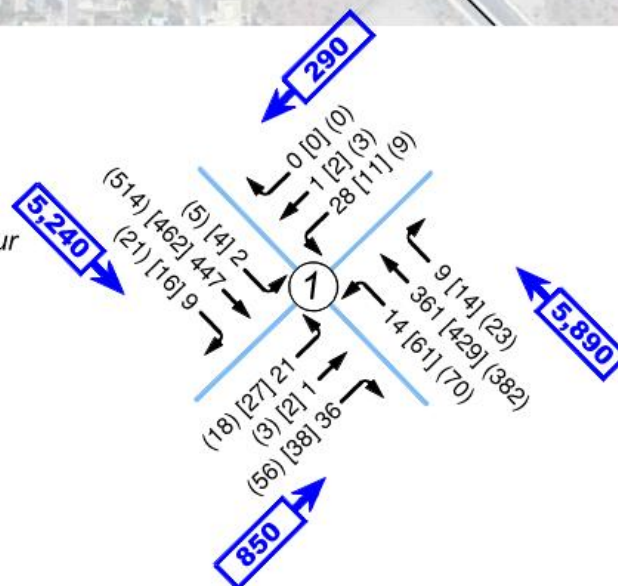


LEGEND:

XX = Weekday AM Peak Hour
 [XX] = Weekday MIDDAY Peak Hour
 (XX) = Weekday PM Peak Hour
 Vehicles Per Hour

— = Existing Road

➔ = Vehicles Per Day





Access

The proposed site will be served by two proposed access points.

West Access will be located on the east side of SR 89A approximately, 190 feet north of Lincoln Drive and will offer right-in, right-out access to the proposed site. Westbound traffic exiting the site at the intersection of West Access/SR 89A will be STOP controlled while northbound and southbound traffic will operate under free flow conditions.

South Access will be a full access point located on the north side of Lincoln Drive, approximately 165 feet west SR 89A. Southbound traffic at the intersection of South Access/Lincoln Drive will be STOP controlled. Eastbound and westbound vehicles at the intersection of South Access/Lincoln Drive will continue to operate under free flow conditions.

Figure 5 shows the locations, geometry and spacing for the study intersections that will serve as a baseline of analysis in 2027 and 2030. This baseline for the analysis serves as a starting point to determine necessary improvements and does not present the final roadway configurations that may be required as part of this analysis.

Trip Generation

Trip generation for the project was developed utilizing nationally agreed upon data contained in the Institute of Transportation Engineers (ITE) publication *Trip Generation, 11th Edition*, 2021. The project is proposing a twelve (12) fueling station gas station, with a convenience store that has a gross floor area (GFA) of 5,200 square feet. Trip generation for the site was estimated using ITE Land Use Code 945, Convenience Store/Gas Station – GFA (4-5.5k) (LUC 945). The ITE *Trip Generation* manual does not provide MIDDAY trip generation data. For the purposes of this report, the greater of the weekday AM and PM peak hour trip generation was used for the MIDDAY peak hour trip generation estimate. The weekday daily and weekday AM, MIDDAY and PM peak hour trip generation for the proposed site is shown in **Table 1**. The complete trip generation calculations can be found in the Appendix.

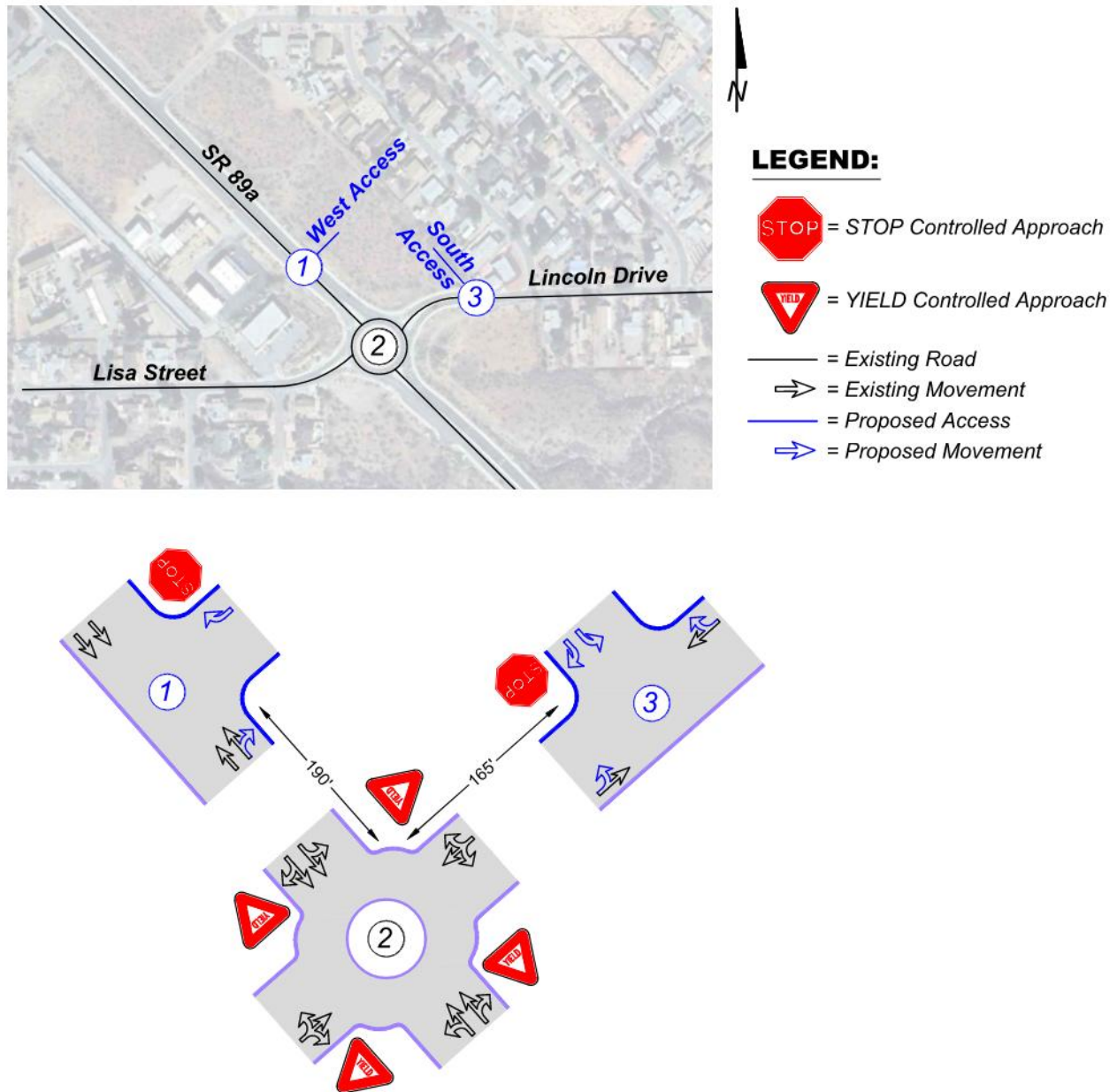
Table 1 – Project Site Generated Trips

Time Period	12 Fueling Station Convenience Market/ Gas Station (LUC 945)
Average Daily, Inbound (vtpd)	1,543
Average Daily, Outbound (vtpd)	1,543
Total Weekday Daily	3,086
AM Peak Hour, Inbound (vtph)	162
AM Peak Hour, Outbound (vtph)	162
Total AM Peak	324
MID Peak Hour, Inbound (vtph)	162
MID Peak Hour, Outbound (vtph)	162
Total MID Peak	324
PM Peak Hour, Inbound (vtph)	137
PM Peak Hour, Outbound (vtph)	137
Total PM Peak	274

vtpd - vehicle trips per day, vtph - vehicle trips per hour



Figure 5 – Baseline Access Point and Intersection Configuration Assumptions





Pass-By Reduction

Gas stations do not typically generate all new traffic on a roadway system, many are ‘pass-by’ trips. The Institute of Transportation Engineers’ (ITE) publication *Trip Generation Manual, 11th Edition*, 2021, defines pass-by trips as intermediate stops on the way from an origin to a primary trip destination without a route diversion. Primary trips are trips where the primary purpose of the trip is to visit a specific location (i.e. gas station). Pass-by trips are trips where the secondary purpose of the trip is to visit the gas station, in conjunction with some other primary trip purpose (such as driving home from work).

ITE estimates that 76% of the weekday AM peak hour trips and 75% of the weekday PM peak hour trips will be from pass-by for a gas station with convenience store that has between 9 and 20 vehicle fueling positions. Pass-by trips lower the study intersections’ through traffic volumes as vehicles choose to turn into the site instead of continuing through the intersection. The ITE weekday AM peak hour pass-by rate was utilized for the weekday MIDDAY peak hour as the vehicle trips during these two peak hours was assumed to be the same. **Table 2** shows the pass-by reductions expected at the project site.

Table 2 – Pass-By Reduction

Time Period	12 Fueling Station Convenience Market/ Gas Station (LUC 945)	Pass-By Reduction	Total (Primary Trips)
AM Peak Hour, Inbound (vtph)	162	-124	38
AM Peak Hour, Outbound (vtph)	162	-124	38
Total AM Peak	324	-247	77
MID Peak Hour, Inbound (vtph)	162	-124	38
MID Peak Hour, Outbound (vtph)	162	-124	38
Total MID Peak	324	-247	77
PM Peak Hour, Inbound (vtph)	137	-103	34
PM Peak Hour, Outbound (vtph)	137	-103	34
Total PM Peak	274	-206	68

vtph - vehicle trips per hour

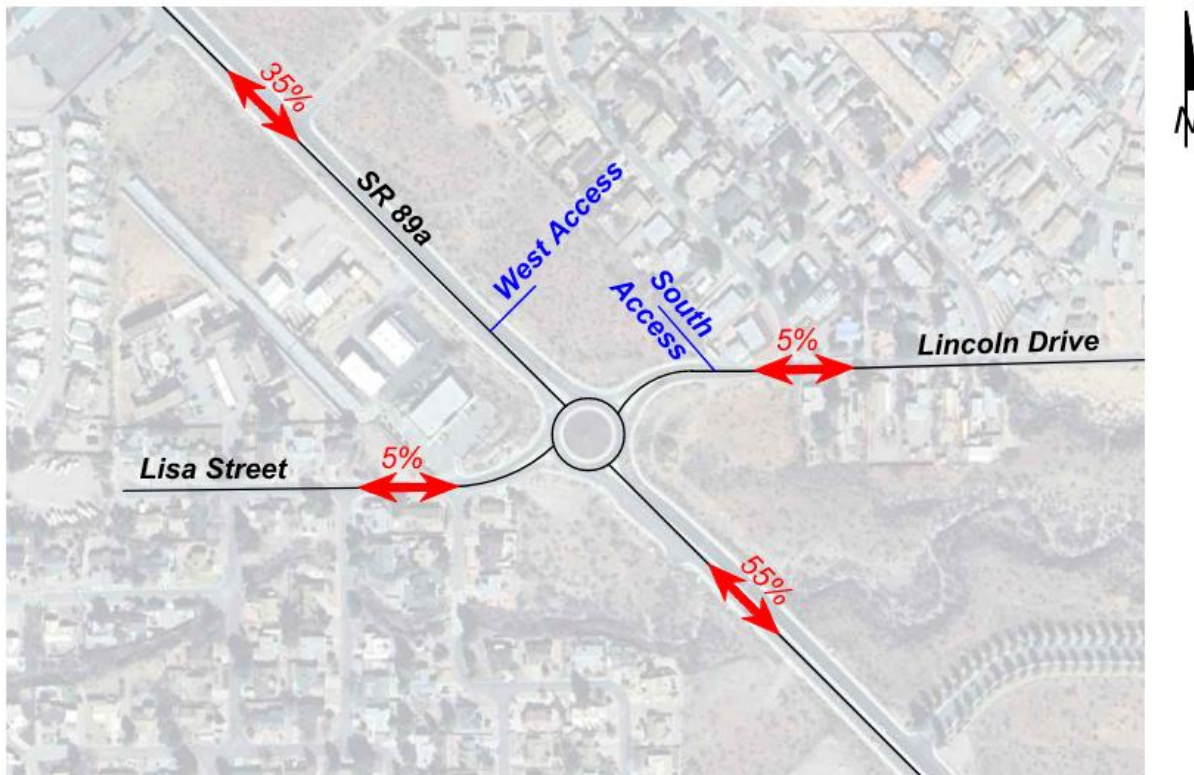
Trip Distribution & Assignment

Trip distribution for the project was based on existing traffic volume patterns near the proposed site. **Figure 6** shows the weekday trip distribution for the project as a percentage of net new primary trips. It was assumed that the pass-by vehicle trips would have an even distribution in each direction along SR 89A.

Based on the values shown in **Table 2**, primary and pass-by trips generated by the site were assigned to the project intersections.



Figure 6 – Weekday Peak Hour Trip Distribution



LEGEND:

— = Existing Road

— = Proposed Access

XX% = Distribution of Vehicle Trips



Figure 7 shows the weekday peak hour primary trip assignment of the new site generated trips to the project intersections. **Figure 8** shows the assignment of the expected pass-by trips in the weekday peak hours at the project site. It should be noted that pass-by trips are positive at the turning movements used to access the site and negative to the through traffic stream.

Figure 9 shows the total weekday peak hour assignment of the site generated trips (combination of primary and pass-by) to the project intersections for the study years 2027 and 2030.

Existing Traffic Operations

Analysis of current intersection operations was conducted for the weekday AM, MIDDAY and PM peak hours using the nationally accepted methodology set forth in the *Highway Capacity Manual*, Transportation Research Board, 2016 (HCM 6). The computer software Synchro 11 was utilized to calculate the levels of service for individual movements and approaches.

LOS is a qualitative measure of the traffic operations at an intersection or on a roadway segment. Level of service is ranked from LOS A, which signifies little or no congestion and is the highest rank, to LOS F, which signifies congestion and jam conditions. LOS D is typically considered adequate operation at signalized and un-signalized intersections in developed areas.

At un-signalized intersections, LOS is predicted/calculated for those movements, which must either stop for or yield to oncoming traffic and is based on average control delay for the particular movement. Control delay is the portion of total delay attributed to traffic control measures such as stop signs and traffic signals. The criteria for level of service at un-signalized intersections are shown in **Table 3**.

