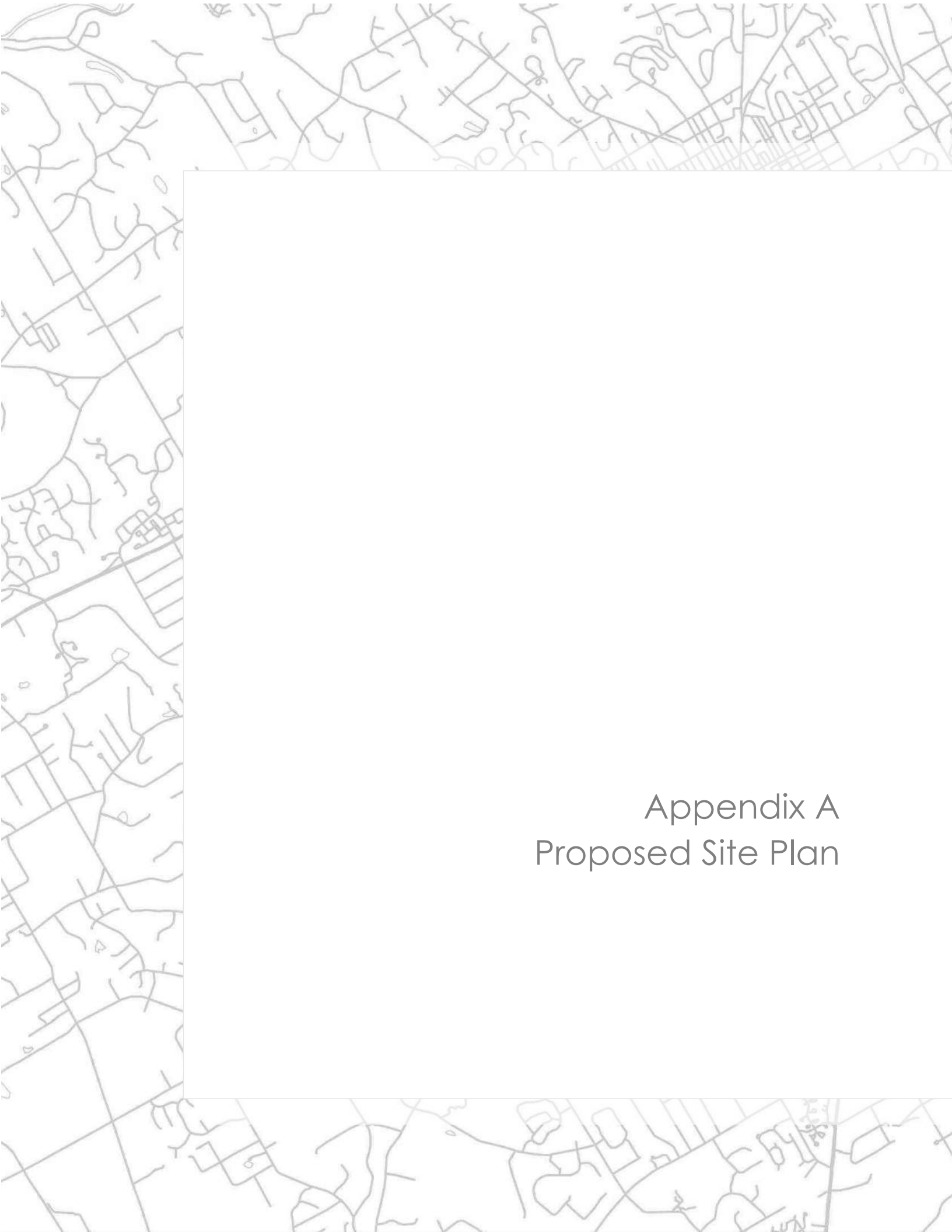


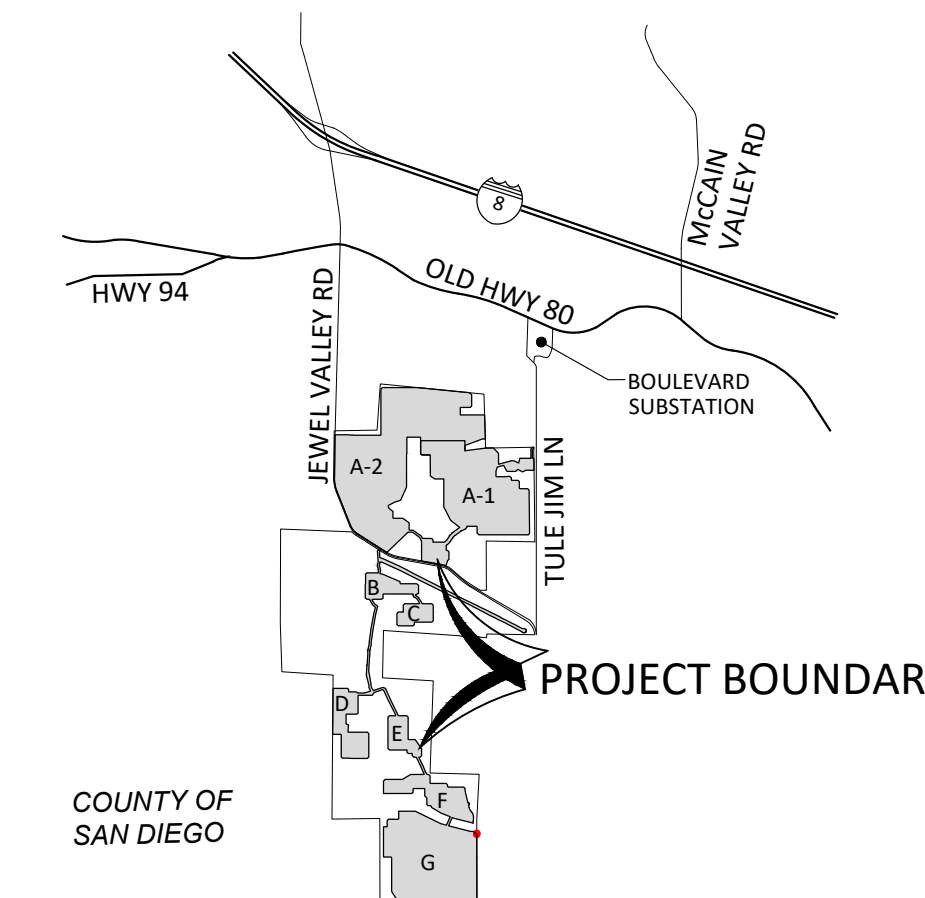
A faint, light gray line-art map pattern serves as the background for the page. It depicts a network of streets, roads, and possibly some building footprints or terrain features, typical of a technical site plan or zoning map.

Appendix A Proposed Site Plan

STARLIGHT SOLAR

COUNTY OF SAN DIEGO, CA

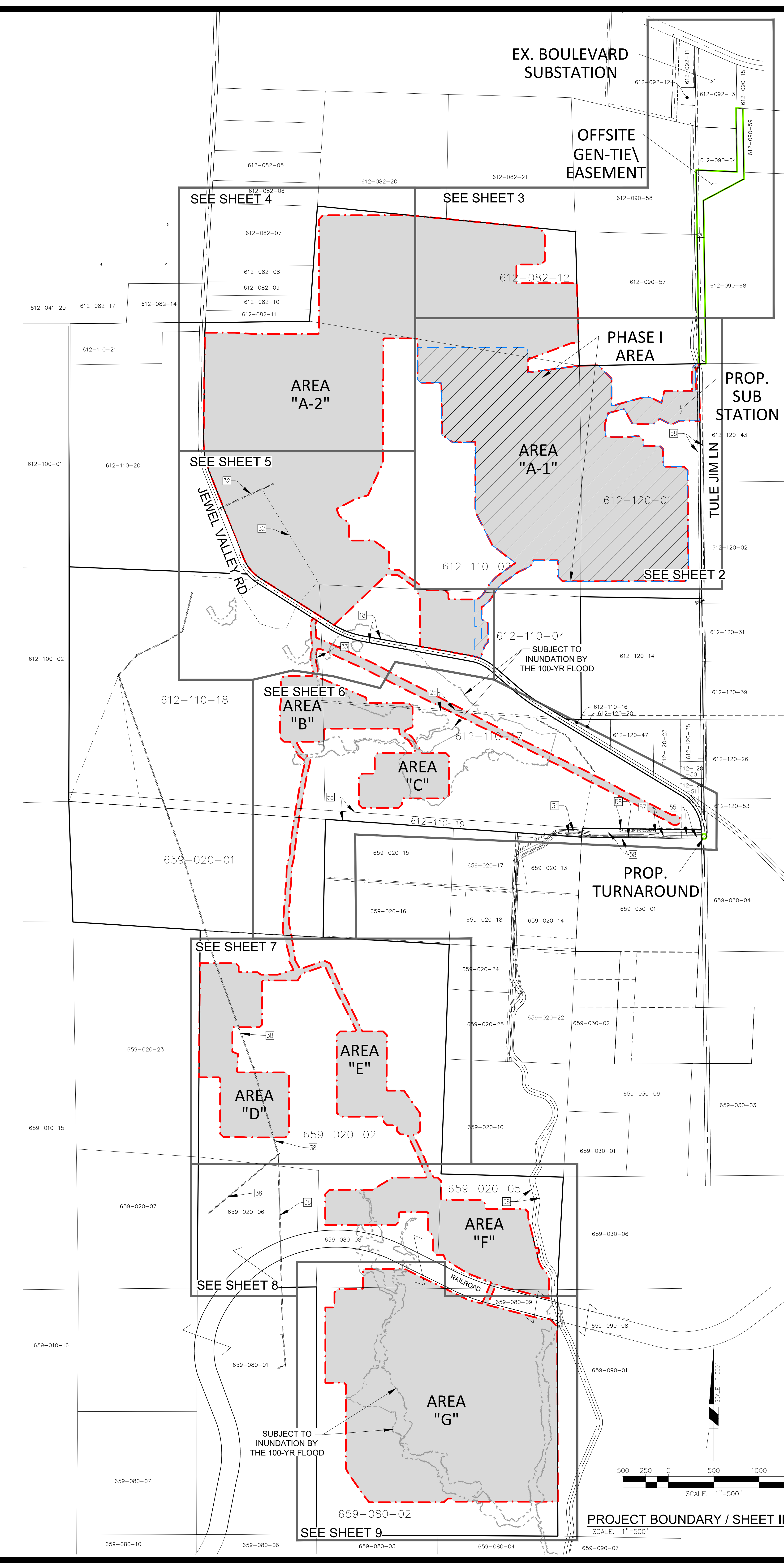
PRELIMINARY GRADING PLAN



VICINITY MAP
NOT TO SCALE



T.B. PG. 1320 D-F, 1-6



SOURCE OF TOPOGRAPHY

THE BASIS OF EXISTING CONTOURS WAS PROVIDED IN A DIGITAL TERRAIN MODEL (DTM) SURVEY AT 40-SCALE 2 FOOT CONTOUR INTERVALS PERFORMED SEPTEMBER 2021. FLOWN TOPOGRAPHY BY AEROTECH MAPPING

EARTHWORK

CUT: 350,000 CUBIC YARDS
FILL: 350,000 CUBIC YARDS
IMPORT: 0.0 CUBIC YARDS

NOTE:

1. QUANTITIES SHOWN ASSUMED 12" UNDERCUTS FOR DG/GRAVEL ROADS, 12" UNDERCUTS FOR BUILDING AND INVERTER PADS AND 12" UNDERCUTS FOR CONCRETE ACCESS ROADS.

2. QUANTITIES SHOWN ARE RAW VALUES ONLY. SUBJECT TO CHANGE DUE TO SHRINKAGE OR BULKING FACTORS AND ACTUAL FOUNDATION/ROADWAY SECTIONS TO BE DETERMINED BY GEOTECHNICAL/STRUCTURAL ENGINEER AT FINAL DESIGN.

3. QUANTITIES SHOWN DO NOT INCLUDE SITE PREPARATION/CLEAR AND GRUB OR UTILITY TRENCH SPOILS.

MAX CUT SLOPE HEIGHT: 18 FT.
MAX CUT SLOPE RATIO: 2:1
MAX FILL SLOPE HEIGHT: 16 FT.
MAX FILL SLOPE RATIO: 2:1
MAX VERTICAL DEPTH OF CUT: 19 FT.
MAX VERTICAL HEIGHT OF FILL: 18 FT.