Table 3 – Level of Service Criteria – Un-signalized Intersections

Level-of-Service	Delay
A	< 10 seconds/vehicle
B	> 10 and < 15 seconds/vehicle
C	> 15 and < 25 seconds/vehicle
D	> 25 and < 35 seconds/vehicle
E	> 35 and < 50 seconds/vehicle
F	> 50 seconds/vehicle



Figure 7 – Weekday Peak Hour Primary Trip Assignment

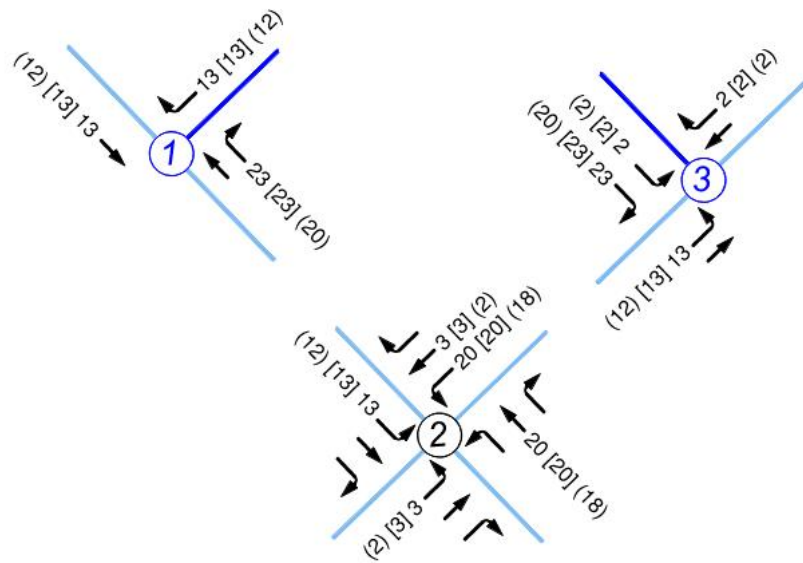
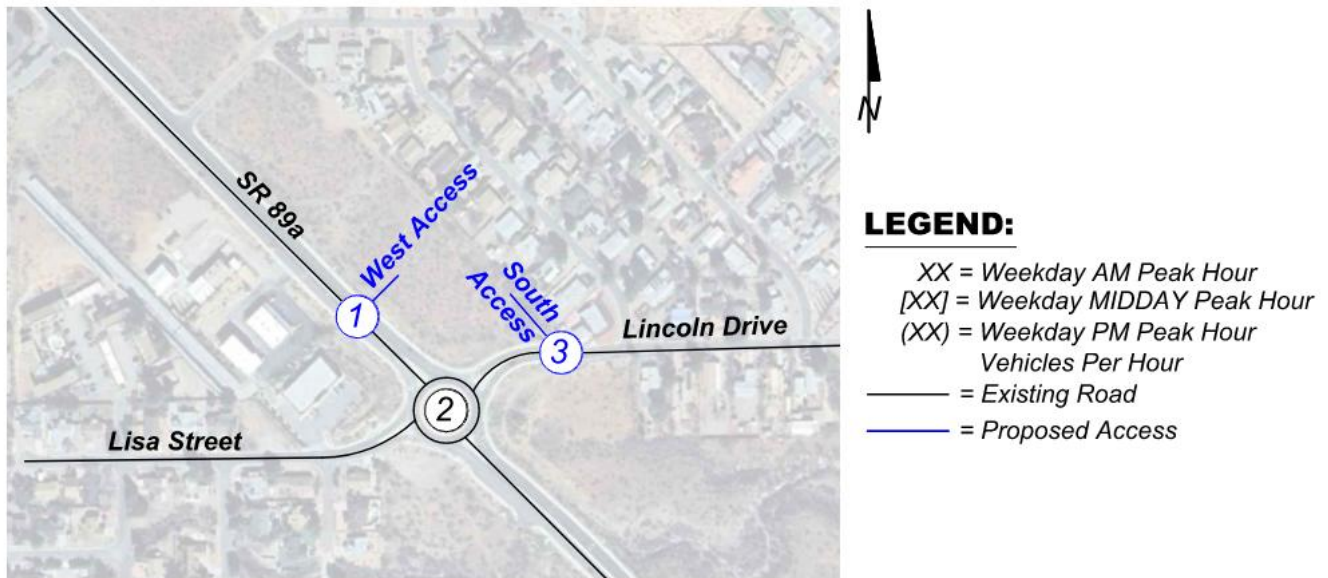




Figure 8 – Weekday Peak Hour Pass-By Trip Assignment Reduction

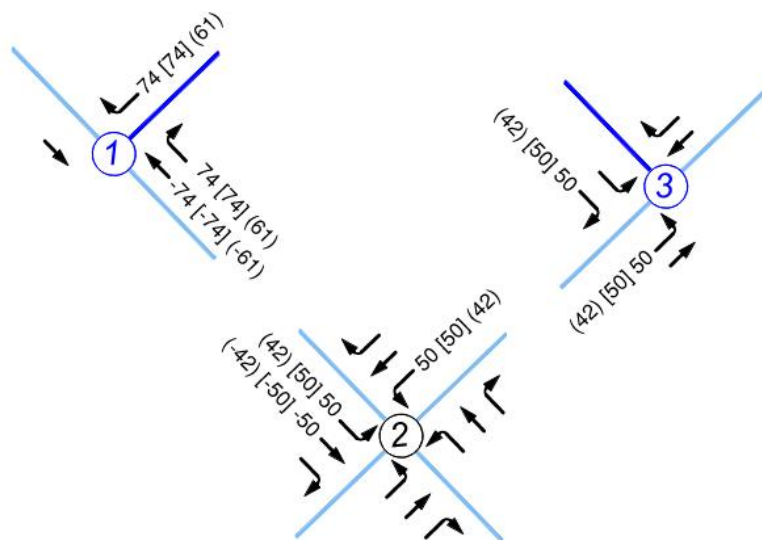
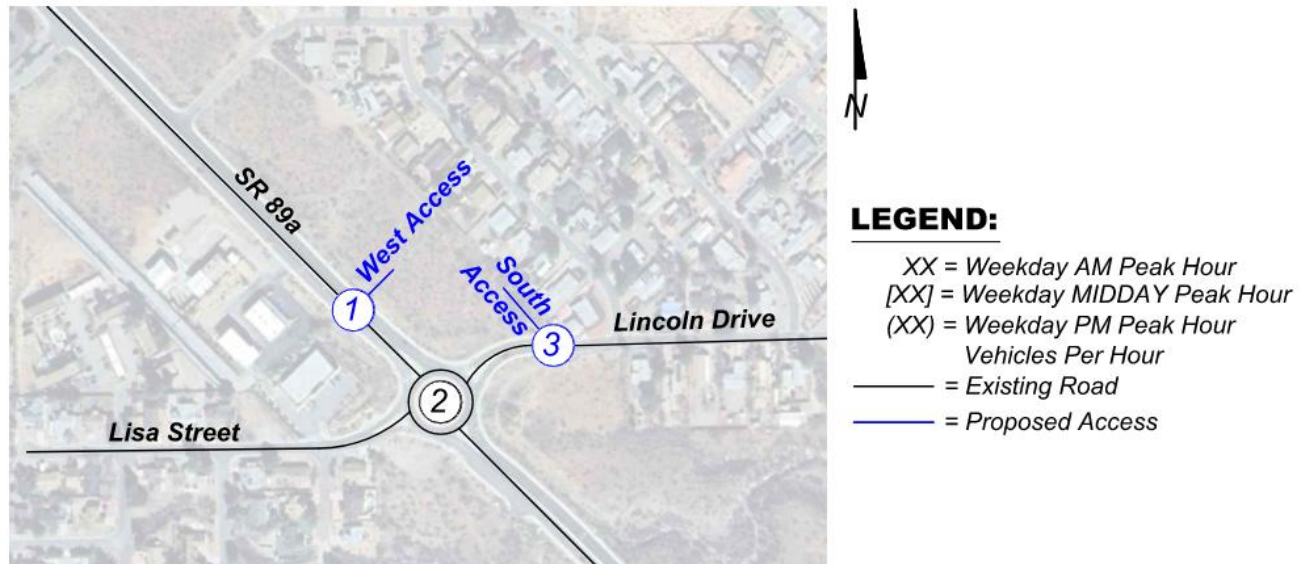




Figure 9 – Weekday Peak Hour Total Trip Assignment (Primary and Pass-By)

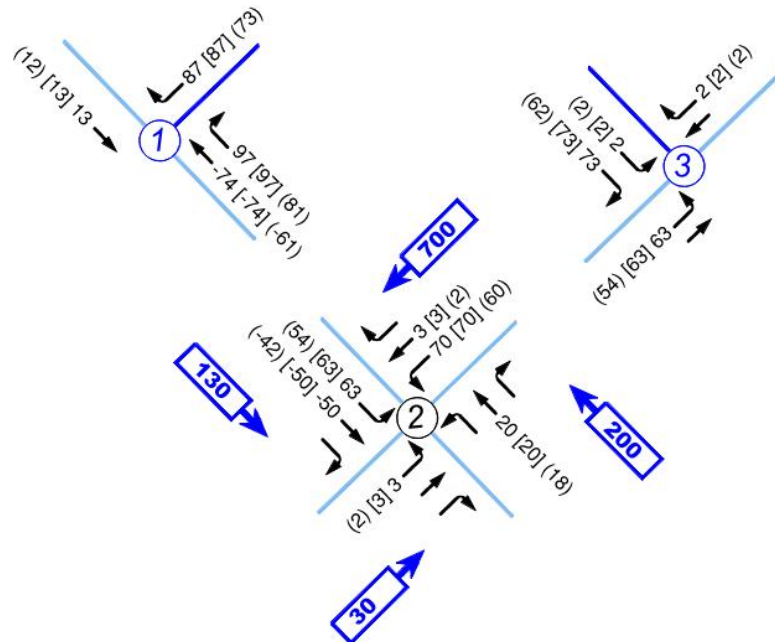
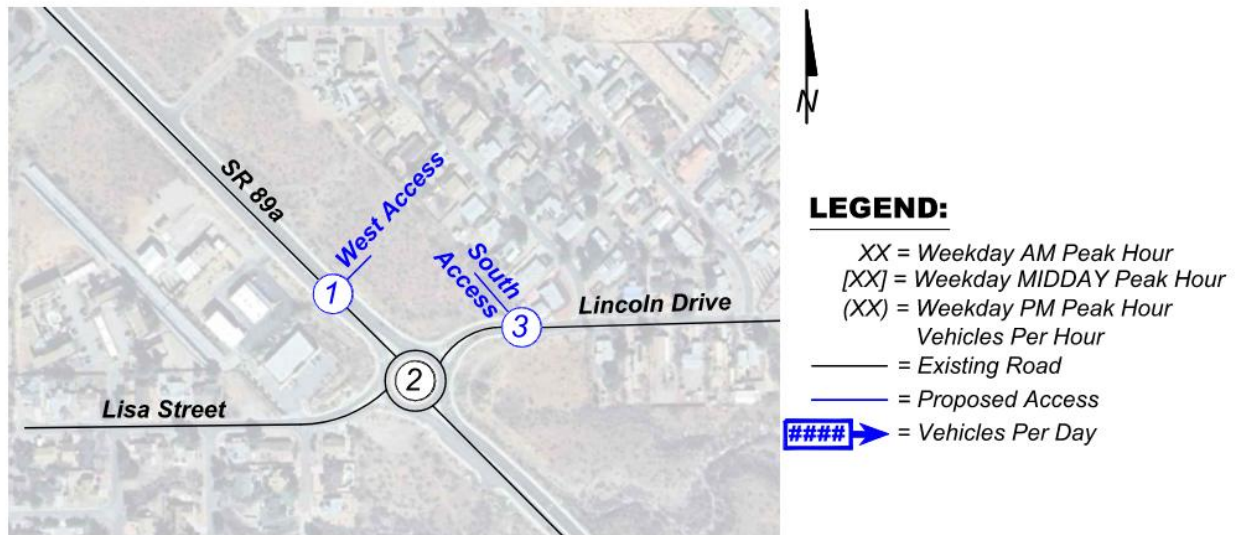




Table 4 shows the existing levels of service that were calculated for the intersection of Lincoln Drive/SR 89A. Complete capacity calculations are included in the Appendix.

Table 4 – Existing Weekday Peak Hour Levels of Service

Intersection	AM Peak Hour		MD Peak Hour		PM Peak Hour	
	LOS	Delay	LOS	Delay	LOS	Delay
Roundabout						
Lincoln Drive/SR 89A						
Overall Intersection	A	4.4	A	4.8	A	4.9
Eastbound Approach	A	5.1	A	5.2	A	5.6
Westbound Approach	A	4.3	A	4.5	A	4.3
Northbound Approach	A	4.1	A	4.7	A	4.5
Southbound Approach	A	4.5	A	4.8	A	5.2

Delay - seconds per vehicle

As shown in **Table 4**, the intersection of Lincoln Drive/SR 89A currently operates at an adequate level of service (LOS) during the weekday AM, MIDDAY and PM peak hours.

Future Traffic Operations Without Project

In order to assess the impacts of the project on future traffic operations, traffic projections were made for the opening year of 2027 and a horizon year of 2030. A review of historical traffic data in the vicinity of the project showed increasing and decreasing traffic volumes. Due to this, a conservative 2% growth rate was used to account for future development near the project area. Weekday peak hour traffic volumes without the project in 2027 and 2030 are shown in **Figures 10** and **11**.

As with the current traffic volumes, levels of service were calculated at the intersection of Lincoln Drive/SR 89A in the study area for 2027 and 2030 without the project. Intersection LOS for 2027 and 2030 without the project are shown in **Tables 5** and **6**. Complete capacity calculations are included in the Appendix.

Table 5 – 2027 Weekday Peak Hour Levels of Service Without Project

Intersection	AM Peak Hour		MD Peak Hour		PM Peak Hour	
	LOS	Delay	LOS	Delay	LOS	Delay
Roundabout						
Lincoln Drive/SR 89A						
Overall Intersection	A	4.5	A	4.9	A	5.0
Eastbound Approach	A	5.2	A	5.4	A	5.7
Westbound Approach	A	4.4	A	4.7	A	4.4
Northbound Approach	A	4.2	A	4.8	A	4.6
Southbound Approach	A	4.7	A	5.0	A	5.3

Delay - seconds per vehicle



Table 6 – 2030 Weekday Peak Hour Levels of Service Without Project

Intersection	AM Peak Hour		MD Peak Hour		PM Peak Hour	
	LOS	Delay	LOS	Delay	LOS	Delay
Roundabout						
Lincoln Drive/SR 89A						
Overall Intersection	A	4.7	A	5.1	A	5.2
Eastbound Approach	A	5.5	A	5.6	A	6.1
Westbound Approach	A	4.5	A	4.9	A	4.6
Northbound Approach	A	4.3	A	5.0	A	4.8
Southbound Approach	A	4.8	A	5.1	A	5.5

Delay - seconds per vehicle

As shown in **Tables 5** and **6**, the intersection of Lincoln Drive/SR 89A is expected to continue to operate at an adequate LOS during the weekday AM, MIDDAY and PM peak hours in 2027 and 2030 without the project.