NOTICE

THE SUBJECT PROPERTY CONTAINS STREAMS, AND/OR WATERS OF THE U.S. AND/OR STATE WHICH MAY BE SUBJECT TO REGULATION BY STATE AND/OR FEDERAL AGENCIES, INCLUDING, BUT NOT LIMITED TO, THE REGIONAL WATER QUALITY CONTROL BOARD, U.S. ARMY CORPS OF ENGINEERS AND THE CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE. IT IS THE APPLICANT'S RESPONSIBILITY TO CONSULT WITH EACH AGENCY TO DETERMINE IF A PERMIT, AGREEMENT OR OTHER APPROVAL IS REQUIRED AND TO OBTAIN ALL NECESSARY PERMITS, AGREEMENTS OR APPROVALS BEFORE COMMENCING ANY ACTIVITY WHICH COULD IMPACT THE WETLANDS, LAKE, STREAM, AND/OR WATERS OF THE U.S. ON THE SUBJECT PROPERTY. THE AGENCY CONTACT INFORMATION IS PROVIDED BELOW.

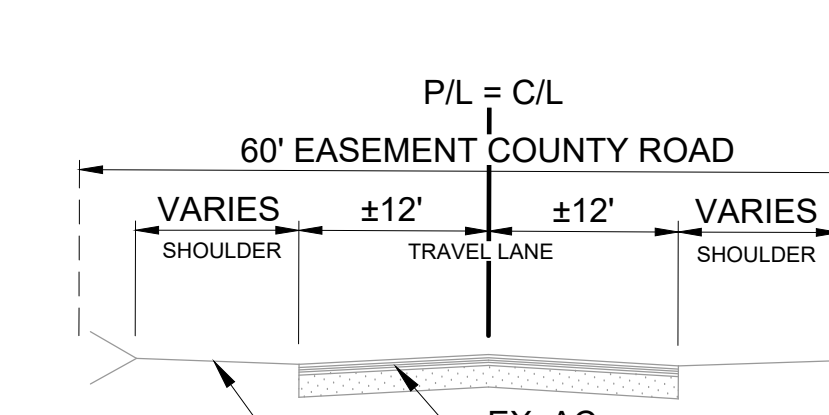
U.S. ARMY CORPS OF ENGINEERS
915 WILSHIRE BLVD., SUITE 1101,
LOS ANGELES, CA 90017
(213) 452-3333
HTTP://WWW.USACE.ARMY.MIL/

REGIONAL WATER QUALITY CONTROL BOARD
2375 NORTHSIDE DR., SUITE 100
SAN DIEGO, CA 92108
RB9_DREDGEFILL@WATERBOARDS.CA.GOV
HTTP://WWW.WATERBOARDS.CA.GOV/SANDIEGO/

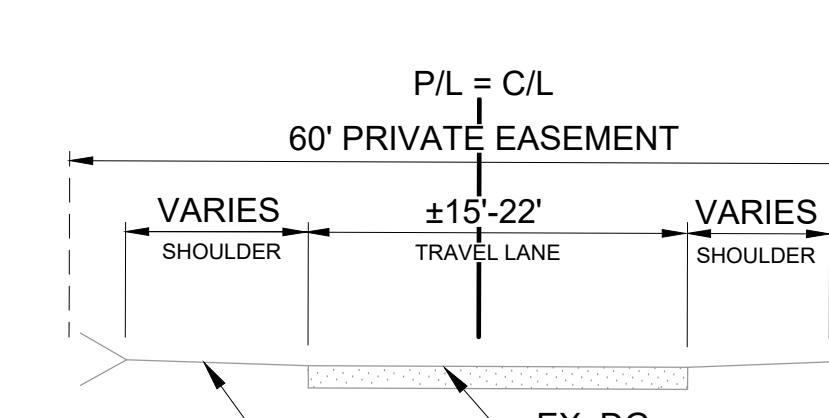
CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
3883 RUFFIN RD.
SAN DIEGO, CA 92123
(858) 636-3160
ASKRS@WILDLIFE.CA.GOV
HTTP://WWW.WILDLIFE.CA.GOV/

LEGEND

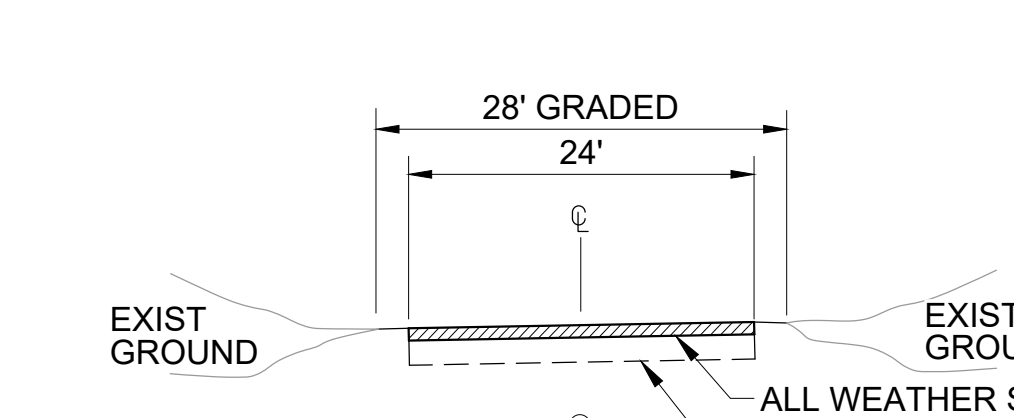
PROPERTY BOUNDARY
MAJOR USE PERMIT BOUNDARY
PHASE I (AREA "A-1")
EXISTING EASEMENT
PHASE I
PHASE II



TYPICAL SECTION
JEWEL VALLEY ROAD
(CRS 592)
NOT TO SCALE

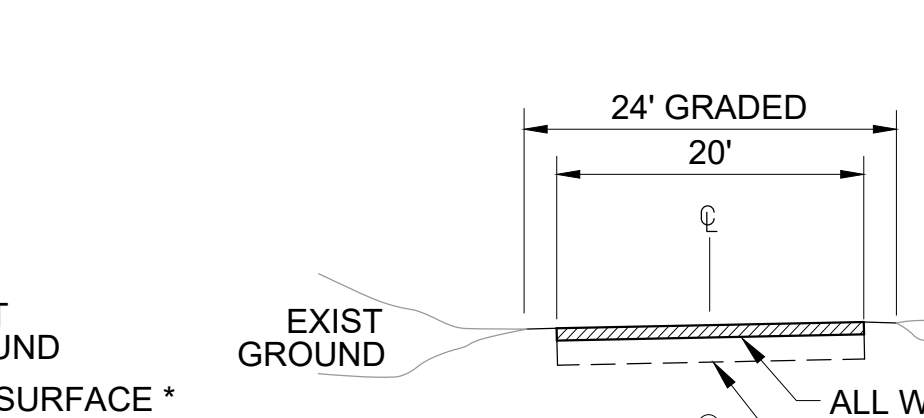


TYPICAL SECTION
TULE JIM LANE
NOT TO SCALE



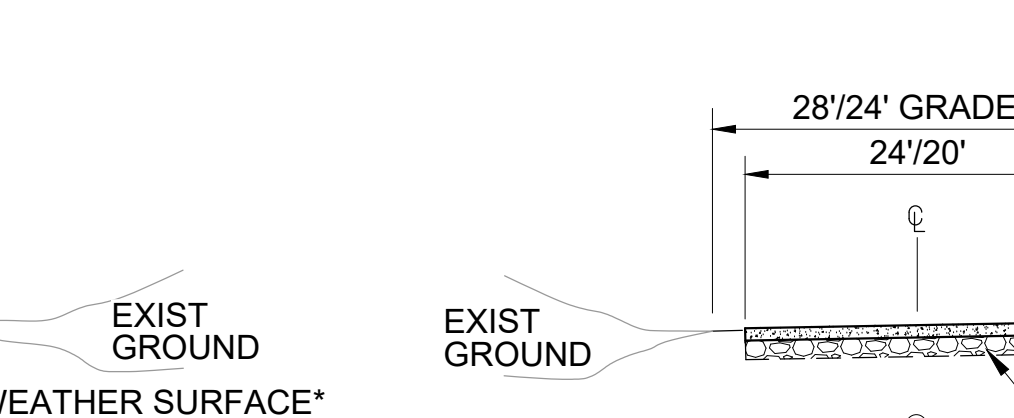
TYPICAL SECTION
24' PERIMETER ACCESS ROAD &
ARRAY CONNECTING ROADS
NOT TO SCALE

* ALL WEATHER, 75,000 lbs. FIRE APPARATUS LOAD CAPACITY



TYPICAL SECTION
20' INTERNAL ARRAY
ACCESS ROAD
NOT TO SCALE

NOTE: STRUCTURAL SECTIONS AS SHOWN ARE FOR PLANNING PURPOSES ONLY.
**GEOTECHNICAL ENGINEER REPORT PRELIMINARY GEOTECHNICAL SITE EVALUATION REPORT DATED JUNE 20, 2022



TYPICAL SECTION
CONCRETE ACCESS ROAD
NOT TO SCALE

NOTE: THE STRUCTURAL SECTION SHALL BE IN ACCORDANCE WITH SAN DIEGO COUNTY STANDARDS AND AS APPROVED BY THE MATERIAL LABORATORY

GENERAL NOTES

- THIS PLAN IS PROVIDED TO ALLOW FOR FULL AND ADEQUATE DISCRETIONARY REVIEW OF A PROPOSED DEVELOPMENT PROJECT. THE PROPERTY OWNER ACKNOWLEDGES THAT ACCEPTANCE OR APPROVAL OF THIS PLAN DOES NOT CONSTITUTE AN APPROVAL TO PERFORM ANY GRADING SHOWN HEREON AND AGREES TO OBTAIN VALID GRADING PERMISSION BEFORE COMMENCING SUCH ACTIVITY.
- MAJOR USE PERMIT AREA: 580.95 ACRES (PHASE I 125.01 AC, PHASE II 455.94 AC)
- OFFSITE GEN-TIE AREA: 7.0 AC
- OFFSITE JEWEL VALLEY ROAD TURNAROUND: 0.06 AC
- SOLAR DEVELOPMENT AREA: 566 ACRES
- TOTAL DISTURBED AREA BEFORE PROJECT: 0.0 ACRES
- TOTAL DISTURBED (CLEARED AND GRUBBED) AREA AFTER PROJECT: 561.06 ACRES (PHASE I 125.33 AC, PHASE II 435.73 AC)
- TOTAL IMPERVIOUS AREA BEFORE PROJECT: 0.0 ACRES
- TOTAL IMPERVIOUS AREA AFTER PROJECT: 6.97 ACRES
- TO MINIMIZE DUST, ALL DISTURBED AREAS WILL BE SURFACED WITH GRAVEL, DECOMPOSED GRANITE WITH BINDING AGENT OR EQUIVALENT.
- A PORTION OF THE SITE IS SUBJECT TO INUNDATION BY THE 100-YEAR FLOOD. THE 100-YEAR INUNDATION LIMITS ARE SHOWN ON THE PRELIMINARY GRADING PLAN.
- NO RETAINING WALLS ARE PROPOSED.
- MAX. GRADIENT OF ALL ACCESS ROADS NOT TO EXCEED 12%.

ASSOCIATE PARCEL NUMBER

MUP AREA-ASSESSOR PARCEL NUMBER (APN) PORTIONS OF 612-082-12, 612-110-02, 612-110-04, 612-110-17, 612-110-18, 612-110-19, 612-120-01, 659-020-01, 659-020-02, 659-020-05, 659-020-06, 659-020-08, 659-080-02, 659-080-03.