Figure 10 – 2027 Weekday Peak Hour Traffic Volumes Without Project

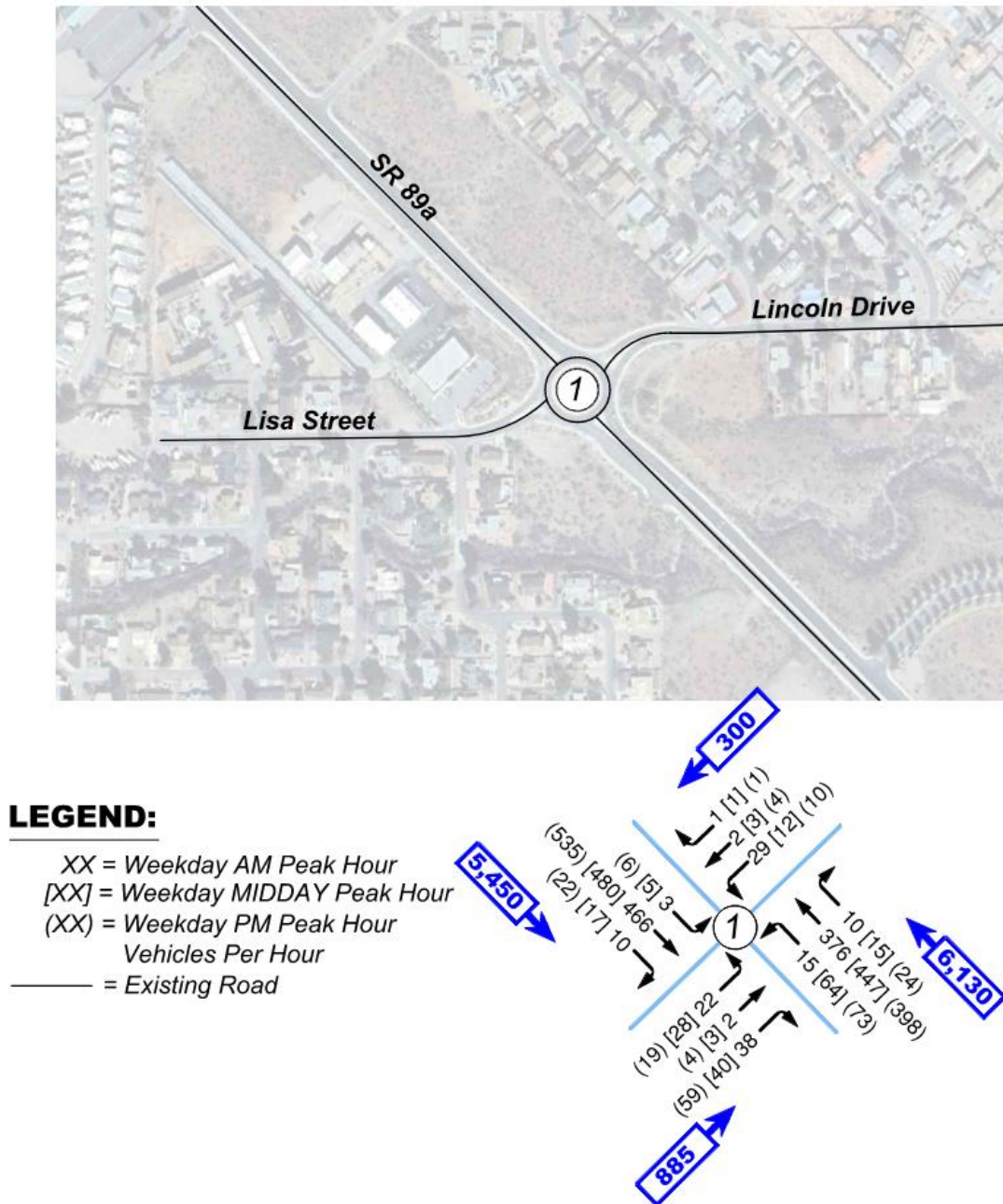
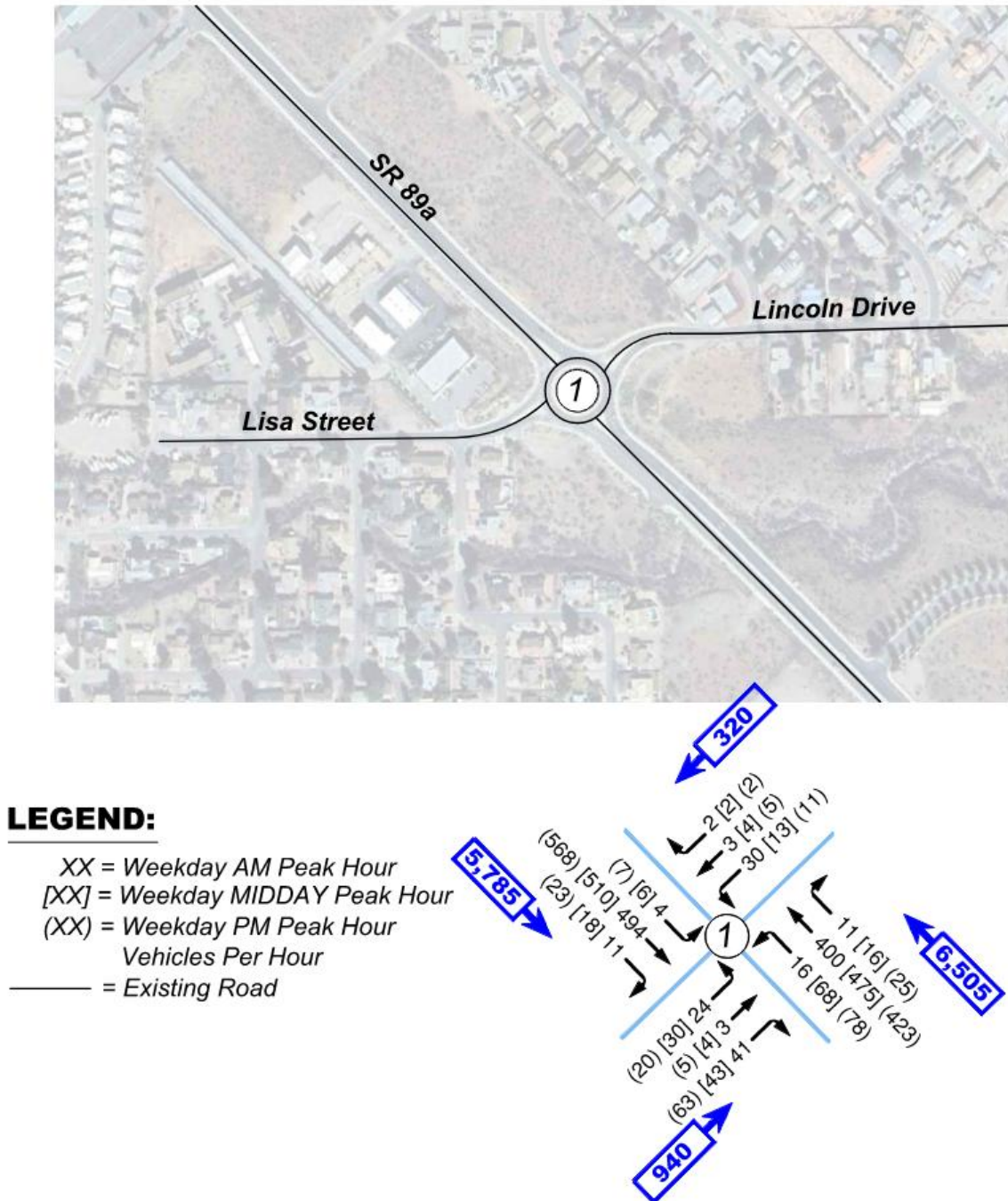




Figure 11 – 2028 Weekday Peak Hour Traffic Volumes Without Project





Future Traffic Operations With Project

In order to assess the impacts of the project on future traffic operations, levels of service were calculated for each project intersection in 2027 and 2030, with the project. Weekday peak hour traffic volumes for 2027 and 2030 without the project were combined with the total estimated trips generated by the project to yield weekday peak hour traffic volumes with the project. The weekday peak hour traffic volumes with the project in 2027 and 2030 are shown in **Figures 12** and **13**.

The weekday intersection LOS for 2025 and 2028 with the project, were then calculated as shown in **Tables 7** and **8**. Complete capacity calculations are included in the Appendix.

Table 7 – 2027 Weekday Peak Hour Levels of Service With Project

Intersection	Without Project						With Project					
	AM Peak Hour		MD Peak Hour		PM Peak Hour		AM Peak Hour		MD Peak Hour		PM Peak Hour	
	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
Roundabout												
Lincoln Drive/SR 89A												
Overall Intersection	A	4.5	A	4.9	A	5.0	A	5.0	A	5.5	A	5.5
Eastbound Approach	A	5.2	A	5.4	A	5.7	A	5.8	A	5.9	A	6.3
Westbound Approach	A	4.4	A	4.7	A	4.4	A	5.2	A	6.0	A	5.5
Northbound Approach	A	4.2	A	4.8	A	4.6	A	4.6	A	5.3	A	5.1
Southbound Approach	A	4.7	A	5.0	A	5.3	A	5.2	A	5.5	A	5.8
Unsignalized Intersections												
West Access/SR 89A												
Westbound Right	N/A		N/A		N/A		B	10.5	B	11.0	B	10.5
South Access/Lincoln Drive												
Eastbound Left/Through	N/A		N/A		N/A		A	7.4	A	7.4	A	7.4
Southbound Left/Right							A	8.9	A	8.8	A	8.7

Delay - seconds per vehicle

Table 8 – 2030 Weekday Peak Hour Levels of Service With Project

Intersection	Without Project						With Project					
	AM Peak Hour		MD Peak Hour		PM Peak Hour		AM Peak Hour		MD Peak Hour		PM Peak Hour	
	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
Roundabout												
Lincoln Drive/SR 89A												
Overall Intersection	A	4.7	A	5.1	A	5.2	A	5.2	A	5.7	A	5.8
Eastbound Approach	A	5.5	A	5.6	A	6.1	A	6.1	A	6.2	A	6.7
Westbound Approach	A	4.5	A	4.9	A	4.6	A	5.4	A	6.3	A	5.7
Northbound Approach	A	4.3	A	5.0	A	4.8	A	4.7	A	5.5	A	5.2
Southbound Approach	A	4.8	A	5.1	A	5.5	A	5.3	A	5.8	A	6.1
Unsignalized Intersections												
West Access/SR 89A												
Westbound Right	N/A		N/A		N/A		B	10.7	B	11.2	B	10.7
South Access/Lincoln Drive												
Eastbound Left/Through	N/A		N/A		N/A		A	7.4	A	7.4	A	7.4
Southbound Left/Right							A	8.9	A	8.8	A	8.7

Delay - seconds per vehicle



Figure 12 – 2027 Weekday Peak Hour Traffic Volumes With Project

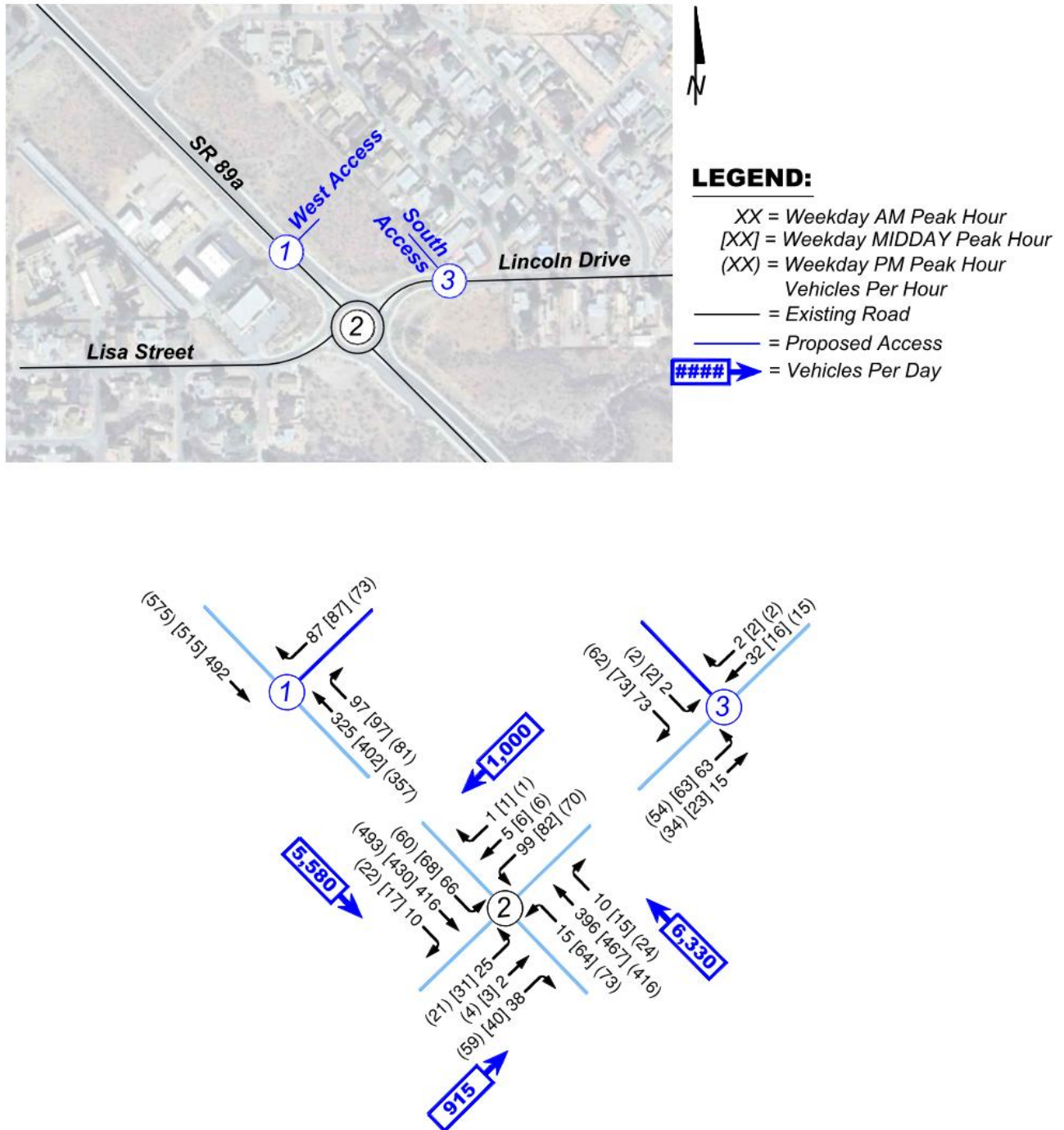
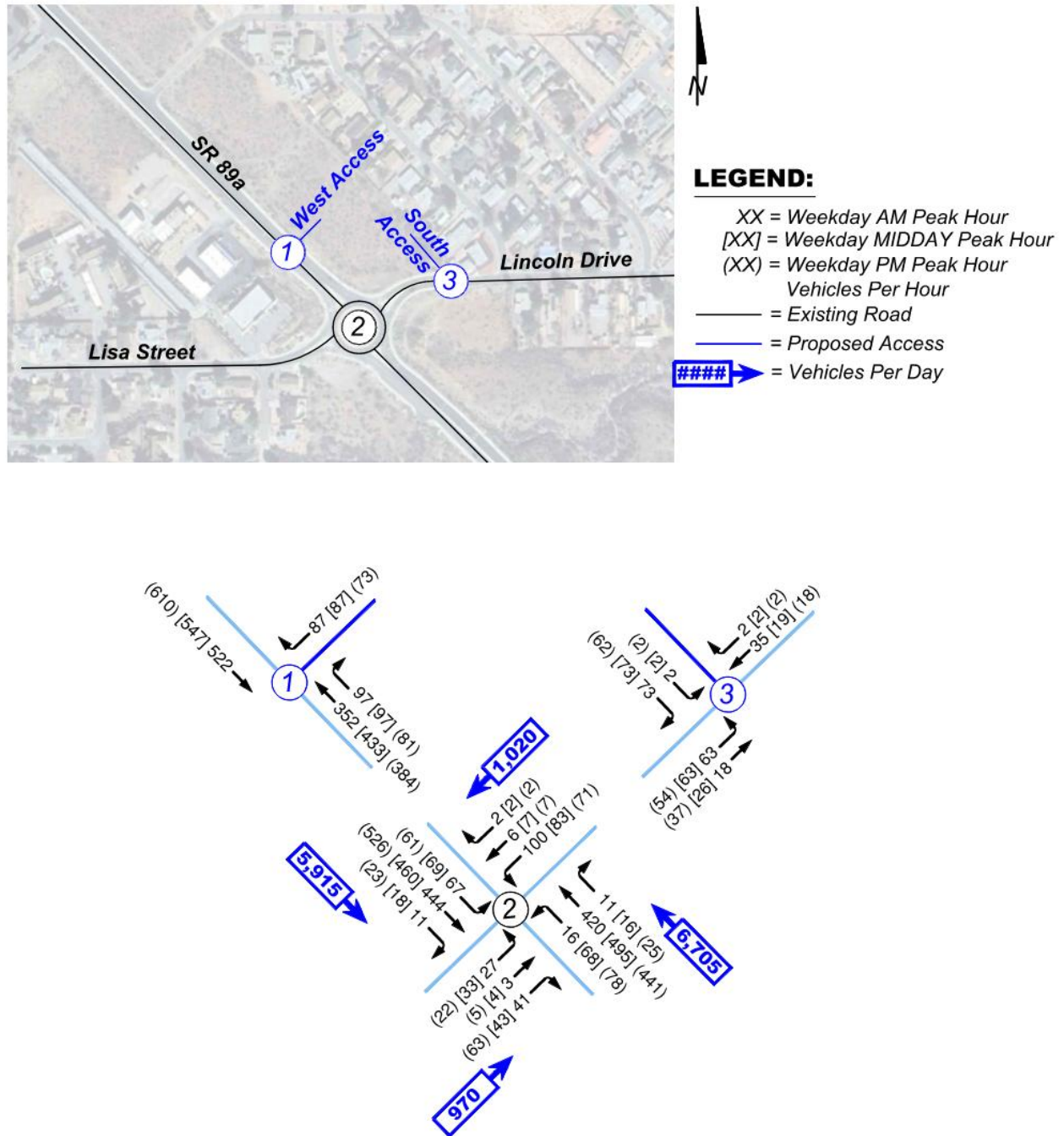




Figure 13 – 2030 Weekday Peak Hour Traffic Volumes With Project





As shown in **Tables 7 and 8**, all of the study intersections are expected to operate at an adequate LOS during the weekday AM, MIDDAY and PM peak hours in 2027 and 2030 without and with the project.

Turn Lane Analysis

A key element of this traffic analysis is to determine if any left or right turn lanes are required at the project access points. The Town of Clarkdale uses ADOT's *Traffic Guidelines and Processes* to determine the need for auxiliary lanes on roads adjacent to the proposed site access driveway. ADOT's turn lane warrant criteria is based on speed, roadway configuration, through traffic volume during the peak hour, and turning traffic volume during the peak hour. **Tables 9 and 10** show ADOT's left and right turn lane warrant requirements, which can be found in Section 245 of the *ADOT Traffic Guidelines and Processes (TGP)*, 2019.