GEN TIE ROUTE-ASSESSOR PARCEL NUMBER (APN) PORTIONS 612-090-59, 612-090-68

BOULEVARD SUBSTATION- ASSESSOR PARCEL NUMBER (APN) 612-092-130

BASIS OF BEARINGS

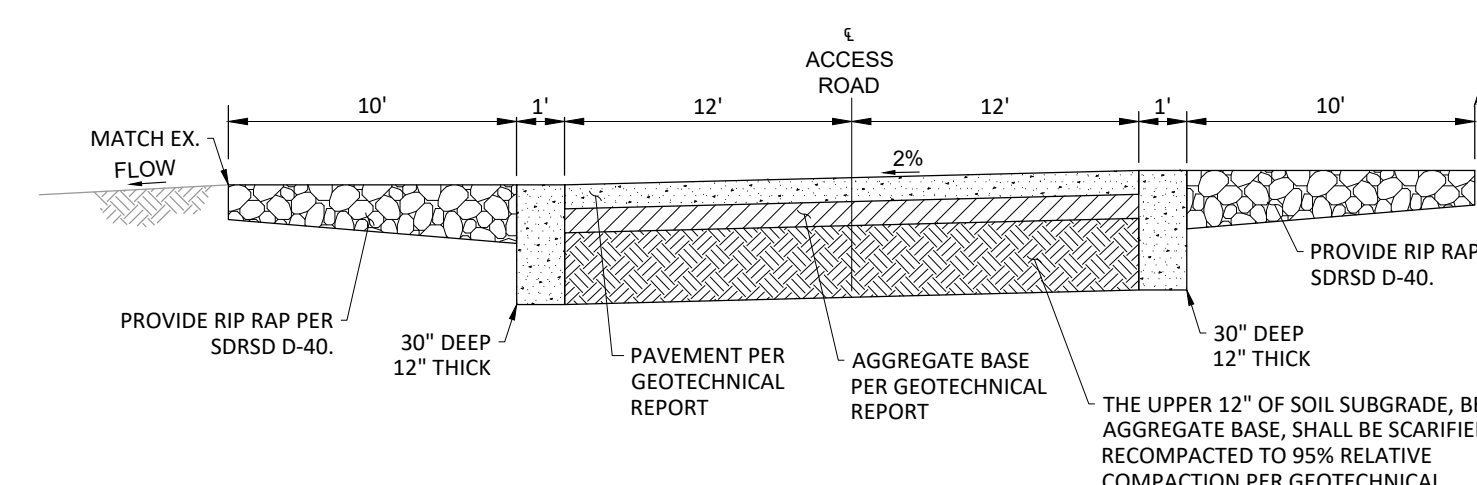
THE COORDINATES AND BEARINGS SHOWN HEREON ARE BASED UPON THE CALIFORNIA COORDINATE SYSTEM OF 1983, CCS83, ZONE 6, CSRS EPOCH 2017.50, NAD83, NSRS EPOCH 2011. SAID COORDINATES AND BEARINGS ARE BASED LOCALLY UPON FIELD-OBSERVED TIES TO THE FOLLOWING CONTINUOUS OPERATING REFERENCE STATIONS (CORS) AS PUBLISHED BY SCRIPPS ORBIT AND PERMANENT ARRAY CENTER (SOPAC).

BENCHMARK

THE BASIS OF ELEVATIONS FOR THIS SURVEY IS THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) PER NATIONAL GEODETIC SURVEY DATA SHEETS. BENCHMARK DESIGNATION: A 1222' LOCATED AT THE RIBBONWOOD ROAD OVERPASS OVER INTERSTATE HIGHWAY 8, 17.7 FEET NORTH OF THE CENTER LINE OF THE EAST BOUND HIGHWAY LANES IN THE TOP OF THE EAST END OF THE NORTH CONCRETE GUARDRAIL OF THE OVERPASS. ELEVATION: 3622.15 (NAVD88)

EXISTING EASEMENT		
DESCRIPTION	DISPOSITION	DOC. #
18 PUBLIC HIGHWAY EASEMENT - COUNTY OF SAN DIEGO	TO REMAIN	BK. 888, PG. 310, 4/13/1939
21 ROAD SURVEY 568 AND INCIDENTAL PURPOSES	TO REMAIN	MAP NO. 5963 OF ROS
26 ROAD AND UTILITY EASEMENTS - CHLOE S. DAHLE, ANNE FROATS	QUIT CLAIM	INSTR. 121453, 7/13/1970
32 EASEMENT AGREEMENT	TO REMAIN	INSTR. 73-045709, 2/21/1973
32 PUBLIC UTILITIES EASEMENT - SAN DIEGO GAS & ELECTRIC	PROP. ENCROACHMENT	INSTR. 74-218550, 8/13/1974
33 INGRESS AND EGRESS - YOUTH DEVELOPMENT INC.	TO REMAIN	INSTR. 76-349054, 10/21/1976
38 PUBLIC UTILITIES EASEMENT - SAN DIEGO GAS & ELECTRIC	PROP. ENCROACHMENT	INSTR. 79-387717, 9/17/1979
54 PUBLIC UTILITIES EASEMENT - SAN DIEGO GAS & ELECTRIC	TO REMAIN	INSTR. 1991-006878, 2/13/1991
55 DEED AND EASEMENT AGREEMENT	TO REMAIN	INSTR. 1994-006679, 8/23/1994
57 ROAD EASEMENT - UNITED STATES OF AMERICA	TO REMAIN	INSTR. 2012-012595, 3/5/2012
58 PUBLIC UTILITIES EASEMENT - SAN DIEGO GAS AND ELECTRIC	TO REMAIN	INSTR. 2012-0497686, 8/21/2012

EASEMENTS AND RESTRICTIONS PER FIRST AMERICAN TITLE INSURANCE COMPANY ALTA COMMITMENT FOR TITLE INSURANCE REPORT ORDER NUMBER N55-1068457-LA2 DATED MAY 25, 2023.



NOTE: THE STRUCTURAL SECTION SHALL BE IN ACCORDANCE WITH SAN DIEGO COUNTY STANDARDS AND AS APPROVED BY THE MATERIAL LABORATORY

PAVEMENT LOW WATER CROSSING

NOT TO SCALE

STARLIGHT SOLAR
COUNTY OF SAN DIEGO, CA
PRELIMINARY GRADING PLAN

TITLE SHEET

SHEET 1 OF 9
DECEMBER 6, 2023

Michael Baker
INTERNATIONAL

9785 Clairemont Mesa Blvd.
San Diego, CA 92124
Phone: (619) 614-5000
MBAKERINTL.COM

C:\USERS\KALB\ICM\B\PRJ\20\06262023\185614-SP-01.DWG BUTTS, KIMBERLY 12/6/2023 12:17 PM

A faint, light gray background pattern of a map, showing various lines representing roads, rivers, and property boundaries, is visible across the entire page.

Appendix B

Scoping Agreement

**Scoping Agreement for Transportation Studies****General Project Information and Description****Project Information****Project Name:** Starlight Solar**Project PDS Number:****Project Location:** South of I-8/Old Highway 80 and east of Tierra Del Sol Road**Project Description****Land Uses and Intensities:** Solar Farm**Gross and Developable Acreage:** 565 acres**Number of Vehicle Parking Spaces:** N/A**Bicycle Storage Capacity:** N/A**Motorcycle Spaces:** N/A**Consultant****Name of Firm:** Kittelson & Associates**Project Manager:** Mychal Loomis**Address:** 3919 30th Street, Suite 107, San Diego, CA 92104**Telephone:** 714-468-1180**Trip Generation**

Note that trip generation is for construction phase only; operational trip generation is nominal.

Source: Construction workforce estimates**Pass-by Trips:** N/A**Total Daily Trips:** Phase 1: 164 trips, Phase 2: 466 trips**Diverted Trips:** N/A**Internal Capture Rate:** N/A**Trip Credit:** N/A**Alternative Modes:** N/A**Net Daily Trips:** Phase 1: 164 trips, Phase 2: 466 trips**General Plan Consistency**Phase 1: Total AM Peak Hour In Trips = 36. Total PM Peak Hour Out Trips = 36
Phase 2: Total AM Peak Hour In Trips = 101. Total PM Peak Hour Out Trips = 101**Is this project consistent with the General Plan?** ☒ Yes ☐ No

General Rural (S92)

Site Plan**Attach 11x17 copies of the project location/vicinity map and site plan containing the following:**

- Driveway locations and access type
- Pedestrian access, bicycle access, and on-site pedestrian circulation N/A
- Location and distance to closest existing transit stop (measure as walking distance to project entrance or middle of parcel) N/A
- Location of any planned trails identified in the Community Trails Master Plan (CTMP) within ¼ mile of the project location N/A

See attached Exhibit 1

CEQA Transportation Analysis Screening

Project Type Screening

1) Select the Land Uses that apply to your project 2) Answer the questions for each Land Use that applies to your project (if "Yes" in any land use category below then that land use (or a portion of the land use) is screened from CEQA Transportation Analysis)		Screened Out Yes	Not Screened Out No
☐	1. Small Projects: a. Does the project result in 110 daily trips or less?	☒	☐
☐	2. Small Service/Retail Project: a. Is the project less than 50,000 square feet?	☐	☐
☐	3. Mixed-Use Project: a. Is the project location screened out based on the SANDAG screening map for VMT/service population?	☐	☐
☐	4. Locally Serving Retail/Public Facility/Recreational a. Is the project locally serving: Retail OR Public Facility OR Recreational?	☒	☐
☐	5. Redevelopment Project: a. Does the project result in a net decrease in total Project VMT than the existing use? b. If the project is to redevelop an affordable housing site, are all proposed units affordable housing units? Mark "No" for projects that replace affordable housing with market rate units	☐ ☐	☐ ☐

Project Location Screening (if not screened based on project type) – Part 1

Is this project located within a grey area (area with little to no existing land use) on the applicable County screening maps for the project land use type?	N/A	☐ Yes	☐ No
--	-----	------------------------------	-----------------------------

If "yes", the project cannot be screened based on location. If "No", proceed to Part 2.

Project Location Screening (if not screened based on project type) – Part 2

N/A

1) Select the Land Uses that apply to your project 2) Answer the questions for each Land Use that applies to your project (if "Yes" in any land use category below then that land use (or a portion of the land use) is screened from CEQA Transportation Analysis)		Screened Out Yes	Not Screened Out No
☐	1. Residential a. Is the project location screened out using the County screening maps for VMT/resident?	☐	☐
☐	2. Employment a. Is the project location screened out using the County screening maps for VMT/employee or VMT/service population?	☐	☐
☐	3. Retail/Public Facility/Recreational a. Is the project location screened out using the County screening maps for VMT/service population?	☐	☐
☐	4. Infill Screening a. Is the project location screened out using the County screening maps for Infill locations?	☐	☐

Local Mobility Analysis

Type of Local Mobility Analysis (LMA)

☐ Site Access Study	249 daily trips or less
☒ Focused LMA	250 to 499 daily trips and consistent with the General Plan
☐ Full LMA	500 or greater daily trips and consistent with the General Plan, or 250 or greater daily trips and inconsistent with the General Plan

Trip Distribution

☐ Select Zone (Model Series _____)	Projects that generate greater than 1,000 daily trips
☒ Manual Estimation	Site Access Studies, Focused LMAs, or project's that generate less than 1,000 daily trips

Provide exhibit detailing trip distribution and trip assignment for review.

See attached Exhibit 2: 70% to/from the west via I-8, 10% to/from the west via SR-94, 20% to/from the east via I-8 (10% uses Ribbonwood/Jewel Valley Rd interchange and 10% uses via Carizzo George Road)

Study Intersections (and Roadway Segments) (NOTE: Subject to change based on staff review)

1. Ribbonwood Road / I-8 WB ramps	6.
2. Jewel Valley Road / SR94 / I-8 EB ramps	7.
3. Avenue De Robles Verdes / SR94	8.
4. Old Highway 80 / SR94	9.
5. Project Access Driveways / Jewel Valley Road	10.

Attach a separate page if the number of study locations exceeds 10.

Other Jurisdictions

Is this project located within one mile of another Local Jurisdiction? ☐ Yes ☒ No

If so, name of Jurisdiction:

Specific Issues to be addressed within the Study

(in addition to requirements described in the Guidelines – to be filled out by County Staff)

1.
2.
3.
4.
5.

Please include a CEQA VMT section in the LMA that states the number of trips once project is operational. Whether it is manned or unmanned. Meeting small project screening criteria per adopted TSG.

Recommended by:



Consultant's Representative

08/17/23

Date

Scoping Agreement Submitted on

08/15/23

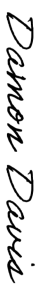
Date

Scoping Agreement Re-submitted on

08/17/23

Date

Approved Scoping Agreement:

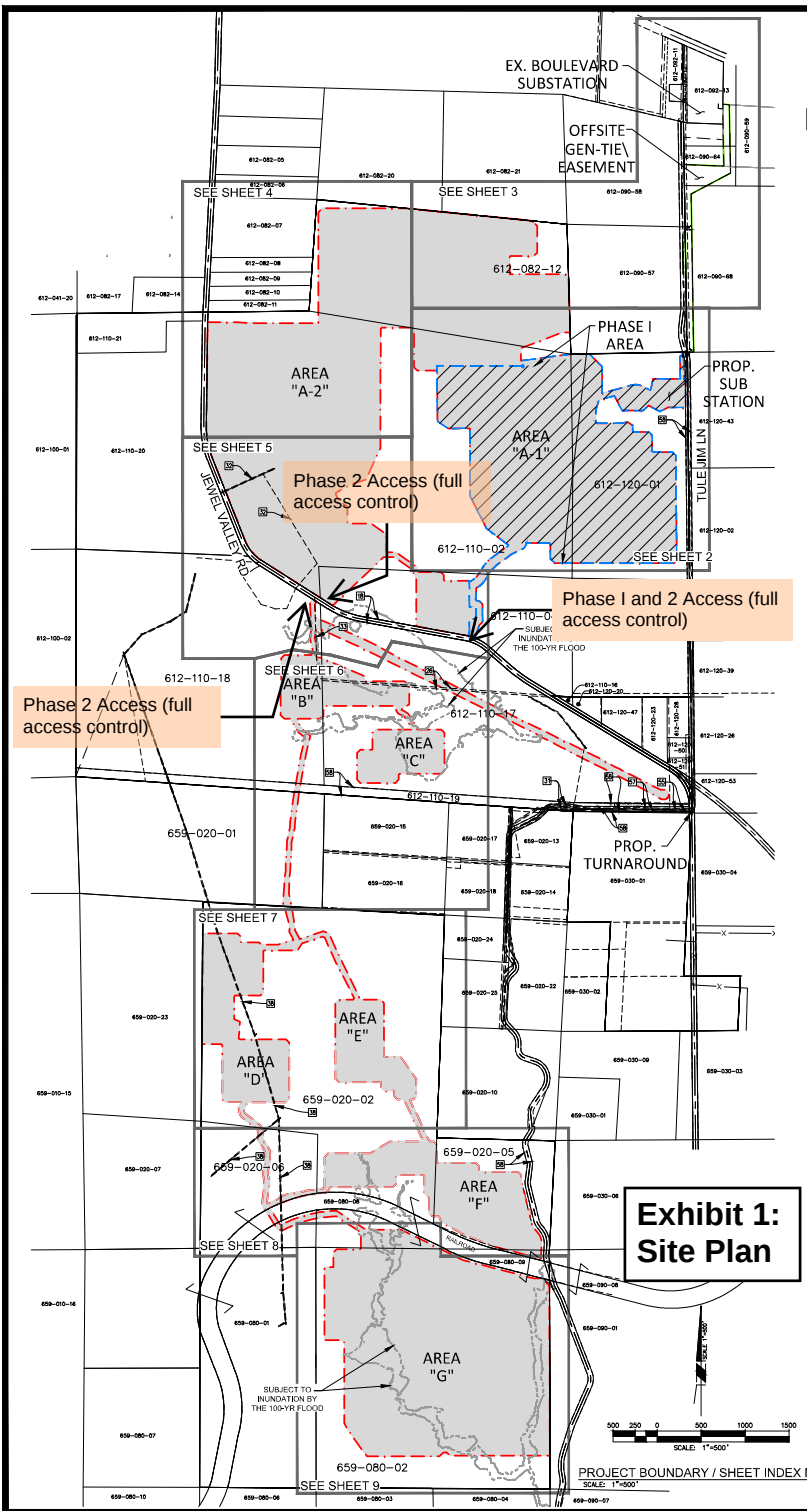


8/18/2023

County of San Diego

Date

Transportation Specialist



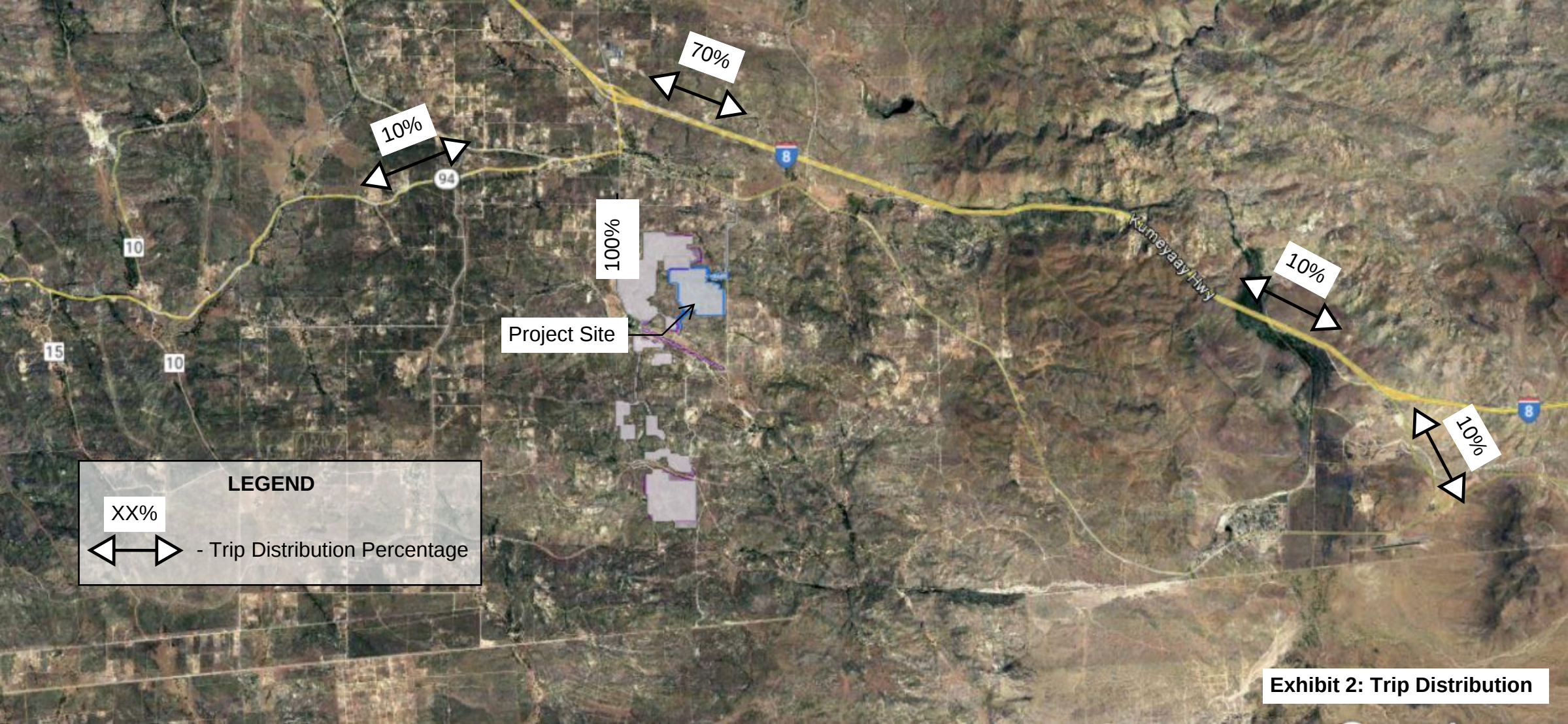
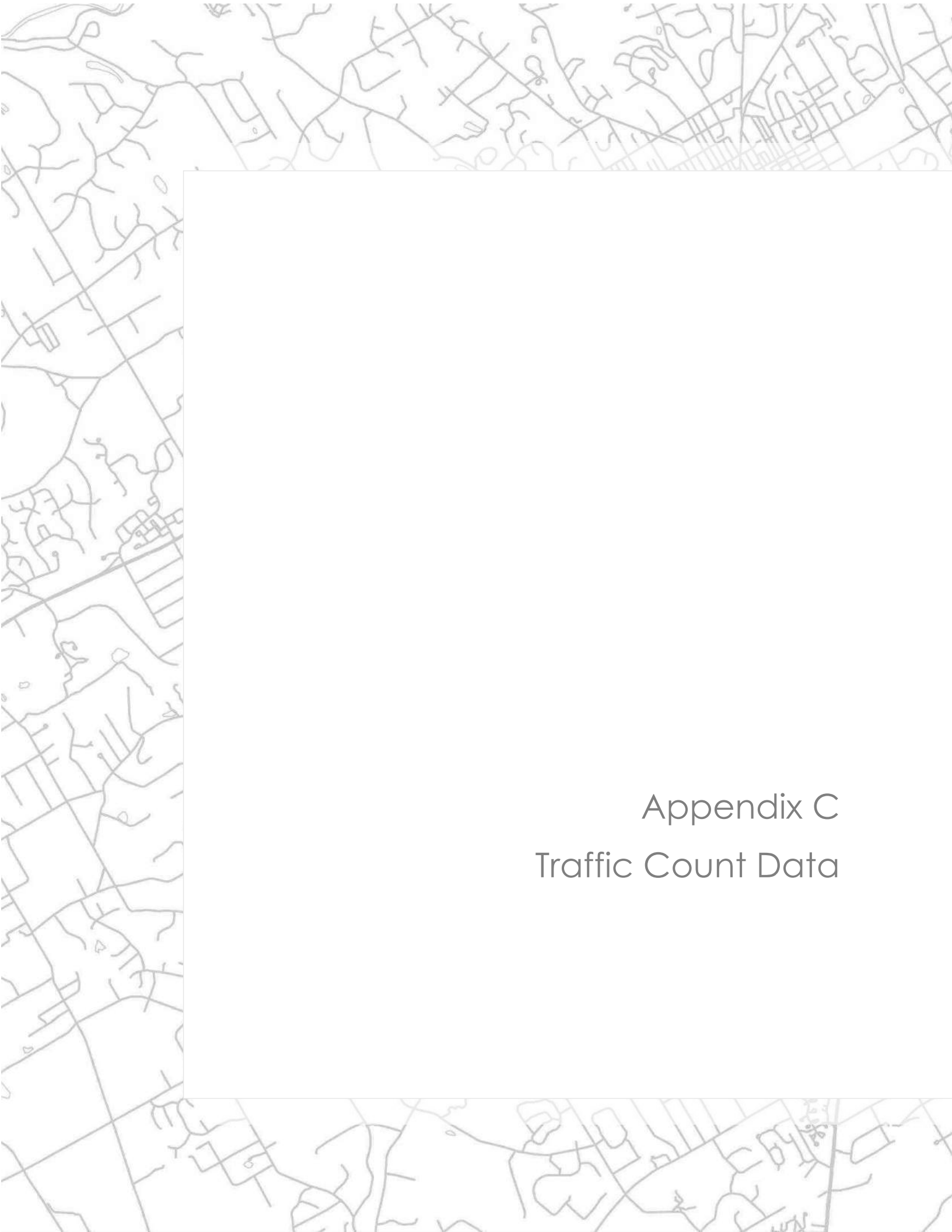


Exhibit 2: Trip Distribution

A faint, light gray background pattern of a street map, showing various road layouts, intersections, and building footprints, primarily visible on the left and bottom edges of the page.

Appendix C

Traffic Count Data

Project #: 23-1430-001

TMC SUMMARY OF Ribbonwood Rd & I-8 WB Ramps

Ribbonwood Rd

APPROACH LANES			
TOTAL	PM	MD	AM
18	2		16
2	1		1
0	0		0

N

↑

I-8 WB Ramps

AM	MD	PM	TOTAL
16		2	18
1		1	2
0		0	0

I-8 WB Ramps

APPROACH LANES

TOTAL	AM	MD	PM
0	0		0
0	0		0
0	0		0

CONTROL
1-Way Stop
WB

AM	MD	PM	TOTAL
0		0	0
0		2	2
11		9	20

APPROACH LANES

Ribbonwood Rd

TOTAL	AM	MD	PM
25	12		13
4	3		1
0	0		0

APPROACH LANES

LOCATION #: 23-1430-001

TURNING MOVEMENT COUNT

Ribbonwood Rd & I-8 WB Ramps
(Intersection Name)

TUESDAY

Day

08/29/23

Date

COUNT PERIODS

AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

AM PEAK HOUR 700 AM

NOON PEAK HOUR

PM PEAK HOUR 400 PM

Intersection Turning Movement

Prepared by:



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



veracitytrafficgroup

N-S STREET: Ribbonwood Rd

DATE: 08/29/23

LOCATION: Boulevard

E-W STREET: I-8 WB Ramps

DAY: TUESDAY

PROJECT# 23-1430-001

	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	0	0	1	1	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	8	1	0	0	0	5	0	0	0	2	0	0	16
7:15 AM	2	0	0	0	1	2	0	0	0	5	0	0	10
7:30 AM	2	1	0	0	0	7	0	0	0	3	0	0	13
7:45 AM	0	1	0	0	0	2	0	0	0	1	0	0	4
8:00 AM	2	0	0	0	1	0	0	0	0	1	1	0	5
8:15 AM	0	1	0	0	1	2	0	0	0	2	0	0	6
8:30 AM	1	0	0	0	0	1	0	0	0	3	0	0	5
8:45 AM	1	1	0	0	0	0	0	0	0	1	0	0	3
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
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	16	5	0	0	3	19	0	0	0	18	1	0	62
Approach %	76.19	23.81	0.00	0.00	13.64	86.36	####	####	####	94.74	5.26	0.00	
App/Depart	21	/	5	22	/	21	0	/	0	19	/	36	

AM Peak Hr Begins at: 700 AM

PEAK

Volumes	12	3	0	0	1	16	0	0	0	11	0	0	43
Approach %	80.00	20.00	0.00	0.00	5.88	94.12	####	####	####	100.00	0.00	0.00	

PEAK HR.