Table 9 – ADOT Left Turn Lane Warrant Criteria

Peak Hour Traffic Volume on the Highway in Advancing Direction	Minimum Peak Hour Left-turn Traffic Volume			
	# of thru lanes per direction			
	1		2 (Undivided)*	
	< 45 MPH Posted Speed	≥ 45 MPH Posted Speed	< 45 MPH Posted Speed	≥ 45 MPH Posted Speed
≤ 200	30	15	-	-
201 – 300	12	12	40	30
301 – 400	12	12	30	25
401 – 500	12	12	25	18
501 – 600	12	12	15	12
601 – 1000	12	12	10	8
1000+	12	8	10	8

*On non-freeway divided highways, left-turn or U-turn lanes should be provided at median breaks.



Table 10 – ADOT Right Turn Lane Warrant Criteria

Peak Hour Traffic Volume on the Highway in Advancing Direction	Minimum Peak Hour Right-turn Traffic Volume				
	# of thru lanes per direction				
	1		2		3
	< 45 MPH Posted Speed	≥ 45 MPH Posted Speed	< 45 MPH Posted Speed	≥ 45 MPH Posted Speed	All Speeds
≤ 200					
201 – 300	-	30	-	-	-
301 – 400	-	19	-	55	-
401 – 500	85	14	-	30	-
501 – 600	58	12	140	25	-
601 – 700	27	9	80	18	-
701 – 800	20	8	53	15	-
801 – 900	12	7	40	12	-
901 – 1000	9	6	30	11	-
1001 – 1100	8	5	23	9	18
1101 – 1200	7	5	18	8	16
1201 – 1300	6	4	14	8	15
1301 – 1400	6	4	11	6	12
1400+	5	3	8	6	10

When needed, turn lanes remove the slow turning traffic from the through traffic stream, improving capacity and reducing rear-end accidents. **Table 11** shows the locations that were evaluated for right turn lanes based on traffic volumes in 2030 with the project.

Table 11 – Turn Lane Warrants

Intersection	Direction	Peak Hour	# of Thru Lanes per Direction	Posted Speed	Peak Hour Traffic Volume in Advancing Direction	Turn Volume	Minimum Right Turn Volume Criteria	Warranted
West Access/SR 89A	Northbound Right Turn	AM	2	45 mph	501 vph	149 vph	25 vph	Yes
		Mid			582 vph	149 vph		
		PM			502 vph	118 vph		
South Access/Lincoln Drive	Eastbound Left Turn	AM	1	25 mph	111 vph	63 vph	30 vph	Yes
		Mid			105 vph	63 vph		
		PM			115 vph	54 vph		
South Access/Lincoln Drive	Westbound Right Turn	AM	1	25 mph	35 vph	2 vph	30 vph	No
		Mid			19 vph	2 vph		
		PM			18 vph	2 vph		

vph - vehicles per hour, mph - miles per hour



As shown in **Table 11**, a northbound right turn lane is warranted at the intersection of West Access/SR 89A.

While an eastbound left turn lane is warranted at the intersection of South Access/Lincoln Drive, the eastbound left turn/through movement is expected operate at a LOS A (with less than 10 seconds of delay) during the weekday AM, MIDDAY and PM peak hours in 2030 with the project, and is not recommended due to the relatively low traffic volumes on westbound Lincoln Drive, as Lincoln Drive ends approximately ¼ mile east of the South Access, and low speed nature of Lincoln Drive.

Queue lengths were determined for the warranted northbound right turn lane at the intersection of West Access/SR 89A, as well as for the eastbound left turn/through lane at the intersection of South Access/Lincoln Drive, to identify any potential queue overlap with the intersection of Lincoln Drive/SR 89A. The queue length for the westbound approach to the intersection of Lincoln Drive/SR 89A was also evaluated to identify any potential overlap with the South Access.

Queue storage requirements for the turn lanes were calculated using Synchro 95th percentile (Synchro 95th) methodology. Typically, an average vehicle length of 25 feet is assumed. The critical weekday peak hour volume was selected for each turning movement.

For un-signalized intersections, storage for vehicles likely to arrive in an average two-minute period within the peak hour should be provided, similarly based on Synchro 95th percentile queue lengths.

$$\text{Storage length} = \text{Synchro 95th \% queue (vehicles)} \times \text{vehicle length (ft)}$$

Table 12 shows the calculated queue lengths for turn lanes at the study intersections based on 2030 weekday peak hour traffic volumes with traffic from the project. The computed values are typically rounded to the nearest 25 feet. It should be noted that the northbound right turn movement at West Access/SR 89A is not expected to generate a queue, as it will be a free flow movement.

Table 12 – Calculated Queue Lengths

Intersection	Left Turn Storage				Right Turn Storage			
	NB	SB	EB	WB	NB	SB	EB	WB
Lincoln Drive/SR 89A								
Turning Volume (vph)								108
S _{calculated} =								0
S _{rounded} =								25
West Access/SR 89A								
Turning Volume (vph)					97			
S _{calculated} =					0			
S _{rounded} =					0			
South Access/SR 89A								
Turning Volume (vph)			63					
S _{calculated} =			3					
S _{rounded} =			25					

S - storage in feet, vph - vehicles per hour



It should be noted that free flowing right turn movements are not expected to generate a queue. Section 430, Turn Lane Design of ADOT's *Traffic Guidelines and Processes* specifies a minimum queue length of 85 feet to accommodate one passenger vehicle and one truck when the truck percentage is greater than 10% and a minimum queue length of 50 feet to accommodate two passenger vehicles when the truck percentage is less than 10%.

As shown in **Table 12**, the westbound approach to the intersection of Lincoln Drive/SR 89A is expected to experience a queue of 25 feet, the northbound right turn lane at the intersection of West Access/SR 89A is not expected to generate a queue and the eastbound left turn movement at the intersection of South Access/SR 89A is anticipated to generate a queue of 25 feet in 2030 with the project. These turning movements are not expected to overlap with the adjacent study intersections.

ADOT's *Traffic Engineering Guidelines and Processes*, Section 430 – Turn Lane Design, 2015, was reviewed to determine the necessary turn lane design for the northbound right turn lane at the intersection of West Access/SR 89A. A gap length of 60 feet and a minimum braking distance of 65 feet is required when designing a right turn lane for a speed limit of 45 mph. The minimum total right turn lane length is shown in **Table 13**. Based on an average vehicle length of 25 feet, ADOT requires a minimum queue length of 50 feet for turn lanes.

Table 13 – ADOT Right Turn Lane Length

Intersection	Queue	Minimum Braking Distance	Gap	Total
West Access/SR 89A				
Northbound Right Turn	50	65	90	205

All Lengths in Feet, Calculations Based on Posted Speed, Minimum Requirements

The warranted northbound right turn lane at the intersection of West Access/SR 89A needs to be constructed to provide 115 feet of storage with a 90 foot taper to satisfy ADOT's right turn lane requirements. The northbound right turn lane at the intersection of West Access/SR 89A should be maximized within the available space between the West Access and Lincoln Drive/SR 89A intersection.

Conclusion

When fully completed, the proposed project is predicted to generate an additional 3,086 vehicle trips per day (vtpd) on weekdays to the adjacent street system from the new project site. Fifty percent of these new trips (1,543 vehicle trips) will be into the project and fifty percent will be out of the project.

The intersection of Lincoln Drive/SR 89A currently operates at an adequate level of service (LOS) during the weekday AM, MIDDAY and PM peak hours.



The intersection of Lincoln Drive/SR 89A is expected to continue to operate at an adequate LOS during the weekday AM, MIDDAY and PM peak hours in 2027 and 2030 without the project.

All of the study intersections are expected to operate at an adequate LOS during the weekday AM, MIDDAY and PM peak hours in 2027 and 2030 without and with the project.

While an eastbound left turn lane is warranted at the intersection of South Access/Lincoln Drive, the eastbound left turn/through movement is expected operate at a LOS A (with less than 10 seconds of delay) during the weekday AM, MIDDAY and PM peak hours in 2030 with the project, and is not recommended due to the relatively low traffic volumes on westbound Lincoln Drive, as Lincoln Drive ends approximately ¼ mile east of the South Access, and low speed nature of Lincoln Drive.

The westbound approach to the intersection of Lincoln Drive/SR 89A is expected to experience a queue of 25 feet, the northbound right turn lane at the intersection of West Access/SR 89A is not expected to generate a queue and the eastbound left turn movement at the intersection of South Access/SR 89A is anticipated to generate a queue of 25 feet in 2030 with the project. These turning movements are not expected to overlap with the adjacent study intersections.

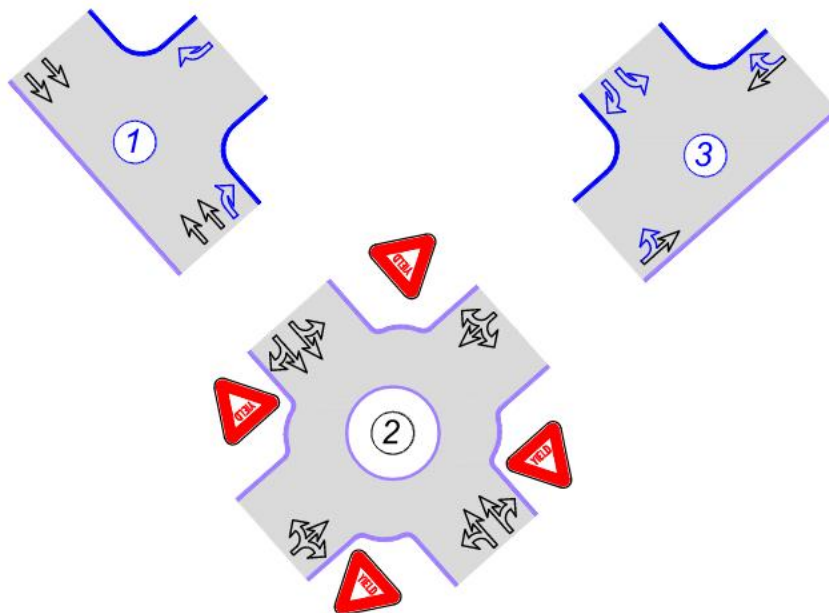
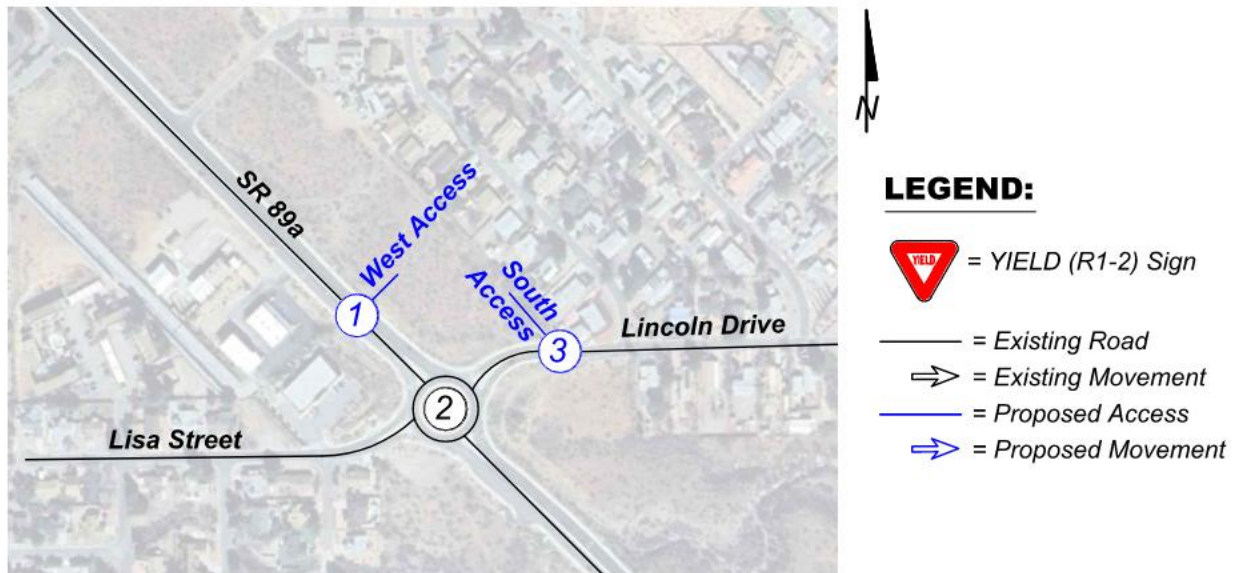
The warranted northbound right turn lane at the intersection of West Access/SR 89A needs to be constructed to provide 115 feet of storage with a 90 foot taper to satisfy ADOT's right turn lane requirements.

A northbound right turn lane should be constructed at the intersection of West Access/SR 89A and should be maximized with the available space between the West Access and Lincoln Drive/SR 89A intersection.

Proposed lane configurations and traffic control are shown in **Figure 14**.



Figure 14 – Proposed Lane Configurations and Traffic Control





**LINCOLN 89 CIRCLE K
LINCOLN DRIVE/STATE ROUTE 89A (SR 89A)
TRAFFIC IMPACT ANALYSIS**

APPENDIX

Traffic Counts

Trip Generation Calculations

Capacity Calculations

Turn Lane Calculations



**LINCOLN 89 CIRCLE K
LINCOLN DRIVE/STATE ROUTE 89A (SR 89A)
TRAFFIC IMPACT ANALYSIS**

APPENDIX

Traffic Counts

Intersection Turning Movement Prepared by:



Project #: 25-1100-001

TMC SUMMARY OF SR-89A & Lincoln Dr / Lisa St

SR-89A

Lincoln Dr / Lisa St

APPROACH LANES

	0.5	1	0.5
PEAK HR VOLUME	21	514	5
24-HR TOTAL	175	5020	43

N

Lincoln Dr / Lisa St

APPROACH LANES

	0	18			250
	1	3			21
	0	56			574

CONTROL

Round a bout

APPROACH LANES

24-HR TOTAL	19			0
	15			3
	254			9

SR-89A

APPROACH LANES

24-HR TOTAL	646	5023	220
PEAK HR VOLUME	70	382	23
	0.5	1	0.5

LOCATION #: 25-1100-001

TURNING MOVEMENT COUNT

SR-89A & Lincoln Dr / Lisa St

(Intersection Name)

THURSDAY

Day

02/27/25

Date

COUNT PERIODS

1200AM	-	1200AM
-		
-		

PEAK HOUR

315 PM

Intersection Turning Movement
Prepared by:



N-S STREET: SR-89A DATE: 02/27/25 LOCATION: Clarkdale
E-W STREET: Lincoln Dr / Lisa St DAY: THURSDAY PROJECT# 25-1100-001

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0.5	NT 1	NR 0.5	SL 0.5	ST 1	SR 0.5	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL
12:00 AM	1	6	0	0	9	0	0	0	1	0	0	0	17
12:15 AM	0	6	0	0	2	0	0	0	0	0	0	0	8
12:30 AM	0	6	1	0	9	0	0	0	0	0	0	0	16
12:45 AM	0	3	0	0	4	0	0	0	0	0	0	0	7
1:00 AM	0	3	1	0	6	0	0	0	0	0	0	1	11
1:15 AM	0	4	0	0	2	0	0	0	0	0	0	0	6
1:30 AM	0	2	0	0	1	0	0	0	0	0	0	0	3
1:45 AM	0	4	0	0	4	0	0	0	0	0	0	0	8
2:00 AM	1	2	0	0	2	0	0	0	0	0	0	0	5
2:15 AM	0	6	0	0	1	0	0	0	0	0	0	0	7
2:30 AM	0	3	0	0	5	0	0	0	0	0	0	0	8
2:45 AM	0	7	0	0	3	0	0	1	0	0	0	0	11
3:00 AM	0	3	0	0	5	0	0	0	0	0	0	0	8
3:15 AM	0	2	0	0	3	0	0	0	1	0	0	0	6
3:30 AM	0	4	0	0	6	0	0	0	0	0	0	0	10
3:45 AM	0	5	0	0	6	0	0	0	0	0	0	0	11
4:00 AM	0	9	0	0	2	1	0	0	2	0	0	0	14
4:15 AM	0	10	0	0	6	0	0	0	1	0	0	0	17
4:30 AM	0	18	0	0	11	0	0	0	0	0	0	0	29
4:45 AM	1	19	0	0	8	0	0	0	1	0	0	0	29
5:00 AM	1	13	0	0	12	0	1	0	2	1	0	0	30
5:15 AM	1	30	0	0	7	0	1	0	2	6	0	0	47
5:30 AM	1	28	0	0	16	0	1	0	0	0	0	0	46
5:45 AM	0	33	0	0	22	1	1	0	5	4	0	0	66
6:00 AM	1	37	0	0	44	0	1	0	4	4	0	0	91
6:15 AM	3	37	1	0	33	1	1	0	4	3	0	0	83
6:30 AM	1	37	1	0	38	0	3	0	5	9	0	0	94
6:45 AM	2	54	3	0	55	1	1	0	7	3	0	1	129
7:00 AM	2	35	0	0	58	0	2	0	5	8	0	0	110
7:15 AM	1	42	0	2	104	0	1	0	17	10	1	0	178
7:30 AM	0	81	1	1	110	2	5	1	13	10	0	0	224
7:45 AM	5	104	3	0	127	2	8	0	6	5	0	0	260
8:00 AM	3	104	4	1	105	3	5	0	7	7	1	0	240
8:15 AM	6	72	1	0	105	2	3	0	10	6	0	0	205
8:30 AM	9	54	6	1	94	4	3	0	11	3	0	0	185
8:45 AM	12	78	2	0	84	1	2	0	13	3	0	1	196
9:00 AM	8	61	2	0	72	2	3	1	13	4	1	2	169
9:15 AM	14	60	3	1	77	2	3	0	12	7	1	0	180
9:30 AM	10	68	3	1	81	1	3	1	11	6	0	0	185
9:45 AM	4	79	3	2	87	4	0	0	8	3	0	1	193
10:00 AM	11	87	1	1	65	2	5	0	19	4	0	1	196
10:15 AM	15	86	5	1	81	6	6	0	3	4	0	1	208
10:30 AM	14	94	1	1	88	2	2	0	12	4	1	0	219
10:45 AM	17	96	3	0	83	2	8	1	11	5	0	0	226
11:00 AM	8	106	3	1	67	4	2	3	12	3	0	0	209
11:15 AM	7	107	1	2	92	1	2	0	14	3	0	2	231
11:30 AM	13	100	3	0	84	4	2	0	8	5	0	0	219
11:45 AM	8	115	2	0	86	6	5	1	8	3	0	1	235
12:00 PM	13	110	4	0	74	4	5	0	8	4	0	0	222
12:15 PM	7	99	5	0	98	1	4	0	10	4	0	0	228
12:30 PM	8	89	2	0	70	4	4	0	7	5	0	0	189
12:45 PM	16	93	12	0	81	4	5	1	8	5	1	2	228
1:00 PM	14	100	3	0	77	4	12	0	16	8	0	0	234
1:15 PM	12	83	4	0	83	3	4	0	11	1	0	0	201
1:30 PM	10	112	3	0	100	4	7	0	10	4	1	1	252
1:45 PM	8	107	4	1	96	3	6	1	11	6	0	1	244
2:00 PM	15	113	2	2	107	3	5	0	6	1	0	0	254
2:15 PM	8	120	1	1	85	0	2	0	6	4	0	0	227
2:30 PM	21	105	6	1	165	8	9	0	9	1	2	0	327
2:45 PM	17	91	5	0	105	5	11	2	17	5	0	0	258
3:00 PM	13	102	9	2	113	4	5	0	6	2	1	0	257
3:15 PM	13	79	8	1	126	6	3	1	10	3	1	0	251
3:30 PM	13	102	5	1	126	5	6	0	17	3	1	0	256
3:45 PM	22	84	2	1	122	6	3	1	12	2	1	0	279
4:00 PM	22	117	8	2	140	4	1	1	17	1	0	0	318
4:15 PM	16	93	3	0	105	0	6	0	7	3	0	0	233
4:30 PM	20	85	4	1	105	3	1	0	8	2	0	0	229
4:45 PM	16	93	4	2	99	5	3	1	6	8	0	0	237
5:00 PM	17	94	6	1	110	4	2	1	9	4	1	0	249
5:15 PM	23	88	1	0	92	2	5	0	16	5	0	1	233
5:30 PM	8	80	8	1	78	7	2	0	9	3	0	0	196
5:45 PM	17	74	5	0	76	1	6	0	16	3	1	0	199
6:00 PM	11	62	3	2	56	2	5	2	10	4	0	0	157
6:15 PM	11	64	8	0	54	1	0	0	7	3	0	1	149
6:30 PM	6	45	3	2	54	6	4	0	5	4	0	0	129
6:45 PM	12	55	4	2	33	2	3	0	8	3	0	0	122
7:00 PM	9	49	7	0	32	2	6	0	9	2	0	0	116
7:15 PM	8	42	3	0	21	3	4	0	2	6	0	0	89
7:30 PM	9	46	1	2	29	1	4	0	0	0	0	0	92
7:45 PM	3	45	3	0	17	2	0	0	3	1	0	1	75
8:00 PM	7	31	2	0	35	2	2	0	1	0	0	0	80
8:15 PM	3	39	4	0	22	1	9	0	5	2	0	0	85
8:30 PM	9	23	2	0	27	1	4	0	4	1	0	0	71
8:45 PM	4	20	2	0	19	2	2	0	2	1	0	0	52
9:00 PM	5	15	2	1	22	2	0	1	3	0	0	0	51
9:15 PM	0	26	3	2	16	0	0	0	3	1	0	1	52
9:30 PM	2	15	2	0	15	3	0	0	3	0	0	0	40
9:45 PM	5	16	0	0	11	0	0	0	3	1	0	0	36
10:00 PM	1	17	0	0	10	0	0	0	1	0	0	0	29
10:15 PM	2	12	0	0	10	0	0	0	0	1	0	0	25
10:30 PM	3	13	1	0	7	1	0	0	1	3	0	0	29
10:45 PM	3	7	1	0	8	0	0	0	2	1	0	0	22
11:00 PM	3	11	1	0	6	0	1	0	1	0	0	0	23
11:15 PM	0	15	0	0	3	0	0	0	1	0	0	0	19
11:30 PM	0	7	0	0	3	0	0	0	0	0	0	0	10
11:45 PM	1	15	0	0	5	0	0	0	0	0	0	0	21

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	646	5023	220	43	5020	175	250	21	574	254	15	19	12260
Approach %	10.97	85.29	3.74	0.82	95.84	3.34	29.59	2.49	67.93	88.19	5.21	6.60	
App/Depart	5889	/	5292	5238	/	5848	845	/	284	288	/	836	

Peak Hr Begins at: 315 PM

PEAK													
Volumes	70	382	23	5	514	21	18	3	56	9	3	0	1104
Approach %	14.74	80.42	4.84	0.93	95.19	3.89	23.38	3.90	72.73	75.00	25.00	0.00	

PEAK HR.													
FACTOR:		0.808			0.925			0.802			0.750		0.868

CONTROL: Round a bout

COMMENT 1:

GPS: 34.754675, -112.054248

Pedestrian & Bicycle Study

N-S STREET: SR-89A
E-W STREET: Lincoln Dr / Lisa St

Date: 02/27/25
Day: THURSDAY

City: Clarkdale
Project #: 25-1100-001

	PEDESTRIANS					BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG		N-LEG	S-LEG	E-LEG	W-LEG
12:00 AM	0	0	0	0	12:00 AM	0	0	0	0
12:15 AM	0	0	0	0	12:15 AM	0	0	0	0
12:30 AM	0	0	0	0	12:30 AM	0	0	0	0
12:45 AM	0	0	0	0	12:45 AM	0	0	0	0
1:00 AM	0	0	0	0	1:00 AM	0	0	0	0
1:15 AM	0	0	0	0	1:15 AM	0	0	0	0
1:30 AM	0	0	0	0	1:30 AM	0	0	0	0
1:45 AM	0	0	0	0	1:45 AM	0	0	0	0
2:00 AM	0	0	0	0	2:00 AM	0	0	0	0
2:15 AM	0	0	0	0	2:15 AM	0	0	0	0
2:30 AM	0	0	0	0	2:30 AM	0	0	0	0
2:45 AM	0	0	0	0	2:45 AM	0	0	0	0
3:00 AM	0	0	0	0	3:00 AM	0	0	0	0
3:15 AM	0	0	0	0	3:15 AM	0	0	0	0
3:30 AM	0	0	0	0	3:30 AM	0	0	0	0
3:45 AM	0	0	0	0	3:45 AM	0	0	0	0
4:00 AM	0	0	0	0	4:00 AM	0	0	0	0
4:15 AM	0	0	0	0	4:15 AM	0	0	0	0
4:30 AM	0	0	0	0	4:30 AM	0	0	0	0
4:45 AM	0	0	0	0	4:45 AM	0	0	0	0
5:00 AM	0	0	0	0	5:00 AM	0	0	0	0
5:15 AM	0	0	0	0	5:15 AM	0	0	0	0
5:30 AM	0	0	0	0	5:30 AM	0	0	0	0
5:45 AM	0	0	0	0	5:45 AM	0	0	0	0
6:00 AM	0	0	0	0	6:00 AM	0	0	0	0
6:15 AM	0	0	0	0	6:15 AM	0	0	0	0
6:30 AM	0	0	0	0	6:30 AM	0	0	0	0
6:45 AM	0	0	0	0	6:45 AM	0	0	0	0
7:00 AM	0	0	0	0	7:00 AM	0	0	0	0
7:15 AM	0	0	0	1	7:15 AM	0	0	0	0
7:30 AM	0	0	0	0	7:30 AM	0	0	0	0
7:45 AM	1	0	0	0	7:45 AM	0	0	0	0
8:00 AM	0	0	0	0	8:00 AM	0	0	0	0
8:15 AM	0	1	0	0	8:15 AM	0	0	0	0
8:30 AM	0	0	0	0	8:30 AM	0	0	0	0
8:45 AM	0	0	0	0	8:45 AM	0	0	0	0
9:00 AM	0	0	0	0	9:00 AM	0	0	0	0
9:15 AM	1	0	0	0	9:15 AM	0	0	0	0
9:30 AM	0	0	0	0	9:30 AM	0	0	0	0
9:45 AM	0	0	0	0	9:45 AM	0	0	0	0
10:00 AM	0	0	0	0	10:00 AM	0	0	0	0
10:15 AM	0	0	0	0	10:15 AM	0	0	0	0
10:30 AM	1	0	0	0	10:30 AM	0	0	0	0
10:45 AM	0	0	0	0	10:45 AM	0	0	0	0
11:00 AM	0	0	0	0	11:00 AM	0	0	0	0
11:15 AM	0	0	0	0	11:15 AM	0	0	0	0
11:30 AM	0	0	0	0	11:30 AM	0	0	0	0
11:45 AM	0	0	0	0	11:45 AM	0	0	0	0
12:00 PM	0	0	0	0	12:00 PM	0	0	0	0
12:15 PM	0	0	0	0	12:15 PM	0	0	0	0
12:30 PM	0	0	0	0	12:30 PM	0	0	0	0
12:45 PM	0	0	0	0	12:45 PM	0	0	0	0
1:00 PM	1	0	0	0	1:00 PM	0	0	0	0
1:15 PM	0	0	0	0	1:15 PM	0	0	0	0
1:30 PM	0	0	0	0	1:30 PM	0	0	0	0
1:45 PM	0	0	0	0	1:45 PM	0	0	1	0
2:00 PM	0	0	0	0	2:00 PM	0	0	0	0
2:15 PM	0	0	0	0	2:15 PM	0	0	0	0
2:30 PM	0	0	0	0	2:30 PM	0	0	0	0
2:45 PM	0	0	0	0	2:45 PM	0	0	0	0
3:00 PM	0	0	0	0	3:00 PM	0	0	0	0
3:15 PM	0	0	0	0	3:15 PM	0	0	0	0
3:30 PM	0	0	0	0	3:30 PM	0	0	0	1
3:45 PM	0	0	0	0	3:45 PM	0	0	0	0
4:00 PM	0	0	0	0	4:00 PM	0	0	0	0
4:15 PM	0	0	0	0	4:15 PM	0	0	0	1
4:30 PM	0	0	0	0	4:30 PM	0	0	1	0
4:45 PM	0	0	1	0	4:45 PM	0	0	0	0
5:00 PM	0	0	0	0	5:00 PM	0	0	0	0
5:15 PM	0	0	0	0	5:15 PM	0	0	0	0
5:30 PM	0	0	0	0	5:30 PM	0	0	0	0
5:45 PM	0	0	0	0	5:45 PM	0	0	0	0
6:00 PM	0	0	0	0	6:00 PM	0	0	0	0
6:15 PM	0	0	0	0	6:15 PM	0	0	0	0
6:30 PM	0	0	0	0	6:30 PM	0	0	0	0
6:45 PM	0	0	0	0	6:45 PM	0	0	0	0
7:00 PM	0	0	0	0	7:00 PM	0	0	0	0
7:15 PM	0	0	0	0	7:15 PM	0	0	0	0
7:30 PM	0	0	0	0	7:30 PM	0	0	0	0
7:45 PM	1	0	0	0	7:45 PM	0	0	0	0
8:00 PM	0	0	0	0	8:00 PM	0	0	0	0
8:15 PM	0	0	0	0	8:15 PM	0	0	0	0
8:30 PM	0	0	0	0	8:30 PM	0	0	0	0
8:45 PM	0	0	0	0	8:45 PM	0	0	0	0
9:00 PM	0	0	0	0	9:00 PM	0	0	0	0
9:15 PM	0	0	0	0	9:15 PM	0	0	0	0
9:30 PM	0	0	0	0	9:30 PM	0	0	0	0
9:45 PM	0	0	0	0	9:45 PM	0	0	0	0
10:00 PM	0	0	0	0	10:00 PM	0	0	0	0
10:15 PM	0	0	0	0	10:15 PM	0	0	0	0
10:30 PM	0	0	0	0	10:30 PM	0	0	0	0
10:45 PM	0	0	0	0	10:45 PM	0	0	0	0
11:00 PM	0	0	0	0	11:00 PM	0	0	0	0
11:15 PM	0	0	0	0	11:15 PM	0	0	0	0
11:30 PM	0	0	0	0	11:30 PM	0	0	0	0
11:45 PM	0	0	0	0	11:45 PM	0	0	0	0
TOTAL	5	1	1	1	TOTAL	0	0	2	2

Intersection Turning Movement

Prepared by:



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

Project #: 25-1100-001

TMC SUMMARY OF SR-89A & Lincoln Dr / Lisa St

SR-89A

Lincoln Dr / Lisa St

APPROACH LANES			
TOTAL	46	1423	11
PM	21	514	5
MD	16	462	4
AM	9	447	2

N

Lincoln Dr / Lisa St

APPROACH LANES

TOTAL	AM	MD	PM
66	21	27	18
6	1	2	3
130	36	38	56

CONTROL

Signal

APPROACH LANES

AM	MD	PM	TOTAL
0	0	0	0
1	2	3	6
28	11	9	48

SR-89A

TOTAL	AM	MD	PM
145	14	61	70
1172	361	429	382
46	9	14	23

APPROACH LANES

LOCATION #: 25-1100-001

TURNING MOVEMENT COUNT

SR-89A & Lincoln Dr / Lisa St
(Intersection Name)

THURSDAY

Day

02/27/25

Date

COUNT PERIODS	
AM	630AM - 830AM
MIDDAY	1045AM - 1245PM
PM	330PM - 530PM

AM PEAK HOUR

730 AM

MIDDAY PEAK HOUR

200 PM

PM PEAK HOUR

315 PM

Intersection Turning Movement

Prepared by:



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



veracitytrafficgroup

N-S STREET: SR-89A

DATE: 02/27/25

LOCATION: Clarkdale

E-W STREET: Lincoln Dr / Lisa St

DAY: THURSDAY

PROJECT# 25-1100-001

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL
6:00 AM	1	37	0	0	44	0	1	0	4	4	0	0	91
6:15 AM	3	37	1	0	33	1	1	0	4	3	0	0	83
6:30 AM	1	37	1	0	38	0	3	0	5	9	0	0	94
6:45 AM	2	54	3	0	55	1	3	0	7	3	0	1	129
7:00 AM	2	35	0	0	58	0	2	0	5	8	0	0	110
7:15 AM	1	42	0	2	104	0	1	0	17	10	1	0	178
7:30 AM	0	81	1	1	110	2	5	1	13	10	0	0	224
7:45 AM	5	104	3	0	127	2	8	0	6	5	0	0	260
8:00 AM	3	104	4	1	105	3	5	0	7	7	1	0	240
8:15 AM	6	72	1	0	105	2	3	0	10	6	0	0	205
8:30 AM	9	54	6	1	94	4	3	0	11	3	0	0	185
8:45 AM	12	78	2	0	84	1	2	0	13	3	0	1	196
9:00 AM	8	61	2	0	72	2	3	1	13	4	1	2	169
9:15 AM	14	60	3	1	77	2	3	0	12	7	1	0	180
9:30 AM	10	68	3	1	81	1	3	1	11	6	0	0	185
9:45 AM	4	79	3	2	87	4	2	0	8	3	0	1	193
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	81	1003	33	9	1274	25	48	3	146	91	4	5	2722
Approach %	7.25	89.79	2.95	0.69	97.40	1.91	24.37	1.52	74.11	91.00	4.00	5.00	
App/Depart	1117	/	1056	1308	/	1511	197	/	45	100	/	110	

AM Peak Hr Begins at: 730 AM

PEAK

Volumes	14	361	9	2	447	9	21	1	36	28	1	0	929
Approach %	3.65	94.01	2.34	0.44	97.60	1.97	36.21	1.72	62.07	96.55	3.45	0.00	

PEAK HR.