FACTOR:	0.417	0.607	0.000	0.550	0.672
---------	-------	-------	-------	-------	-------

CONTROL: 1-Way Stop (WB)

COMMENT 1:

GPS: 32.678103, -116.291642

Intersection Turning Movement



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



veracitytrafficgroup

N-S STREET: Ribbonwood Rd
0
E-W STREET: I-8 WB Ramps

DATE: 08/29/23

LOCATION: Boulevard

DAY: TUESDAY

PROJECT# 23-1430-001

	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	0	0	1	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													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	8	0	0	0	0	2	0	0	0	2	0	0	12
4:15 PM	2	1	0	0	0	0	0	0	0	0	0	0	3
4:30 PM	0	0	0	0	1	0	0	0	0	3	1	0	5
4:45 PM	3	0	0	0	0	0	0	0	0	4	1	0	8
5:00 PM	3	1	0	0	0	1	0	0	0	1	0	0	6
5:15 PM	0	0	0	0	1	1	0	0	0	1	0	0	3
5:30 PM	3	0	0	0	0	0	0	0	0	2	0	0	5
5:45 PM	5	1	0	0	0	1	0	0	0	3	0	0	10
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	24	3	0	0	2	5	0	0	0	16	2	0	52
Approach %	88.89	11.11	0.00	0.00	28.57	71.43	####	####	####	88.89	11.11	0.00	
App/Depart	27	/	3	7	/	18	0	/	0	18	/	31	

PM Peak Hr Begins at: 400 PM

PEAK

Volumes	13	1	0	0	1	2	0	0	0	9	2	0	28
Approach %	92.86	7.14	0.00	0.00	33.33	66.67	####	####	####	81.82	18.18	0.00	

PEAK HR.

FACTOR:	0.438	0.375	0.000	0.550	0.583
---------	-------	-------	-------	-------	-------

CONTROL: 1-Way Stop (WB)

COMMENT 1: 0

GPS: 32.678103, -116.291642

Intersection Turning Movement
Prepared by:



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

Project #: 23-1430-002

TMC SUMMARY OF Jewel Valley Rd & I-8 EB Ramps

		APPROACH LANES			
		AM	MD	PM	TOTAL
Jewel Valley Rd		0		0	0
		9		7	16
		3		3	6

I-8 EB Ramps

		APPROACH LANES			
		AM	MD	PM	TOTAL
Jewel Valley Rd		0		0	0
		0		0	0
		0		0	0

I-8 EB Ramps

		APPROACH LANES			
		AM	MD	PM	TOTAL
Jewel Valley Rd		0		0	0
		15		3	18
		34		15	49

I-8 EB Ramps

		APPROACH LANES			
		AM	MD	PM	TOTAL
Jewel Valley Rd		0		0	0
		12		3	15
		19		15	34

I-8 EB Ramps

CONTROL
1-Way Stop
EB

LOCATION #: **23-1430-002**

TURNING MOVEMENT COUNT

Jewel Valley Rd & I-8 EB Ramps
(Intersection Name)

TUESDAY 08/29/23
Day Date

COUNT PERIODS

AM	700AM	-	900AM
NOON		-	
PM	400PM	-	600PM

AM PEAK HOUR 700 AM

NOON PEAK HOUR

PM PEAK HOUR 400 PM

Intersection Turning Movement

Prepared by:



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



veracitytrafficgroup

N-S STREET: Jewel Valley Rd

DATE: 08/29/23

LOCATION: Boulevard

E-W STREET: I-8 EB Ramps

DAY: TUESDAY

PROJECT# 23-1430-002

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	1	0	0	1	0	1	1	0	0	0	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	0	8	5	0	2	0	1	0	3	0	0	0	19
7:15 AM	0	2	5	1	5	0	0	1	2	0	0	0	16
7:30 AM	0	1	4	2	1	0	2	0	2	0	0	0	12
7:45 AM	0	1	5	0	1	0	0	0	4	0	0	0	11
8:00 AM	0	2	4	0	2	0	0	0	3	0	0	0	11
8:15 AM	0	0	3	0	3	0	1	1	3	0	0	0	11
8:30 AM	0	1	1	0	3	0	0	0	5	0	0	0	10
8:45 AM	0	2	7	0	1	0	0	0	2	0	0	0	12
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
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	0	17	34	3	18	0	4	2	24	0	0	0	102
Approach %	0.00	33.33	66.67	14.29	85.71	0.00	13.33	6.67	80.00	####	####	####	
App/Depart	51	/	21	21	/	42	30	/	39	0	/	0	

AM Peak Hr Begins at: 700 AM

PEAK

Volumes	0	12	19	3	9	0	3	1	11	0	0	0	58
Approach %	0.00	38.71	61.29	25.00	75.00	0.00	20.00	6.67	73.33	####	####	####	

PEAK HR.

FACTOR:	0.596	0.500	0.938	0.000	0.763
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CONTROL: 1-Way Stop (EB)

COMMENT 1:

GPS: 32.676120, -116.291046

Intersection Turning Movement



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



veracitytrafficgroup

N-S STREET: Jewel Valley Rd
0

DATE: 08/29/23

LOCATION: Boulevard

E-W STREET: I-8 EB Ramps

DAY: TUESDAY

PROJECT# 23-1430-002

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	1	0	0	1	0	1	1	0	0	0	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													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	0	2	2	0	2	0	6	0	10	0	0	0	22
4:15 PM	0	0	3	0	0	0	3	1	9	0	0	0	16
4:30 PM	0	0	4	0	4	0	0	0	10	0	0	0	18
4:45 PM	0	1	6	3	1	0	2	0	9	0	0	0	22
5:00 PM	0	2	6	0	1	0	2	0	7	0	0	0	18
5:15 PM	0	0	4	0	2	0	0	0	7	0	0	0	13
5:30 PM	0	0	4	0	2	0	3	0	4	0	0	0	13
5:45 PM	0	2	6	0	3	0	4	0	5	0	0	0	20
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	0	7	35	3	15	0	20	1	61	0	0	0	142
Approach %	0.00	16.67	83.33	16.67	83.33	0.00	24.39	1.22	74.39	####	####	####	
App/Depart	42	/	27	18	/	76	82	/	39	0	/	0	

PM Peak Hr Begins at: 400 PM

PEAK

Volumes	0	3	15	3	7	0	11	1	38	0	0	0	78
Approach %	0.00	16.67	83.33	30.00	70.00	0.00	22.00	2.00	76.00	####	####	####	

PEAK HR.

FACTOR:	0.643	0.625	0.781	0.000	0.886
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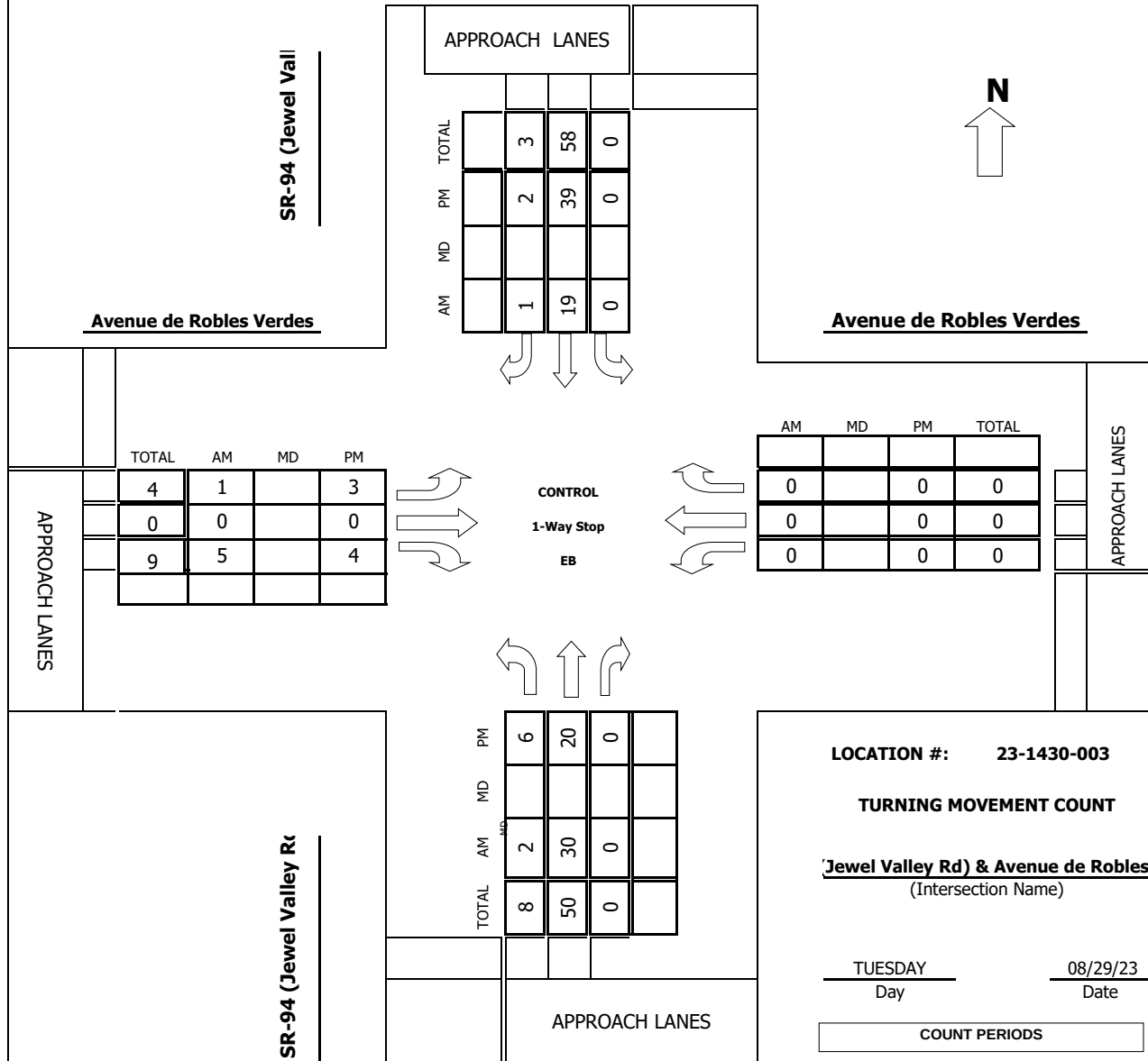
CONTROL: 1-Way Stop (EB)

COMMENT 1: 0

GPS: 32.676120, -116.291046

Project #: 23-1430-003

TMC SUMMARY OF SR-94 (Jewel Valley Rd) & Avenue de Robles Verdes



AM PEAK HOUR 700 AM

NOON PEAK HOUR

PM PEAK HOUR 430 PM

Intersection Turning Movement

Prepared by:



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



veracitytrafficgroup

N-S STREET: SR-94 (Jewel Valley Rd)

DATE: 08/29/23

LOCATION: Boulevard

E-W STREET: Avenue de Robles Verdes

DAY: TUESDAY

PROJECT# 23-1430-003

	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	0	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	0	13	0	0	5	0	0	0	1	0	0	0	19
7:15 AM	1	7	0	0	7	0	0	0	1	0	0	0	16
7:30 AM	1	4	0	0	2	1	1	0	0	0	0	0	9
7:45 AM	0	6	0	0	5	0	0	0	3	0	0	0	14
8:00 AM	2	6	0	0	3	2	0	0	0	0	0	0	13
8:15 AM	0	2	0	0	6	0	1	0	1	0	0	0	10
8:30 AM	1	1	0	0	8	0	1	0	0	0	0	0	11
8:45 AM	2	8	0	0	3	0	1	0	1	0	0	0	15
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
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	7	47	0	0	39	3	4	0	7	0	0	0	107
Approach %	12.96	87.04	0.00	0.00	92.86	7.14	36.36	0.00	63.64	####	####	####	
App/Depart	54	/	51	42	/	46	11	/	0	0	/	10	

AM Peak Hr Begins at: 700 AM

PEAK

Volumes	2	30	0	0	19	1	1	0	5	0	0	0	58
Approach %	6.25	93.75	0.00	0.00	95.00	5.00	16.67	0.00	83.33	####	####	####	

PEAK HR.