FACTOR:	0.857	0.888	0.763	0.725	0.893
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CONTROL: 2-Way Stop (NB & SB)

COMMENT 1:

GPS: 34.513356, -110.077412

Intersection Turning Movement

Prepared by:



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



veracitytrafficgroup

N-S STREET: SR-87 Northbound

DATE: 05/24/23

LOCATION: Rye

E-W STREET: Gisela Rd

DAY: WEDNESDAY

PROJECT# 23-1306-001

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	0	0	1.3	0.3	1.3	0	3	1	1	2	0	
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM	8	106	3	1	67	4	2	3	12	3	0	0	209
11:15 AM	7	107	1	2	92	1	2	0	14	3	0	2	231
11:30 AM	13	100	3	0	84	4	2	0	8	5	0	0	219
11:45 AM	8	115	2	0	86	6	5	1	8	3	0	1	235
12:00 PM	13	110	4	0	74	4	5	0	8	4	0	0	222
12:15 PM	7	99	5	0	98	1	4	0	10	4	0	0	228
12:30 PM	8	89	2	0	70	4	4	0	7	5	0	0	189
12:45 PM	16	93	12	0	81	4	5	1	8	5	1	2	228
1:00 PM	14	100	3	0	77	4	12	0	16	8	0	0	234
1:15 PM	12	83	4	0	83	3	4	0	11	1	0	0	201
1:30 PM	10	112	3	0	100	4	7	0	10	4	1	1	252
1:45 PM	8	107	4	1	96	3	6	1	11	6	0	1	244
2:00 PM	15	113	2	2	107	3	5	0	6	1	0	0	254
2:15 PM	8	120	1	1	85	0	2	0	6	4	0	0	227
2:30 PM	21	105	6	1	165	8	9	0	9	1	2	0	327
2:45 PM	17	91	5	0	105	5	11	2	17	5	0	0	258
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM													
4:15 PM													
4:30 PM													
4:45 PM													
5:00 PM													
5:15 PM													
5:30 PM													
5:45 PM													
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	185	1650	60	8	1470	58	85	8	161	62	4	7	3758
Approach %	9.76	87.07	3.17	0.52	95.70	3.78	33.46	3.15	63.39	84.93	5.48	9.59	
App/Depart	1895	/	1742	1536	/	1693	254	/	76	73	/	247	

AM Peak Hr Begins at: 200 PM

PEAK

Volumes	61	429	14	4	462	16	27	2	38	11	2	0	1066
Approach %	12.10	85.12	2.78	0.83	95.85	3.32	40.30	2.99	56.72	84.62	15.38	0.00	

PEAK HR.

FACTOR:	0.955	0.693	0.558	0.650	0.815
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CONTROL: Signal

COMMENT 1:

GPS: 34.513356, -110.077412

Intersection Turning Movement



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



veracitytrafficgroup

N-S STREET: SR-87 Northbound

DATE: 05/24/23

LOCATION: Rye

E-W STREET: Gisela Rd

DAY: WEDNESDAY

PROJECT# 23-1306-001

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	1	0	0	1	0	0	1	0	0	1	0	

1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM	13	102	9	2	113	4	5	0	6	2	1	0	257
3:15 PM	13	79	8	1	126	6	3	1	10	3	1	0	251
3:30 PM	13	102	5	1	126	5	6	0	17	3	1	0	279
3:45 PM	22	84	2	1	122	6	3	1	12	2	1	0	256
4:00 PM	22	117	8	2	140	4	6	1	17	1	0	0	318
4:15 PM	16	93	3	0	105	0	6	0	7	3	0	0	233
4:30 PM	20	85	4	1	105	3	1	0	8	2	0	0	229
4:45 PM	16	93	4	2	99	5	3	1	6	8	0	0	237
5:00 PM	17	94	6	1	110	4	2	1	9	4	1	0	249
5:15 PM	23	88	1	0	92	2	5	0	16	5	0	1	233
5:30 PM	8	80	8	1	78	7	2	0	9	3	0	0	196
5:45 PM	17	74	5	0	76	1	6	0	16	3	1	0	199
6:00 PM	11	62	3	2	56	2	5	2	10	4	0	0	157
6:15 PM	11	64	8	0	54	1	0	0	7	3	0	1	149
6:30 PM	6	45	3	2	54	6	4	0	5	4	0	0	129
6:45 PM	12	55	4	2	33	2	3	0	8	3	0	0	122

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	240	1317	81	18	1489	58	60	7	163	53	6	2	3494
Approach %	14.65	80.40	4.95	1.15	95.14	3.71	26.09	3.04	70.87	86.89	9.84	3.28	
App/Depart	1638	/	1379	1565	/	1705	230	/	106	61	/	304	

PM Peak Hr Begins at: 315 PM

PEAK

Volumes	70	382	23	5	514	21	18	3	56	9	3	0	1104
Approach %	14.74	80.42	4.84	0.93	95.19	3.89	23.38	3.90	72.73	75.00	25.00	0.00	

PEAK HR.

FACTOR:	0.808	0.925	0.802	0.750	0.868
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CONTROL: 2-Way Stop (NB & SB)

COMMENT 1: 0

GPS: 34.513356, -110.077412



**LINCOLN 89 CIRCLE K
LINCOLN DRIVE/STATE ROUTE 89A (SR 89A)
TRAFFIC IMPACT ANALYSIS**

APPENDIX

Trip Generation Calculations

Convenience Market/Gas Station - GFA (4-5.5k) (LUC 945)

LAND USE: 12 Vehicle Fueling Positions Convenience Market/Gas Station - GFA (4-5.5k)

TRIP GENERATION CALCULATIONS ARE BASED ON THE INSTITUTE OF TRANSPORTATION ENGINEERS' TRIP GENERATION, 11TH EDITION. THE ITE LAND USE CODE IS Convenience Market/Gas Station - GFA (4-5.5k) (945), General Urban/Suburban

Weekday

Average Rate = 257.13 Trips per Vehicle Fueling Position

T = 257.13 Trips x 12 Vehicle Fueling Positions

T = 3,086 VTPD

ENTER: $(0.5) \times (3086) =$ **1,543 VTPD**

EXIT: $(0.5) \times (3086) =$ **1,543 VTPD**

AM PEAK HOUR (ONE HOUR BETWEEN 7 AND 9 AM)

Average Rate = 27.04 Trips per Vehicle Fueling Position

T = 27.04 Trips x 12 Vehicle Fueling Positions

T = 324 VPH

ENTER: $(0.5) \times (324) =$ **162 VPH**

EXIT: $(0.5) \times (324) =$ **162 VPH**

PM PEAK HOUR (ONE HOUR BETWEEN 4 AND 6 PM)

Average Rate = 22.76 Trips per Vehicle Fueling Position

T = 22.76 Trips x 12 Vehicle Fueling Positions

T = 274 VPH

ENTER: $(0.5) \times (274) =$ **137 VPH**

EXIT: $(0.5) \times (274) =$ **137 VPH**

*where, T = trip ends

TRIP GENERATION SUMMARY

WEEKDAY

3,086 VTPD

AM PEAK HOUR (ONE HOUR BETWEEN 7 AND 9 AM)

324 VPH

PM PEAK HOUR (ONE HOUR BETWEEN 4 AND 6 PM)

274 VPH



**LINCOLN 89 CIRCLE K
LINCOLN DRIVE/STATE ROUTE 89A (SR 89A)
TRAFFIC IMPACT ANALYSIS**

APPENDIX

Capacity Calculations

Intersection						
Intersection Delay, s/veh	4.4					
Intersection LOS	A					
Approach	EB	WB	NB		SB	
Entry Lanes	1	1	2		2	
Conflicting Circle Lanes	2	2	2		2	
Adj Approach Flow, veh/h	72	36	452		539	
Demand Flow Rate, veh/h	74	37	461		550	
Vehicles Circulating, veh/h	575	477	30		53	
Vehicles Exiting, veh/h	28	14	619		461	
Ped Vol Crossing Leg, #/h	0	0	0		0	
Ped Cap Adj	1.000	1.000	1.000		1.000	
Approach Delay, s/veh	5.1	4.3	4.1		4.5	
Approach LOS	A	A	A		A	
Lane	Left	Left	Left	Right	Left	Right
Designated Moves	LTR	LTR	LT	TR	LT	TR
Assumed Moves	LTR	LTR	LT	TR	LT	TR
RT Channelized						
Lane Util	1.000	1.000	0.471	0.529	0.471	0.529
Follow-Up Headway, s	2.535	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.328	4.645	4.328	4.645	4.328
A (Intercept)	1420	1420	1350	1420	1350	1420
B (Slope)	8.501e-4	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	74	37	217	244	259	291
Cap Entry Lane, veh/h	871	947	1313	1384	1286	1358
Entry HV Adj Factor	0.973	0.972	0.980	0.983	0.979	0.983
Flow Entry, veh/h	72	36	213	240	254	286
Cap Entry, veh/h	847	921	1287	1361	1259	1334
V/C Ratio	0.085	0.039	0.165	0.176	0.201	0.214
Control Delay, s/veh	5.1	4.3	4.2	4.1	4.6	4.5
LOS	A	A	A	A	A	A
95th %tile Queue, veh	0	0	1	1	1	1

Intersection						
Intersection Delay, s/veh	4.8					
Intersection LOS	A					
Approach	EB	WB	NB		SB	
Entry Lanes	1	1	2		2	
Conflicting Circle Lanes	2	2	2		2	
Adj Approach Flow, veh/h	84	16	604		568	
Demand Flow Rate, veh/h	86	16	616		579	
Vehicles Circulating, veh/h	574	623	42		89	
Vehicles Exiting, veh/h	94	35	618		550	
Ped Vol Crossing Leg, #/h	0	0	0		0	
Ped Cap Adj	1.000	1.000	1.000		1.000	
Approach Delay, s/veh	5.2	4.5	4.7		4.8	
Approach LOS	A	A	A		A	
Lane	Left	Left	Left	Right	Left	Right
Designated Moves	LTR	LTR	LT	TR	LT	TR
Assumed Moves	LTR	LTR	LT	TR	LT	TR
RT Channelized						
Lane Util	1.000	1.000	0.471	0.529	0.470	0.530
Follow-Up Headway, s	2.535	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.328	4.645	4.328	4.645	4.328
A (Intercept)	1420	1420	1350	1420	1350	1420
B (Slope)	8.501e-4	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	86	16	290	326	272	307
Cap Entry Lane, veh/h	872	836	1299	1370	1244	1317
Entry HV Adj Factor	0.976	0.998	0.979	0.982	0.982	0.981
Flow Entry, veh/h	84	16	284	320	267	301
Cap Entry, veh/h	851	834	1271	1345	1221	1291
V/C Ratio	0.099	0.019	0.223	0.238	0.219	0.233
Control Delay, s/veh	5.2	4.5	4.8	4.7	4.9	4.8
LOS	A	A	A	A	A	A
95th %tile Queue, veh	0	0	1	1	1	1

Intersection						
Intersection Delay, s/veh	4.9					
Intersection LOS	A					
Approach	EB	WB	NB		SB	
Entry Lanes	1	1	2		2	
Conflicting Circle Lanes	2	2	2		2	
Adj Approach Flow, veh/h	96	15	558		636	
Demand Flow Rate, veh/h	97	15	570		649	
Vehicles Circulating, veh/h	634	564	32		99	
Vehicles Exiting, veh/h	114	38	699		480	
Ped Vol Crossing Leg, #/h	0	0	0		0	
Ped Cap Adj	1.000	1.000	1.000		1.000	
Approach Delay, s/veh	5.6	4.3	4.5		5.2	
Approach LOS	A	A	A		A	
Lane	Left	Left	Left	Right	Left	Right
Designated Moves	LTR	LTR	LT	TR	LT	TR
Assumed Moves	LTR	LTR	LT	TR	LT	TR
RT Channelized						
Lane Util	1.000	1.000	0.470	0.530	0.470	0.530
Follow-Up Headway, s	2.535	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.328	4.645	4.328	4.645	4.328
A (Intercept)	1420	1420	1350	1420	1350	1420
B (Slope)	8.501e-4	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	97	15	268	302	305	344
Cap Entry Lane, veh/h	828	879	1311	1382	1232	1305
Entry HV Adj Factor	0.989	0.995	0.979	0.979	0.980	0.980
Flow Entry, veh/h	96	15	262	296	299	337
Cap Entry, veh/h	819	875	1283	1353	1208	1279
V/C Ratio	0.117	0.017	0.204	0.219	0.247	0.264
Control Delay, s/veh	5.6	4.3	4.5	4.5	5.2	5.1
LOS	A	A	A	A	A	A
95th %tile Queue, veh	0	0	1	1	1	1

Intersection						
Intersection Delay, s/veh	4.5					
Intersection LOS	A					
Approach	EB	WB	NB		SB	
Entry Lanes	1	1	2		2	
Conflicting Circle Lanes	2	2	2		2	
Adj Approach Flow, veh/h	78	39	472		564	
Demand Flow Rate, veh/h	80	40	481		575	
Vehicles Circulating, veh/h	600	498	35		57	
Vehicles Exiting, veh/h	32	18	645		481	
Ped Vol Crossing Leg, #/h	0	0	0		0	
Ped Cap Adj	1.000	1.000	1.000		1.000	
Approach Delay, s/veh	5.2	4.4	4.2		4.7	
Approach LOS	A	A	A		A	
Lane	Left	Left	Left	Right	Left	Right
Designated Moves	LTR	LTR	LT	TR	LT	TR
Assumed Moves	LTR	LTR	LT	TR	LT	TR
RT Channelized						
Lane Util	1.000	1.000	0.470	0.530	0.470	0.530
Follow-Up Headway, s	2.535	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.328	4.645	4.328	4.645	4.328
A (Intercept)	1420	1420	1350	1420	1350	1420
B (Slope)	8.501e-4	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	80	40	226	255	270	305
Cap Entry Lane, veh/h	853	930	1307	1378	1281	1353
Entry HV Adj Factor	0.975	0.974	0.982	0.981	0.982	0.980
Flow Entry, veh/h	78	39	222	250	265	299
Cap Entry, veh/h	831	906	1283	1353	1258	1326
V/C Ratio	0.094	0.043	0.173	0.185	0.211	0.225
Control Delay, s/veh	5.2	4.4	4.3	4.2	4.7	4.6
LOS	A	A	A	A	A	A
95th %tile Queue, veh	0	0	1	1	1	1