FACTOR:	0.615	0.714	0.500	0.000	0.763
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CONTROL: 1-Way Stop (EB)

COMMENT 1:

GPS: 32.675808, -116.291016

Intersection Turning Movement



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



veracitytrafficgroup

N-S STREET: SR-94 (Jewel Valley Rd)

DATE: 08/29/23

LOCATION: Boulevard

E-W STREET: Avenue de Robles Verdes

DAY: TUESDAY

PROJECT# 23-1430-003

	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	0	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													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	0	4	0	0	12	0	0	0	1	0	0	0	17
4:15 PM	0	3	0	0	9	0	0	0	1	0	0	0	13
4:30 PM	2	4	0	0	14	0	0	0	1	0	0	0	21
4:45 PM	2	5	0	0	8	2	2	0	2	0	0	0	21
5:00 PM	1	8	0	0	8	0	0	0	1	0	0	0	18
5:15 PM	1	3	0	0	9	0	1	0	0	0	0	0	14
5:30 PM	0	4	0	0	5	1	0	0	1	0	0	0	11
5:45 PM	0	8	0	0	7	1	0	0	0	0	0	0	16
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	6	39	0	0	72	4	3	0	7	0	0	0	131
Approach %	13.33	86.67	0.00	0.00	94.74	5.26	30.00	0.00	70.00	####	####	####	
App/Depart	45	/	42	76	/	79	10	/	0	0	/	10	

PM Peak Hr Begins at: 430 PM

PEAK

Volumes	6	20	0	0	39	2	3	0	4	0	0	0	74
Approach %	23.08	76.92	0.00	0.00	95.12	4.88	42.86	0.00	57.14	####	####	####	

PEAK HR.

FACTOR:	0.722	0.732	0.438	0.000	0.881
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CONTROL: 1-Way Stop (EB)

COMMENT 1: 0

GPS: 32.675808, -116.291016

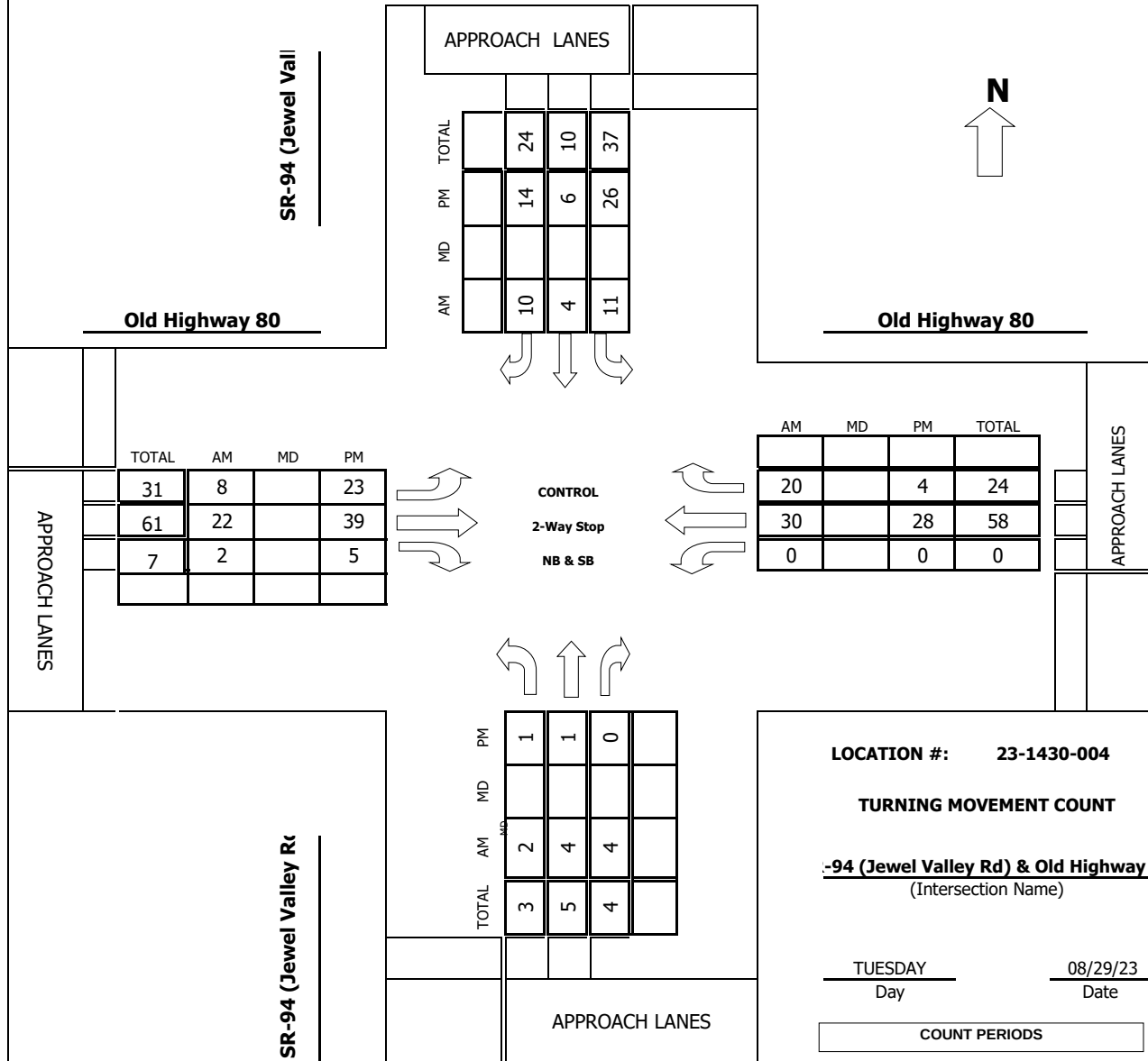
Intersection Turning Movement
Prepared by:



FIELD DATA SERVICES OF ARIZONA, INC.
 520.316.6745

Project #: 23-1430-004

TMC SUMMARY OF SR-94 (Jewel Valley Rd) & Old Highway 80



AM PEAK HOUR 700 AM

NOON PEAK HOUR

PM PEAK HOUR 430 PM

Intersection Turning Movement

Prepared by:



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



veracitytrafficgroup

N-S STREET: SR-94 (Jewel Valley Rd)

DATE: 08/29/23

LOCATION: Boulevard

E-W STREET: Old Highway 80

DAY: TUESDAY

PROJECT# 23-1430-004

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	1	0	0	1	0	1	1	0	0	1	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	0	1	1	2	0	3	2	7	0	0	7	9	32
7:15 AM	1	0	1	5	1	2	3	4	1	0	7	5	30
7:30 AM	1	3	1	2	1	2	1	3	0	0	5	2	21
7:45 AM	0	0	1	2	2	3	2	8	1	0	11	4	34
8:00 AM	1	0	0	1	0	2	3	2	2	0	5	5	21
8:15 AM	0	1	2	1	1	5	1	7	0	0	7	1	26
8:30 AM	1	1	0	1	0	6	2	5	1	1	9	2	29
8:45 AM	3	2	1	0	1	3	3	4	2	1	14	4	38
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
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	7	8	7	14	6	26	17	40	7	2	65	32	231
Approach %	31.82	36.36	31.82	30.43	13.04	56.52	26.56	62.50	10.94	2.02	65.66	32.32	
App/Depart	22	/	57	46	/	15	64	/	61	99	/	98	

AM Peak Hr Begins at: 700 AM

PEAK

Volumes	2	4	4	11	4	10	8	22	2	0	30	20	117
Approach %	20.00	40.00	40.00	44.00	16.00	40.00	25.00	68.75	6.25	0.00	60.00	40.00	

PEAK HR.

FACTOR:	0.500	0.781	0.727	0.781	0.860
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CONTROL: 2-Way Stop (NB & SB)

COMMENT 1:

GPS: 32.669176, -116.290117

Intersection Turning Movement



FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745



veracitytrafficgroup

N-S STREET: SR-94 (Jewel Valley Rd)

DATE: 08/29/23

LOCATION: Boulevard

E-W STREET: Old Highway 80

DAY: TUESDAY

PROJECT# 23-1430-004

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	1	0	0	1	0	1	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													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	0	3	0	5	2	7	2	4	2	0	3	2	30
4:15 PM	1	0	0	7	2	2	3	9	2	0	4	2	32
4:30 PM	0	0	0	8	1	6	6	8	2	0	10	1	42
4:45 PM	0	0	0	8	2	2	7	9	1	0	5	1	35
5:00 PM	0	0	0	9	2	1	8	7	1	0	5	1	34
5:15 PM	1	1	0	1	1	5	2	15	1	0	8	1	36
5:30 PM	1	1	0	4	1	2	3	5	2	0	7	0	26
5:45 PM	0	0	0	6	2	2	5	10	1	0	7	2	35
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	3	5	0	48	13	27	36	67	12	0	49	10	270
Approach %	37.50	62.50	0.00	54.55	14.77	30.68	31.30	58.26	10.43	0.00	83.05	16.95	
App/Depart	8	/	51	88	/	25	115	/	115	59	/	79	

PM Peak Hr Begins at: 430 PM

PEAK

Volumes	1	1	0	26	6	14	23	39	5	0	28	4	147
Approach %	50.00	50.00	0.00	56.52	13.04	30.43	34.33	58.21	7.46	0.00	87.50	12.50	

PEAK HR.

FACTOR:	0.250	0.767	0.931	0.727	0.875
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CONTROL: 2-Way Stop (NB & SB)

COMMENT 1: 0

GPS: 32.669176, -116.290117

Page 1

Site Code: 08/29/23 & 08/30/23
Station ID: 23-1430-005
Jewel Valley Rd south of Old Highway 80
32.667307, -116.290179
Latitude: 0' 0.0000 Undefined

Start Time	Cars & Bikes	2 Axle Long	2 Axle Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total	Truck Total
08/29/23	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	1	0	0	0	0	0	0	0	1	0	0	2	1
02:00	0	1	0	0	0	0	0	0	0	0	0	0	1	0
03:00	0	0	1	0	0	0	0	0	0	0	0	0	1	0
04:00	0	1	0	0	2	0	0	0	0	0	0	0	3	2
05:00	0	6	1	0	1	0	0	0	0	0	0	0	8	1
06:00	0	7	3	0	1	0	0	0	0	0	0	0	11	1
07:00	0	7	1	0	1	0	0	0	0	0	0	0	9	1
08:00	0	6	4	0	2	0	0	0	0	0	0	0	12	2
09:00	0	8	3	0	0	0	0	0	0	0	0	0	11	0
10:00	0	7	0	0	0	0	0	0	0	0	0	0	7	0
11:00	0	0	1	0	4	0	1	0	0	0	0	0	6	5
12 PM	0	4	3	0	0	0	0	0	0	0	0	0	7	0
13:00	0	11	1	0	2	0	0	0	0	0	0	0	14	2
14:00	0	3	3	0	3	0	0	0	0	0	0	0	9	3
15:00	0	8	5	0	2	0	0	0	0	0	0	0	15	2
16:00	0	3	1	0	0	1	0	0	0	0	0	0	5	1
17:00	0	2	2	0	0	0	0	0	0	0	0	0	4	0
18:00	0	4	1	0	0	0	0	0	0	0	0	0	5	0
19:00	0	1	3	0	1	0	0	0	0	0	0	0	5	1
20:00	0	0	3	0	1	0	0	0	0	0	0	0	4	1
21:00	0	2	0	0	0	0	0	0	0	0	0	0	2	0
22:00	0	2	1	0	2	0	0	0	0	0	0	0	5	2
23:00	0	0	1	0	0	0	0	0	0	0	0	0	1	0
Total	0	84	38	0	22	1	1	0	0	1	0	0	147	25
Percent	0.0%	57.1%	25.9%	0.0%	15.0%	0.7%	0.7%	0.0%	0.0%	0.0%	0.7%	0.0%		17.0%
AM Peak Vol.		09:00	08:00		11:00		11:00			01:00			08:00	11:00
		8	4		4		1			1			12	5
PM Peak Vol.		13:00	15:00		14:00		16:00						15:00	14:00
		11	5		3		1						15	3

Field Data Services of Arizona, Inc.

31894 Whitetail Ln.
Temecula, CA 92592
(520) 316-6745

Page 2

Site Code: 08/29/23 & 08/30/23
Station ID: 23-1430-005
Jewel Valley Rd south of Old Highway 80
32.667307, -116.290179
Latitude: 0' 0.0000 Undefined

Northbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total	Truck Total
08/30/23	0	0	0	0	2	0	0	0	0	0	0	0	0	2	2
01:00	0	3	0	0	1	0	0	0	0	0	0	0	0	4	1
02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
03:00	0	0	0	0	2	0	0	0	0	0	0	0	0	2	2
04:00	0	0	0	0	2	0	0	0	0	0	0	0	0	2	2
05:00	0	7	3	0	0	0	0	0	0	0	0	0	0	10	0
06:00	0	8	3	0	0	0	0	0	0	0	0	0	0	11	0
07:00	0	2	3	0	2	0	0	0	0	0	0	0	0	7	2
08:00	0	10	5	0	2	0	0	0	0	0	0	0	0	17	2
09:00	0	10	1	0	1	0	0	0	0	0	0	0	0	12	1
10:00	0	8	2	0	0	0	0	0	0	0	0	0	0	10	0
11:00	0	8	0	0	0	0	0	0	0	0	0	0	0	8	0
12 PM	0	2	2	0	2	0	0	0	0	0	0	0	0	6	2
13:00	0	6	3	0	5	0	0	0	0	0	0	0	0	14	5
14:00	0	8	2	0	1	0	0	0	0	0	0	0	0	11	1
15:00	0	6	1	0	3	0	0	0	0	0	0	0	0	10	3
16:00	0	2	3	0	0	0	0	0	0	0	0	0	0	5	0
17:00	0	3	2	0	0	0	0	0	0	0	0	0	0	5	0
18:00	0	1	2	0	1	0	0	0	0	0	0	0	0	4	1
19:00	0	1	1	0	1	1	0	0	0	0	0	0	0	4	2
20:00	0	1	0	0	1	0	0	0	0	0	0	0	0	2	1
21:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
22:00	0	1	1	0	1	0	0	0	0	0	0	0	0	3	1
23:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
Total	0	90	34	0	27	1	0	0	0	0	0	0	0	152	28
Percent	0.0%	59.2%	22.4%	0.0%	17.8%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		18.4%
AM Peak		08:00	08:00		00:00									08:00	00:00
Vol.		10	5		2									17	2
PM Peak		14:00	13:00		13:00	19:00								13:00	13:00
Vol.		8	3		5	1								14	5
Grand Total	0	174	72	0	49	2	1	0	0	0	1	0	0	299	53
Percent	0.0%	58.2%	24.1%	0.0%	16.4%	0.7%	0.3%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%		17.7%

Page 3

Site Code: 08/29/23 & 08/30/23
Station ID: 23-1430-005
Jewel Valley Rd south of Old Highway 80
32.667307, -116.290179
Latitude: 0' 0.0000 Undefined

Start Time	Cars & Bikes		2 Axle Long		2 Axle 6 Tire		3 Axle Single		4 Axle Single		<5 Axl Double		5 Axle Double		>6 Axl Double		<6 Axl Multi		6 Axle Multi		>6 Axl Multi		Total	Truck Total
	Bikes	Tlrs	Long	Buses	6 Tire	Single	Single	Double	Double	Double	Multi	Multi	Multi	Total	Total									
08/29/23	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
02:00	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:00	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	
05:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	
06:00	0	3	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4	1	1	1	1	
07:00	0	4	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	6	1	1	1	1	1	
08:00	0	8	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	9	1	1	1	1	1	
09:00	0	6	4	0	1	0	0	0	0	0	0	0	0	0	0	0	11	1	1	1	1	1	1	
10:00	0	2	0	0	1	0	0	1	0	0	0	0	0	0	0	0	4	2	2	2	2	2	2	
11:00	0	2	1	0	3	0	1	0	0	0	0	0	0	0	0	0	7	4	4	4	4	4	4	
12 PM	0	6	0	0	3	0	0	0	0	0	0	0	0	0	0	0	9	3	3	3	3	3	3	
13:00	0	5	2	0	5	0	0	0	0	0	0	0	0	0	0	0	12	5	5	5	5	5	5	
14:00	0	5	3	0	5	1	0	0	0	0	0	0	0	0	0	0	14	6	6	6	6	6	6	
15:00	0	7	4	0	5	0	0	0	0	0	0	0	0	0	0	0	16	5	5	5	5	5	5	
16:00	0	11	2	0	1	0	0	0	0	0	0	0	0	0	0	0	14	1	1	1	1	1	1	
17:00	0	10	1	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	
18:00	0	9	2	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	
19:00	0	5	3	0	3	0	0	0	0	0	0	0	0	0	0	0	11	3	3	3	3	3	3	
20:00	0	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	
21:00	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	3	1	1	1	1	1	1	
22:00	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	
23:00	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	4	2	2	2	2	2	2	
Total	0	98	28	0	34	1	1	1	0	0	0	0	0	0	0	0	163	37	37	37	37	37	37	
Percent																								

Field Data Services of Arizona, Inc.

31894 Whitetail Ln.
Temecula, CA 92592
(520) 316-6745

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Site Code: 08/29/23 & 08/30/23
Station ID: 23-1430-005
Jewel Valley Rd south of Old Highway 80
32.667307, -116.290179
Latitude: 0' 0.0000 Undefined

Northbound, Southbound

Start Time	Cars & Bikes	2 Axle Long	2 Axle Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total	Truck Total
08/29/23	0	1	0	0	0	0	0	0	0	0	0	0	1	0
01:00	0	1	0	0	0	0	0	0	0	1	0	0	2	1
02:00	0	3	0	0	0	0	0	0	0	0	0	0	3	0
03:00	0	0	1	0	0	0	0	0	0	0	0	0	1	0
04:00	0	3	0	0	2	0	0	0	0	0	0	0	5	2
05:00	0	6	1	0	2	0	0	0	0	0	0	0	9	2
06:00	0	10	3	0	2	0	0	0	0	0	0	0	15	2
07:00	0	11	2	0	2	0	0	0	0	0	0	0	15	2
08:00	0	14	4	0	3	0	0	0	0	0	0	0	21	3
09:00	0	14	7	0	1	0	0	0	0	0	0	0	22	1
10:00	0	9	0	0	1	0	0	1	0	0	0	0	11	2
11:00	0	2	2	0	7	0	2	0	0	0	0	0	13	9
12 PM	0	10	3	0	3	0	0	0	0	0	0	0	16	3
13:00	0	16	3	0	7	0	0	0	0	0	0	0	26	7
14:00	0	8	6	0	8	1	0	0	0	0	0	0	23	9
15:00	0	15	9	0	7	0	0	0	0	0	0	0	31	7
16:00	0	14	3	0	1	1	0	0	0	0	0	0	19	2
17:00	0	12	3	0	0	0	0	0	0	0	0	0	15	0
18:00	0	13	3	0	0	0	0	0	0	0	0	0	16	0
19:00	0	6	6	0	4	0	0	0	0	0	0	0	16	4
20:00	0	5	5	0	1	0	0	0	0	0	0	0	11	1
21:00	0	3	1	0	1	0	0	0	0	0	0	0	5	1
22:00	0	5	2	0	2	0	0	0	0	0	0	0	9	2
23:00	0	1	2	0	2	0	0	0	0	0	0	0	5	2
Total	0	182	66	0	56	2	2	1	0	0	1	0	310	62
Percent	0.0%	58.7%	21.3%	0.0%	18.1%	0.6%	0.6%	0.3%	0.0%	0.0%	0.3%	0.0%		20.0%
AM Peak Vol.		08:00	09:00		11:00		11:00	10:00			01:00		09:00	11:00
		14	7		7		2	1			1		22	9
PM Peak Vol.		13:00	15:00		14:00	14:00							15:00	14:00
		16	9		8	1							31	9

Field Data Services of Arizona, Inc.

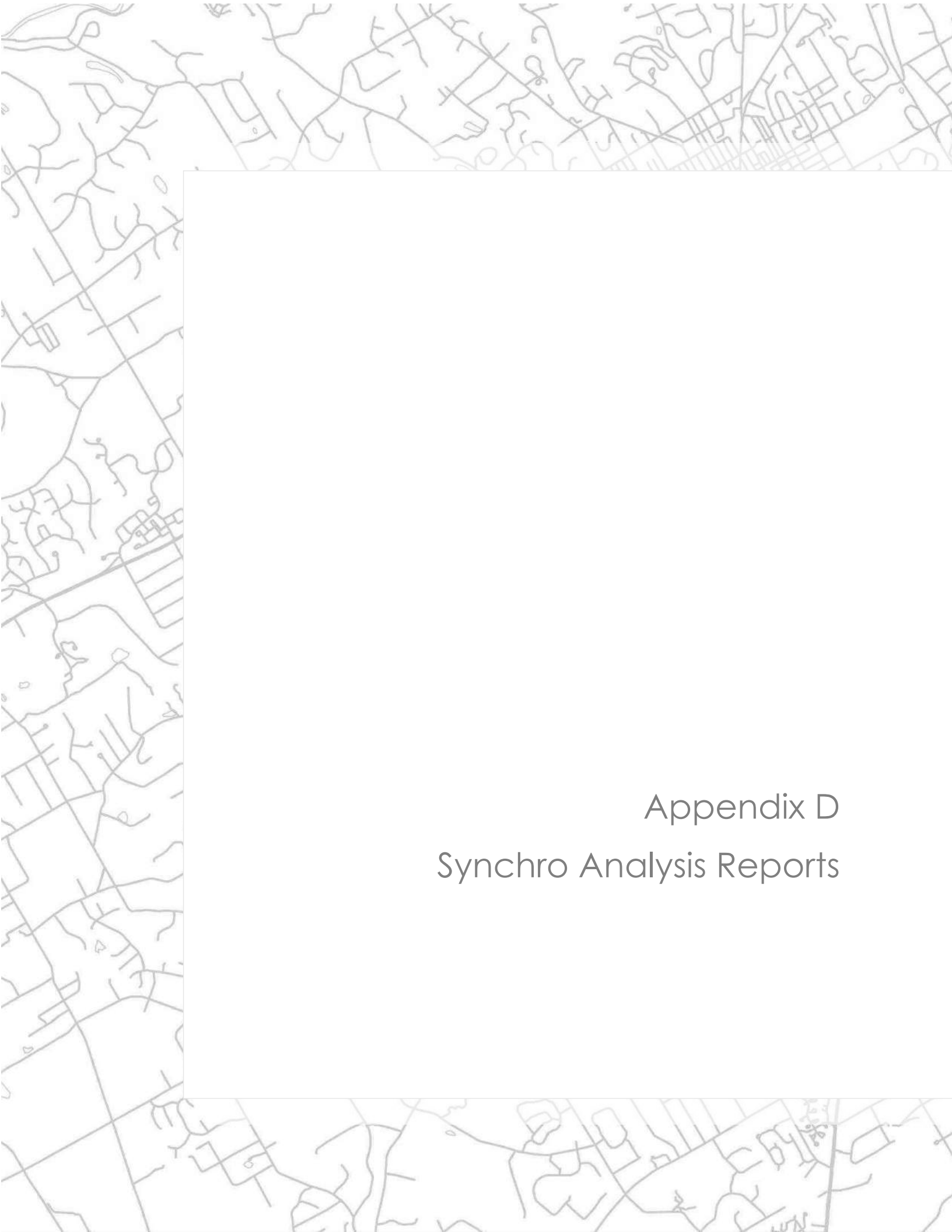
31894 Whitetail Ln.
Temecula, CA 92592
(520) 316-6745

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Site Code: 08/29/23 & 08/30/23
Station ID: 23-1430-005
Jewel Valley Rd south of Old Highway 80
32.667307, -116.290179
Latitude: 0' 0.0000 Undefined