Intersection						
Intersection Delay, s/veh	4.9					
Intersection LOS	A					
Approach	EB	WB	NB	SB		
Entry Lanes	1	1	2	2		
Conflicting Circle Lanes	2	2	2	2		
Adj Approach Flow, veh/h	90	20	619	591		
Demand Flow Rate, veh/h	92	20	632	602		
Vehicles Circulating, veh/h	597	650	47	95		
Vehicles Exiting, veh/h	101	28	642	575		
Ped Vol Crossing Leg, #/h	0	0	0	0		
Ped Cap Adj	1.000	1.000	1.000	1.000		
Approach Delay, s/veh	5.4	4.7	4.8	5.0		
Approach LOS	A	A	A	A		
Lane	Left	Left	Left	Right	Left	Right
Designated Moves	LTR	LTR	LT	TR	LT	TR
Assumed Moves	LTR	LTR	LT	TR	LT	TR
RT Channelized						
Lane Util	1.000	1.000	0.470	0.530	0.470	0.530
Follow-Up Headway, s	2.535	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.328	4.645	4.328	4.645	4.328
A (Intercept)	1420	1420	1350	1420	1350	1420
B (Slope)	8.501e-4	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	92	20	297	335	283	319
Cap Entry Lane, veh/h	855	817	1293	1364	1237	1310
Entry HV Adj Factor	0.977	0.996	0.980	0.980	0.981	0.981
Flow Entry, veh/h	90	20	291	328	278	313
Cap Entry, veh/h	836	814	1267	1337	1213	1286
V/C Ratio	0.108	0.024	0.230	0.246	0.229	0.244
Control Delay, s/veh	5.4	4.7	4.8	4.8	5.0	4.9
LOS	A	A	A	A	A	A
95th %tile Queue, veh	0	0	1	1	1	1

Intersection						
Intersection Delay, s/veh	5.0					
Intersection LOS	A					
Approach	EB	WB	NB		SB	
Entry Lanes	1	1	2		2	
Conflicting Circle Lanes	2	2	2		2	
Adj Approach Flow, veh/h	96	18	582		662	
Demand Flow Rate, veh/h	97	18	594		676	
Vehicles Circulating, veh/h	661	587	34		105	
Vehicles Exiting, veh/h	120	41	724		500	
Ped Vol Crossing Leg, #/h	0	0	0		0	
Ped Cap Adj	1.000	1.000	1.000		1.000	
Approach Delay, s/veh	5.7	4.4	4.6		5.3	
Approach LOS	A	A	A		A	
Lane	Left	Left	Left	Right	Left	Right
Designated Moves	LTR	LTR	LT	TR	LT	TR
Assumed Moves	LTR	LTR	LT	TR	LT	TR
RT Channelized						
Lane Util	1.000	1.000	0.470	0.530	0.470	0.530
Follow-Up Headway, s	2.535	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.328	4.645	4.328	4.645	4.328
A (Intercept)	1420	1420	1350	1420	1350	1420
B (Slope)	8.501e-4	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	97	18	279	315	318	358
Cap Entry Lane, veh/h	810	862	1308	1380	1226	1299
Entry HV Adj Factor	0.989	0.995	0.980	0.979	0.979	0.981
Flow Entry, veh/h	96	18	273	308	311	351
Cap Entry, veh/h	800	857	1282	1350	1200	1274
V/C Ratio	0.120	0.021	0.213	0.228	0.259	0.276
Control Delay, s/veh	5.7	4.4	4.6	4.6	5.3	5.3
LOS	A	A	A	A	A	A
95th %tile Queue, veh	0	0	1	1	1	1

Intersection						
Intersection Delay, s/veh	4.7					
Intersection LOS	A					
Approach	EB	WB	NB	SB		
Entry Lanes	1	1	2	2		
Conflicting Circle Lanes	2	2	2	2		
Adj Approach Flow, veh/h	85	44	503	599		
Demand Flow Rate, veh/h	87	45	512	611		
Vehicles Circulating, veh/h	637	530	40	62		
Vehicles Exiting, veh/h	36	22	684	513		
Ped Vol Crossing Leg, #/h	0	0	0	0		
Ped Cap Adj	1.000	1.000	1.000	1.000		
Approach Delay, s/veh	5.5	4.5	4.3	4.8		
Approach LOS	A	A	A	A		
Lane	Left	Left	Left	Right	Left	Right
Designated Moves	LTR	LTR	LT	TR	LT	TR
Assumed Moves	LTR	LTR	LT	TR	LT	TR
RT Channelized						
Lane Util	1.000	1.000	0.471	0.529	0.470	0.530
Follow-Up Headway, s	2.535	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.328	4.645	4.328	4.645	4.328
A (Intercept)	1420	1420	1350	1420	1350	1420
B (Slope)	8.501e-4	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	87	45	241	271	287	324
Cap Entry Lane, veh/h	826	905	1301	1373	1275	1347
Entry HV Adj Factor	0.976	0.976	0.980	0.983	0.982	0.980
Flow Entry, veh/h	85	44	236	266	282	318
Cap Entry, veh/h	807	883	1275	1349	1251	1321
V/C Ratio	0.105	0.050	0.185	0.197	0.225	0.240
Control Delay, s/veh	5.5	4.5	4.4	4.3	4.8	4.8
LOS	A	A	A	A	A	A
95th %tile Queue, veh	0	0	1	1	1	1

Intersection						
Intersection Delay, s/veh	5.1					
Intersection LOS	A					
Approach	EB	WB	NB		SB	
Entry Lanes	1	1	2		2	
Conflicting Circle Lanes	2	2	2		2	
Adj Approach Flow, veh/h	97	23	658		628	
Demand Flow Rate, veh/h	99	23	671		640	
Vehicles Circulating, veh/h	635	691	51		103	
Vehicles Exiting, veh/h	108	31	683		611	
Ped Vol Crossing Leg, #/h	0	0	0		0	
Ped Cap Adj	1.000	1.000	1.000		1.000	
Approach Delay, s/veh	5.6	4.9	5.0		5.1	
Approach LOS	A	A	A		A	
Lane	Left	Left	Left	Right	Left	Right
Designated Moves	LTR	LTR	LT	TR	LT	TR
Assumed Moves	LTR	LTR	LT	TR	LT	TR
RT Channelized						
Lane Util	1.000	1.000	0.469	0.531	0.470	0.530
Follow-Up Headway, s	2.535	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.328	4.645	4.328	4.645	4.328
A (Intercept)	1420	1420	1350	1420	1350	1420
B (Slope)	8.501e-4	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	99	23	315	356	301	339
Cap Entry Lane, veh/h	828	789	1288	1360	1228	1301
Entry HV Adj Factor	0.979	0.996	0.982	0.979	0.981	0.982
Flow Entry, veh/h	97	23	309	349	295	333
Cap Entry, veh/h	810	786	1264	1332	1204	1277
V/C Ratio	0.120	0.029	0.245	0.262	0.245	0.261
Control Delay, s/veh	5.6	4.9	5.0	5.0	5.2	5.1
LOS	A	A	A	A	A	A
95th %tile Queue, veh	0	0	1	1	1	1

Intersection						
Intersection Delay, s/veh	5.2					
Intersection LOS	A					
Approach	EB	WB	NB	SB		
Entry Lanes	1	1	2	2		
Conflicting Circle Lanes	2	2	2	2		
Adj Approach Flow, veh/h	104	22	619	703		
Demand Flow Rate, veh/h	105	22	632	717		
Vehicles Circulating, veh/h	703	626	38	114		
Vehicles Exiting, veh/h	128	44	770	534		
Ped Vol Crossing Leg, #/h	0	0	0	0		
Ped Cap Adj	1.000	1.000	1.000	1.000		
Approach Delay, s/veh	6.1	4.6	4.8	5.5		
Approach LOS	A	A	A	A		
Lane	Left	Left	Left	Right	Left	Right
Designated Moves	LTR	LTR	LT	TR	LT	TR
Assumed Moves	LTR	LTR	LT	TR	LT	TR
RT Channelized						
Lane Util	1.000	1.000	0.470	0.530	0.470	0.530
Follow-Up Headway, s	2.535	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.328	4.645	4.328	4.645	4.328
A (Intercept)	1420	1420	1350	1420	1350	1420
B (Slope)	8.501e-4	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	105	22	297	335	337	380
Cap Entry Lane, veh/h	781	834	1303	1375	1215	1289
Entry HV Adj Factor	0.989	0.995	0.980	0.979	0.980	0.980
Flow Entry, veh/h	104	22	291	328	330	372
Cap Entry, veh/h	773	830	1277	1347	1191	1263
V/C Ratio	0.134	0.026	0.228	0.244	0.277	0.295
Control Delay, s/veh	6.1	4.6	4.8	4.8	5.6	5.5
LOS	A	A	A	A	A	A
95th %tile Queue, veh	0	0	1	1	1	1

Intersection						
Intersection Delay, s/veh	5.0					
Intersection LOS	A					
Approach	EB	WB	NB	SB		
Entry Lanes	1	1	2	2		
Conflicting Circle Lanes	2	2	2	2		
Adj Approach Flow, veh/h	81	123	468	579		
Demand Flow Rate, veh/h	83	125	477	591		
Vehicles Circulating, veh/h	697	498	114	141		
Vehicles Exiting, veh/h	35	93	666	482		
Ped Vol Crossing Leg, #/h	0	0	0	0		
Ped Cap Adj	1.000	1.000	1.000	1.000		
Approach Delay, s/veh	5.8	5.2	4.6	5.2		
Approach LOS	A	A	A	A		
Lane	Left	Left	Left	Right	Left	Right
Designated Moves	LTR	LTR	LT	TR	LT	TR
Assumed Moves	LTR	LTR	LT	TR	LT	TR
RT Channelized						
Lane Util	1.000	1.000	0.470	0.530	0.470	0.530
Follow-Up Headway, s	2.535	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.328	4.645	4.328	4.645	4.328
A (Intercept)	1420	1420	1350	1420	1350	1420
B (Slope)	8.501e-4	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	83	125	224	253	278	313
Cap Entry Lane, veh/h	785	930	1215	1289	1186	1260
Entry HV Adj Factor	0.975	0.983	0.982	0.981	0.979	0.981
Flow Entry, veh/h	81	123	220	248	272	307
Cap Entry, veh/h	766	914	1194	1264	1161	1235
V/C Ratio	0.106	0.134	0.184	0.196	0.234	0.248
Control Delay, s/veh	5.8	5.2	4.6	4.5	5.2	5.1
LOS	A	A	A	A	A	A
95th %tile Queue, veh	0	0	1	1	1	1

Intersection						
Int Delay, s/veh	0.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↗↘			↗↘
Traffic Vol, veh/h	0	87	325	97	0	492
Future Vol, veh/h	0	87	325	97	0	492
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	85	85	85	92	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	102	382	114	0	579

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	-	248	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.94	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.32	-
Pot Cap-1 Maneuver	0	752	-
Stage 1	0	-	-
Stage 2	0	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	752	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v10.54		0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	752
HCM Lane V/C Ratio	-	-	0.136
HCM Control Delay (s/veh)	-	-	10.5
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	0.5

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Intersection						
Int Delay, s/veh	6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	63	15	32	2	2	73
Future Vol, veh/h	63	15	32	2	2	73
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	80	80	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	74	18	40	3	2	86

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	43	0	0 207 41
Stage 1	-	-	- 41 -
Stage 2	-	-	- 166 -
Critical Hdwy	4.12	-	- 6.42 6.22
Critical Hdwy Stg 1	-	-	- 5.42 -
Critical Hdwy Stg 2	-	-	- 5.42 -
Follow-up Hdwy	2.218	-	- 3.518 3.318
Pot Cap-1 Maneuver	1566	-	- 781 1030
Stage 1	-	-	- 981 -
Stage 2	-	-	- 864 -
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1566	-	- 744 1030
Mov Cap-2 Maneuver	-	-	- 744 -
Stage 1	-	-	- 934 -
Stage 2	-	-	- 864 -

Approach	EB	WB	SB
HCM Control Delay, s/v	5.99	0	8.87
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1454	-	-	-	1019
HCM Lane V/C Ratio	0.047	-	-	-	0.087
HCM Control Delay (s/veh)	7.4	0	-	-	8.9
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.3

Intersection						
Intersection Delay, s/veh	5.5					
Intersection LOS	A					
Approach	EB	WB	NB		SB	
Entry Lanes	1	1	2		2	
Conflicting Circle Lanes	2	2	2		2	
Adj Approach Flow, veh/h	93	104	642		606	
Demand Flow Rate, veh/h	95	106	655		618	
Vehicles Circulating, veh/h	696	676	126		181	
Vehicles Exiting, veh/h	104	104	665		601	
Ped Vol Crossing Leg, #/h	0	0	0		0	
Ped Cap Adj	1.000	1.000	1.000		1.000	
Approach Delay, s/veh	5.9	6.0	5.3		5.5	
Approach LOS	A	A	A		A	
Lane	Left	Left	Left	Right	Left	Right
Designated Moves	LTR	LTR	LT	TR	LT	TR
Assumed Moves	LTR	LTR	LT	TR	LT	TR
RT Channelized						
Lane Util	1.000	1.000	0.470	0.530	0.469	0.531
Follow-Up Headway, s	2.535	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.328	4.645	4.328	4.645	4.328
A (Intercept)	1420	1420	1350	1420	1350	1420
B (Slope)	8.501e-4	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	95	106	308	347	290	328
Cap Entry Lane, veh/h	786	799	1202	1276	1143	1218
Entry HV Adj Factor	0.978	0.980	0.980	0.981	0.982	0.979
Flow Entry, veh/h	93	104	302	340	285	321
Cap Entry, veh/h	769	783	1178	1251	1122	1192
V/C Ratio	0.121	0.133	0.256	0.272	0.254	0.269
Control Delay, s/veh	5.9	6.0	5.4	5.3	5.6	5.5
LOS	A	A	A	A	A	A
95th %tile Queue, veh	0	0	1	1	1	1

Intersection						
Int Delay, s/veh	0.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕			↕
Traffic Vol, veh/h	0	87	402	97	0	515
Future Vol, veh/h	0	87	402	97	0	515
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	85	85	85	92	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	102	473	114	0	606

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	-	294	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.94	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.32	-
Pot Cap-1 Maneuver	0	703	-
Stage 1	0	-	-
Stage 2	0	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	703	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v10.99		0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	- 703	-
HCM Lane V/C Ratio	-	- 0.146	-
HCM Control Delay (s/veh)	-	- 11	-
HCM Lane LOS	-	- B	-
HCM 95th %tile Q(veh)	-	- 0.5	-

Intersection						
Int Delay, s/veh	6.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	63	23	16	2	2	73
Future Vol, veh/h	63	23	16	2	2	73
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	80	80	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	74	27	20	3	2	86
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	23	0	-	0	197	21
Stage 1	-	-	-	-	21	-
Stage 2	-	-	-	-	175	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1593	-	-	-	792	1056
Stage 1	-	-	-	-	1001	-
Stage 2	-	-	-	-	855	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1593	-	-	-	755	1056
Mov Cap-2 Maneuver	-	-	-	-	755	-
Stage 1	-	-	-	-	954	-
Stage 2	-	-	-	-	855	-
Approach	EB	WB		SB		
HCM Control Delay, s/v	5.4	0		8.76		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1319	-	-	-	1045	
HCM Lane V/C Ratio	0.047	-	-	-	0.084	
HCM Control Delay (s/veh)	7.4	0	-	-	8.8	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0.1	-	-	-	0.3	

Intersection						
Intersection Delay, s/veh	5.5					
Intersection LOS	A					
Approach	EB	WB	NB		SB	
Entry Lanes	1	1	2		2	
Conflicting Circle Lanes	2	2	2		2	
Adj Approach Flow, veh/h	99	90	603		677	
Demand Flow Rate, veh/h	101	92	616		691	
Vehicles Circulating, veh/h	748	613	103		179	
Vehicles Exiting, veh/h	122	106	746		526	
Ped Vol Crossing Leg, #/h	0	0	0		0	
Ped Cap Adj	1.000	1.000	1.000		1.000	
Approach Delay, s/veh	6.3	5.5	5.1		5.8	
Approach LOS	A	A	A		A	
Lane	Left	Left	Left	Right	Left	Right
Designated Moves	LTR	LTR	LT	TR	LT	TR
Assumed Moves	LTR	LTR	LT	TR	LT	TR
RT Channelized						
Lane Util	1.000	1.000	0.471	0.529	0.470	0.530
Follow-Up Headway, s	2.535	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.328	4.645	4.328	4.645	4.328
A (Intercept)	1420	1420	1350	1420	1350	1420
B (Slope)	8.501e-4	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	101	92	290	326	325	366
Cap Entry Lane, veh/h	752	843	1228	1301	1145	1220
Entry HV Adj Factor	0.979	0.977	0.978	0.981	0.980	0.981
Flow Entry, veh/h	99	90	284	320	318	359
Cap Entry, veh/h	736	824	1200	1276	1122	1196
V/C Ratio	0.134	0.109	0.236	0.251	0.284	0.300
Control Delay, s/veh	6.3	5.5	5.1	5.0	5.9	5.8
LOS	A	A	A	A	A	A
95th %tile Queue, veh	0	0	1	1	1	1

Intersection						
Int Delay, s/veh	0.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕			↕
Traffic Vol, veh/h	0	73	357	81	0	575
Future Vol, veh/h	0	73	357	81	0	575
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	85	85	85	92	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	86	420	95	0	639

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	-	258	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.94	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.32	-
Pot Cap-1 Maneuver	0	741	-
Stage 1	0	-	-
Stage 2	0	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	741	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v10.49		0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	- 741	-
HCM Lane V/C Ratio	-	- 0.116	-
HCM Control Delay (s/veh)	-	- 10.5	-
HCM Lane LOS	-	- B	-
HCM 95th %tile Q(veh)	-	- 0.4	-

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Intersection						
Int Delay, s/veh	5.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	54	34	15	2	2	62
Future Vol, veh/h	54	34	15	2	2	62
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	80	80	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	64	40	19	3	2	73

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	21	0	0 187 20
Stage 1	-	-	- 20 -
Stage 2	-	-	- 167 -
Critical Hdwy	4.12	-	- 6.42 6.22
Critical Hdwy Stg 1	-	-	- 5.42 -
Critical Hdwy Stg 2	-	-	- 5.42 -
Follow-up Hdwy	2.218	-	- 3.518 3.318
Pot Cap-1 Maneuver	1594	-	- 802 1058
Stage 1	-	-	- 1003 -
Stage 2	-	-	- 862 -
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1594	-	- 769 1058
Mov Cap-2 Maneuver	-	-	- 769 -
Stage 1	-	-	- 962 -
Stage 2	-	-	- 862 -

Approach	EB	WB	SB
HCM Control Delay, s/v	4.51	0	8.71
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1105	-	-	-	1046
HCM Lane V/C Ratio	0.04	-	-	-	0.072
HCM Control Delay (s/veh)	7.4	0	-	-	8.7
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2

Intersection						
Intersection Delay, s/veh	5.7					
Intersection LOS	A					
Approach	EB	WB	NB		SB	
Entry Lanes	1	1	2		2	
Conflicting Circle Lanes	2	2	2		2	
Adj Approach Flow, veh/h	95	108	681		643	
Demand Flow Rate, veh/h	97	110	695		656	
Vehicles Circulating, veh/h	735	716	128		190	
Vehicles Exiting, veh/h	111	107	704		636	
Ped Vol Crossing Leg, #/h	0	0	0		0	
Ped Cap Adj	1.000	1.000	1.000		1.000	
Approach Delay, s/veh	6.2	6.3	5.5		5.8	
Approach LOS	A	A	A		A	
Lane	Left	Left	Left	Right	Left	Right
Designated Moves	LTR	LTR	LT	TR	LT	TR
Assumed Moves	LTR	LTR	LT	TR	LT	TR
RT Channelized						
Lane Util	1.000	1.000	0.471	0.529	0.470	0.530
Follow-Up Headway, s	2.535	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.328	4.645	4.328	4.645	4.328
A (Intercept)	1420	1420	1350	1420	1350	1420
B (Slope)	8.501e-4	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	97	110	327	368	308	348
Cap Entry Lane, veh/h	760	773	1200	1274	1133	1208
Entry HV Adj Factor	0.978	0.980	0.979	0.981	0.981	0.980
Flow Entry, veh/h	95	108	320	361	302	341
Cap Entry, veh/h	744	757	1175	1250	1112	1184
V/C Ratio	0.128	0.142	0.273	0.289	0.272	0.288
Control Delay, s/veh	6.2	6.3	5.6	5.5	5.8	5.7
LOS	A	A	A	A	A	A
95th %tile Queue, veh	0	0	1	1	1	1

Intersection						
Int Delay, s/veh	0.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↗↗			↗↗
Traffic Vol, veh/h	0	87	433	97	0	547
Future Vol, veh/h	0	87	433	97	0	547
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	85	85	85	92	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	102	509	114	0	644

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	-	312	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.94	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.32	-
Pot Cap-1 Maneuver	0	684	-
Stage 1	0	-	-
Stage 2	0	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	684	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v11.19		0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	684	-
HCM Lane V/C Ratio	-	0.15	-
HCM Control Delay (s/veh)	-	11.2	-
HCM Lane LOS	-	B	-
HCM 95th %tile Q(veh)	-	0.5	-

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Intersection						
Int Delay, s/veh	6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	63	26	19	2	2	73
Future Vol, veh/h	63	26	19	2	2	73
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	80	80	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	74	31	24	3	2	86
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	26	0	-	0	204	25
Stage 1	-	-	-	-	25	-
Stage 2	-	-	-	-	179	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1588	-	-	-	785	1051
Stage 1	-	-	-	-	998	-
Stage 2	-	-	-	-	852	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1588	-	-	-	747	1051
Mov Cap-2 Maneuver	-	-	-	-	747	-
Stage 1	-	-	-	-	950	-
Stage 2	-	-	-	-	852	-
Approach	EB	WB		SB		
HCM Control Delay, s/v	5.22	0		8.78		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1274	-	-	-	1040	
HCM Lane V/C Ratio	0.047	-	-	-	0.085	
HCM Control Delay (s/veh)	7.4	0	-	-	8.8	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0.1	-	-	-	0.3	

Intersection						
Intersection Delay, s/veh	5.8					
Intersection LOS	A					
Approach	EB	WB	NB	SB		
Entry Lanes	1	1	2	2		
Conflicting Circle Lanes	2	2	2	2		
Adj Approach Flow, veh/h	106	94	640	718		
Demand Flow Rate, veh/h	108	96	653	732		
Vehicles Circulating, veh/h	790	650	106	188		
Vehicles Exiting, veh/h	130	109	792	558		
Ped Vol Crossing Leg, #/h	0	0	0	0		
Ped Cap Adj	1.000	1.000	1.000	1.000		
Approach Delay, s/veh	6.7	5.7	5.2	6.1		
Approach LOS	A	A	A	A		
Lane	Left	Left	Left	Right	Left	Right
Designated Moves	LTR	LTR	LT	TR	LT	TR
Assumed Moves	LTR	LTR	LT	TR	LT	TR
RT Channelized						
Lane Util	1.000	1.000	0.470	0.530	0.470	0.530
Follow-Up Headway, s	2.535	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.328	4.645	4.328	4.645	4.328
A (Intercept)	1420	1420	1350	1420	1350	1420
B (Slope)	8.501e-4	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	108	96	307	346	344	388
Cap Entry Lane, veh/h	726	817	1224	1298	1135	1210
Entry HV Adj Factor	0.980	0.978	0.979	0.980	0.980	0.980
Flow Entry, veh/h	106	94	301	339	337	380
Cap Entry, veh/h	711	799	1199	1271	1113	1186
V/C Ratio	0.149	0.117	0.251	0.267	0.303	0.321
Control Delay, s/veh	6.7	5.7	5.3	5.2	6.1	6.1
LOS	A	A	A	A	A	A
95th %tile Queue, veh	1	0	1	1	1	1

Intersection						
Int Delay, s/veh	0.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↗↗			↗↗
Traffic Vol, veh/h	0	73	384	81	0	610
Future Vol, veh/h	0	73	384	81	0	610
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	80	85	85	92	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	91	452	95	0	678

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	-	274	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.94	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.32	-
Pot Cap-1 Maneuver	0	724	-
Stage 1	0	-	-
Stage 2	0	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	724	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v10.69		0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	724	-
HCM Lane V/C Ratio	-	0.126	-
HCM Control Delay (s/veh)	-	10.7	-
HCM Lane LOS	-	B	-
HCM 95th %tile Q(veh)	-	0.4	-

Intersection						
Int Delay, s/veh	5.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	54	37	18	2	2	62
Future Vol, veh/h	54	37	18	2	2	62
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	80	80	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	64	44	23	3	2	73

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	25	0	0 194 24
Stage 1	-	-	- 24 -
Stage 2	-	-	- 171 -
Critical Hdwy	4.12	-	- 6.42 6.22
Critical Hdwy Stg 1	-	-	- 5.42 -
Critical Hdwy Stg 2	-	-	- 5.42 -
Follow-up Hdwy	2.218	-	- 3.518 3.318
Pot Cap-1 Maneuver	1589	-	- 794 1053
Stage 1	-	-	- 999 -
Stage 2	-	-	- 859 -
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1589	-	- 762 1053
Mov Cap-2 Maneuver	-	-	- 762 -
Stage 1	-	-	- 958 -
Stage 2	-	-	- 859 -

Approach	EB	WB	SB
HCM Control Delay, s/v	4.37	0	8.73
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1068	-	-	-	1040
HCM Lane V/C Ratio	0.04	-	-	-	0.072
HCM Control Delay (s/veh)	7.4	0	-	-	8.7
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2

Intersection						
Intersection Delay, s/veh	5.2					
Intersection LOS	A					
Approach	EB	WB	NB		SB	
Entry Lanes	1	1	2		2	
Conflicting Circle Lanes	2	2	2		2	
Adj Approach Flow, veh/h	89	127	497		614	
Demand Flow Rate, veh/h	91	129	506		626	
Vehicles Circulating, veh/h	733	529	120		145	
Vehicles Exiting, veh/h	38	97	704		513	
Ped Vol Crossing Leg, #/h	0	0	0		0	
Ped Cap Adj	1.000	1.000	1.000		1.000	
Approach Delay, s/veh	6.1	5.4	4.7		5.3	
Approach LOS	A	A	A		A	
Lane	Left	Left	Left	Right	Left	Right
Designated Moves	LTR	LTR	LT	TR	LT	TR
Assumed Moves	LTR	LTR	LT	TR	LT	TR
RT Channelized						
Lane Util	1.000	1.000	0.470	0.530	0.470	0.530
Follow-Up Headway, s	2.535	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.328	4.645	4.328	4.645	4.328
A (Intercept)	1420	1420	1350	1420	1350	1420
B (Slope)	8.501e-4	8.501e-4	9.199e-4	8.501e-4	9.199e-4	8.501e-4
Entry Flow, veh/h	91	129	238	268	294	332
Cap Entry Lane, veh/h	762	906	1209	1282	1181	1255
Entry HV Adj Factor	0.977	0.983	0.981	0.982	0.981	0.979
Flow Entry, veh/h	89	127	233	263	288	325
Cap Entry, veh/h	744	891	1186	1260	1159	1230
V/C Ratio	0.119	0.142	0.197	0.209	0.249	0.264
Control Delay, s/veh	6.1	5.4	4.8	4.7	5.4	5.3
LOS	A	A	A	A	A	A
95th %tile Queue, veh	0	0	1	1	1	1

Intersection						
Int Delay, s/veh	0.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕			↕
Traffic Vol, veh/h	0	87	352	97	0	522
Future Vol, veh/h	0	87	352	97	0	522
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	85	85	85	92	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	102	414	114	0	614

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	-	264	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.94	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.32	-
Pot Cap-1 Maneuver	0	734	-
Stage 1	0	-	-
Stage 2	0	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	734	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	10.7	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	734
HCM Lane V/C Ratio	-	-	0.139
HCM Control Delay (s/veh)	-	-	10.7
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	0.5

HCM 7th TWSC
9: Lincoln Dr & South Access

04/11/2025

Intersection						
Int Delay, s/veh	5.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	63	18	35	2	2	73
Future Vol, veh/h	63	18	35	2	2	73
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	80	80	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	74	21	44	3	2	86

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	46	0	0 214 45
Stage 1	-	-	- 45 -
Stage 2	-	-	- 169 -
Critical Hdwy	4.12	-	- 6.42 6.22
Critical Hdwy Stg 1	-	-	- 5.42 -
Critical Hdwy Stg 2	-	-	- 5.42 -
Follow-up Hdwy	2.218	-	- 3.518 3.318
Pot Cap-1 Maneuver	1561	-	- 774 1025
Stage 1	-	-	- 977 -
Stage 2	-	-	- 860 -
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1561	-	- 737 1025
Mov Cap-2 Maneuver	-	-	- 737 -
Stage 1	-	-	- 931 -
Stage 2	-	-	- 860 -

Approach	EB	WB	SB
HCM Control Delay, s/v	5.77	0	8.89
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1400	-	-	-	1014
HCM Lane V/C Ratio	0.047	-	-	-	0.087
HCM Control Delay (s/veh)	7.4	0	-	-	8.9
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.3



**LINCOLN 89 CIRCLE K
LINCOLN DRIVE/STATE ROUTE 89A (SR 89A)
TRAFFIC IMPACT ANALYSIS**

APPENDIX

Turn Lane Calculations

Un-Signalized Intersection	(Right Turn Lane)	
Location:	South Access/SR 89A	
Approach/Leg:	Eastbound	2030 With Project

V = vehicles per hour Vehicle Length = 25 feet

AM Peak Hour
V = 63 vph Synchro 95th Queue = 0.1 vehicles

S = Storage = Synchro Queue x Vehicle Length

S (ft) = 0.1 vehicles X 25 feet = 3 feet

Minimum Recommended Storage: 25 feet

Un-Signalized Intersection	(Right Turn Lane)	
Location:	West Access/SR 89A	
Approach/Leg:	Northbound	2030 With Project

V = vehicles per hour Vehicle Length = 25 feet

AM Peak Hour
V = 97 vph Synchro 95th Queue = 0 vehicles

S = Storage = Synchro Queue x Vehicle Length

S (ft) = 0 vehicles X 25 feet = 0 feet

Minimum Recommended Storage: 0 feet

May 24, 2025



RE: Lincoln 89 Circle K Traffic Study Review

The following comments are provided by A-Trans Engineering, LLC for the Lincoln 89 Circle K Traffic Impact Analysis by Southwest Traffic Engineering, LLC dated May 12, 2025. The site is located on the northeast corner of Lincoln Drive and State Route 89A in Clarkdale, Arizona.

It is our opinion that the traffic study was executed per industry standards and we concur with the trip generation, origin destination and trip assignment, capacity analysis and queue analysis performed within the study. The following comments and clarifications request for the study are provided.

- Page 14 and 18: Please provide the pass-by factors reference as the 76% AM and 75% PM seems higher than the “Recommended Practices from ITE”. Also, your pass-by traffic represents 10%-20% of the existing traffic on the road implying that between 1 on 5 to 10 vehicles on the road will stop at this facility. Is this realistic for a pass-by rate on a road with relatively low traffic?
- Page 16: It appears in the Appendix that you used the Synchro 12 which is the 7th Edition of HCM but report says Synchro 11 and the 6th edition of the HCM.
- Page 29: The right turn lane for the West Access is appropriate and we concur with the recommendation.

The primary issue is that the eastbound left turn at the south access on Lincoln Drive does meet the requirements for a left turn but the traffic study is not recommending one.

- Page 29: Since the emphasis on why not to build the eastbound left turn lane on Lincoln Drive at the south access is because it ends a ¼ mile to the east, please confirm that no future extension or development is planned to the north or east of the current development which would increase future traffic along Lincoln Drive.
- If the development does not want to build the eastbound left turn and there is very little traffic coming from the east, was there consideration for having the south access be a RIRO and let the traffic from the north (traveling southbound) use the roundabout for a U-turn and travel back to the west access?

Please let me know if you have any questions.

Sincerely,
A-Trans Engineering

A handwritten signature in black ink that reads "Joseph Perrin, Jr.".

Joseph Perrin, PhD, PE, PTOE
Principal



EXPIRES 03-31-27