Northbound, Southbound

Start Time	Bikes	Cars & Tlrs	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total	Truck Total
08/30/23	0	0	0	0	4	0	0	0	0	0	0	0	0	4	4
01:00	0	5	0	0	1	0	0	0	0	0	0	0	0	6	1
02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
03:00	0	0	0	0	2	0	0	0	0	0	0	0	0	2	2
04:00	0	1	0	0	2	0	0	0	0	0	0	0	0	3	2
05:00	0	8	3	0	0	0	0	0	0	0	0	0	0	11	0
06:00	0	14	3	0	1	0	0	0	0	0	0	0	0	18	1
07:00	0	3	4	0	3	0	0	0	0	0	0	0	0	10	3
08:00	0	15	8	0	3	0	0	0	0	0	0	0	0	26	3
09:00	0	18	2	0	3	0	0	0	0	0	0	0	0	23	3
10:00	0	13	2	0	2	0	0	0	0	0	0	0	0	17	2
11:00	0	9	0	0	1	0	0	0	0	0	0	0	0	10	1
12 PM	0	8	2	0	8	0	0	0	0	0	0	0	0	18	8
13:00	0	10	3	0	9	0	0	0	0	0	0	0	0	22	9
14:00	0	12	3	0	8	0	0	0	0	0	0	0	0	23	8
15:00	0	16	3	0	5	0	0	0	0	0	0	0	0	24	5
16:00	0	11	5	0	3	0	0	0	0	0	0	0	0	19	3
17:00	0	9	5	0	3	0	0	0	0	0	0	0	0	17	3
18:00	0	6	3	0	2	0	0	0	0	0	0	0	0	11	2
19:00	0	5	2	0	2	1	0	0	0	0	0	0	0	10	3
20:00	0	3	0	0	1	0	0	0	0	0	0	0	0	4	1
21:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3	0
22:00	0	3	1	0	2	0	0	0	0	0	0	0	0	6	2
23:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2	0
Total	0	175	49	0	65	1	0	0	0	0	0	0	0	290	66
Percent	0.0%	60.3%	16.9%	0.0%	22.4%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		22.8%
AM Peak Vol.		09:00	08:00		00:00									08:00	00:00
		18	8		4									26	4
PM Peak Vol.		15:00	16:00		13:00	19:00								15:00	13:00
		16	5		9	1								24	9
Grand Total	0	357	115	0	121	3	2	1	0	0	1	0	0	600	128
Percent	0.0%	59.5%	19.2%	0.0%	20.2%	0.5%	0.3%	0.2%	0.0%	0.0%	0.2%	0.0%	0.0%		21.3%

The background of the page features a faint, light gray map pattern. This pattern consists of a complex network of lines representing streets, roads, and possibly water bodies or topographical features. The lines are thin and vary in orientation, creating a textured, urban-like background.

Appendix D

Synchro Analysis Reports

Lanes, Volumes, Timings

Year 2025 Existing Plus Project Traffic Conditions

1: Ribbonwood Rd & I-8 WB Ramps

Phase 1 - Weekday AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	20	0	0	43	3	0	0	1	16
Future Volume (vph)	0	0	0	20	0	0	43	3	0	0	1	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	10		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	0		0
Taper Length (ft)	25			50			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt											0.870	
Flt Protected				0.950				0.955				
Satd. Flow (prot)	0	0	0	1641	1727	0	0	1650	0	0	1503	0
Flt Permitted				0.950				0.955				
Satd. Flow (perm)	0	0	0	1641	1727	0	0	1650	0	0	1503	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1175			1143			734			1473	
Travel Time (s)		26.7			26.0			16.7			33.5	
Peak Hour Factor	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67
Adj. Flow (vph)	0	0	0	30	0	0	64	4	0	0	1	24
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	30	0	0	0	68	0	0	25	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Stop			Free			Free	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	19.2%						ICU Level of Service A					
Analysis Period (min)	15											

HCM 6th TWSC
1: Ribbonwood Rd & I-8 WB Ramps

Year 2025 Existing Plus Project Traffic Conditions
Phase 1 - Weekday AM Peak Hour

Intersection												
Int Delay, s/veh	6.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↰	↰			↱			↱	
Traffic Vol, veh/h	0	0	0	20	0	0	43	3	0	0	1	16
Future Vol, veh/h	0	0	0	20	0	0	43	3	0	0	1	16
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	10	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	67	67	67	67	67	67	67	67	67	67	67	67
Heavy Vehicles, %	10	10	10	10	10	10	10	10	10	10	10	10
Mvmt Flow	0	0	0	30	0	0	64	4	0	0	1	24

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	145	157	4	25	0	-
Stage 1	132	132	-	-	-	-
Stage 2	13	25	-	-	-	-
Critical Hdwy	6.5	6.6	6.3	4.2	-	-
Critical Hdwy Stg 1	5.5	5.6	-	-	-	-
Critical Hdwy Stg 2	5.5	5.6	-	-	-	-
Follow-up Hdwy	3.59	4.09	3.39	2.29	-	-
Pot Cap-1 Maneuver	829	721	1057	1539	-	0
Stage 1	875	772	-	-	-	0
Stage 2	989	859	-	-	-	0
Platoon blocked, %					-	-
Mov Cap-1 Maneuver	794	0	1057	1539	-	-
Mov Cap-2 Maneuver	794	0	-	-	-	-
Stage 1	838	0	-	-	-	-
Stage 2	989	0	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.7	7	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBTWBLn1WBLn2	SBT	SBR
Capacity (veh/h)	1539	- 794	-	-
HCM Lane V/C Ratio	0.042	- 0.038	-	-
HCM Control Delay (s)	7.4	0 9.7	0	-
HCM Lane LOS	A	A A	A	-
HCM 95th %tile Q(veh)	0.1	- 0.1	-	-

Lanes, Volumes, Timings
2: Jewel Valley Rd & I-8 EB Ramps

Year 2025 Existing Plus Project Traffic Conditions

Phase 1 - Weekday AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	1	77	0	0	0	0	43	23	3	18	0
Future Volume (vph)	3	1	77	0	0	0	0	43	23	3	18	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	10		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	50			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.851						0.953				
Flt Protected	0.950										0.993	
Satd. Flow (prot)	1641	1470	0	0	0	0	0	1646	0	0	1715	0
Flt Permitted	0.950										0.993	
Satd. Flow (perm)	1641	1470	0	0	0	0	0	1646	0	0	1715	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		396			467			115			734	
Travel Time (s)		9.0			10.6			2.6			16.7	
Peak Hour Factor	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
Adj. Flow (vph)	4	1	101	0	0	0	0	57	30	4	24	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	4	102	0	0	0	0	0	87	0	0	28	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Free			Free			Free	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	15.2%						ICU Level of Service A					
Analysis Period (min)	15											

HCM 6th TWSC
2: Jewel Valley Rd & I-8 EB Ramps

Year 2025 Existing Plus Project Traffic Conditions
Phase 1 - Weekday AM Peak Hour

Intersection												
Int Delay, s/veh	4.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	1	77	0	0	0	0	43	23	3	18	0
Future Vol, veh/h	3	1	77	0	0	0	0	43	23	3	18	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	10	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	76	76	76	76	76	76	76	76	76	76	76	76
Heavy Vehicles, %	10	10	10	10	10	10	10	10	10	10	10	10
Mvmt Flow	4	1	101	0	0	0	0	57	30	4	24	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	104	119	24	-	0	0	87	0	0
Stage 1	32	32	-	-	-	-	-	-	-
Stage 2	72	87	-	-	-	-	-	-	-
Critical Hdwy	6.5	6.6	6.3	-	-	-	4.2	-	-
Critical Hdwy Stg 1	5.5	5.6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.5	5.6	-	-	-	-	-	-	-
Follow-up Hdwy	3.59	4.09	3.39	-	-	-	2.29	-	-
Pot Cap-1 Maneuver	875	757	1030	0	-	-	1460	-	0
Stage 1	970	853	-	0	-	-	-	-	0
Stage 2	931	807	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	872	0	1030	-	-	-	1460	-	-
Mov Cap-2 Maneuver	872	0	-	-	-	-	-	-	-
Stage 1	970	0	-	-	-	-	-	-	-
Stage 2	928	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.9	0	1.1
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBL	SBT
Capacity (veh/h)	-	-	872	1030	1460	-
HCM Lane V/C Ratio	-	-	0.005	0.1	0.003	-
HCM Control Delay (s)	-	-	9.1	8.9	7.5	0
HCM Lane LOS	-	-	A	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0.3	0	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	1	5	2	66	94	1
Future Volume (vph)	1	5	2	66	94	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.882				0.999	
Flt Protected	0.994			0.998		
Satd. Flow (prot)	1514	0	0	1724	1726	0
Flt Permitted	0.994			0.998		
Satd. Flow (perm)	1514	0	0	1724	1726	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	385			176	115	
Travel Time (s)	8.8			4.0	2.6	
Peak Hour Factor	0.76	0.76	0.76	0.76	0.76	0.76
Adj. Flow (vph)	1	7	3	87	124	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	8	0	0	90	125	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 15.1% ICU Level of Service A

Analysis Period (min) 15

Intersection

Int Delay, s/veh 0.4

Movement EBL EBR NBL NBT SBT SBRLane Configurations 

Traffic Vol, veh/h 1 5 2 66 94 1

Future Vol, veh/h 1 5 2 66 94 1

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 76 76 76 76 76 76

Heavy Vehicles, % 10 10 10 10 10 10

Mvmt Flow 1 7 3 87 124 1

Major/Minor Minor2 Major1 Major2

Conflicting Flow All 218 125 125 0 - 0

Stage 1 125 - - - - -

Stage 2 93 - - - - -

Critical Hdwy 6.5 6.3 4.2 - - -

Critical Hdwy Stg 1 5.5 - - - - -

Critical Hdwy Stg 2 5.5 - - - - -

Follow-up Hdwy 3.59 3.39 2.29 - - -

Pot Cap-1 Maneuver 753 905 1413 - - -

Stage 1 881 - - - - -

Stage 2 911 - - - - -

Platoon blocked, % - - -

Mov Cap-1 Maneuver 751 905 1413 - - -

Mov Cap-2 Maneuver 751 - - - - -

Stage 1 879 - - - - -

Stage 2 911 - - - - -

Approach EB NB SB

HCM Control Delay, s 9.2 0.2 0

HCM LOS A

Minor Lane/Major Mvmt NBL NBT EBLn1 SBT SBR

Capacity (veh/h) 1413 - 875 - -

HCM Lane V/C Ratio 0.002 - 0.009 - -

HCM Control Delay (s) 7.6 0 9.2 - -

HCM Lane LOS A A A - -

HCM 95th %tile Q(veh) 0 - 0 - -

Lanes, Volumes, Timings

Year 2025 Existing Plus Project Traffic Conditions

4: SR-95 (Jewel Valley Rd) & Old Highway 80

Phase 1 - Weekday AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	22	11	10	31	20	6	39	9	11	79	10
Future Volume (vph)	8	22	11	10	31	20	6	39	9	11	79	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.950			0.956			0.978			0.986	
Flt Protected	0.950				0.992			0.994			0.994	
Satd. Flow (prot)	1641	1641	0	0	1638	0	0	1679	0	0	1693	0
Flt Permitted	0.950				0.992			0.994			0.994	
Satd. Flow (perm)	1641	1641	0	0	1638	0	0	1679	0	0	1693	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		577			650			1281			697	
Travel Time (s)		13.1			14.8			29.1			15.8	
Confl. Peds. (#/hr)			2	2								
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Adj. Flow (vph)	9	26	13	12	36	23	7	45	10	13	92	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	9	39	0	0	71	0	0	62	0	0	117	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	23.9%				ICU Level of Service A							
Analysis Period (min)	15											

Intersection

Int Delay, s/veh 6.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	22	11	10	31	20	6	39	9	11	79	10
Future Vol, veh/h	8	22	11	10	31	20	6	39	9	11	79	10
Conflicting Peds, #/hr	0	0	2	2	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	10	10	10	10	10	10	10	10	10	10	10	10
Mvmt Flow	9	26	13	12	36	23	7	45	10	13	92	12

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	59	0	0	41	0	0	177	136	35	150	131	48
Stage 1	-	-	-	-	-	-	53	53	-	72	72	-
Stage 2	-	-	-	-	-	-	124	83	-	78	59	-
Critical Hdwy	4.2	-	-	4.2	-	-	7.2	6.6	6.3	7.2	6.6	6.3
Critical Hdwy Stg 1	-	-	-	-	-	-	6.2	5.6	-	6.2	5.6	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.2	5.6	-	6.2	5.6	-
Follow-up Hdwy	2.29	-	-	2.29	-	-	3.59	4.09	3.39	3.59	4.09	3.39
Pot Cap-1 Maneuver	1495	-	-	1518	-	-	768	740	1015	800	745	999
Stage 1	-	-	-	-	-	-	940	835	-	918	820	-
Stage 2	-	-	-	-	-	-	861	811	-	911	830	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1495	-	-	1515	-	-	677	728	1013	746	733	999
Mov Cap-2 Maneuver	-	-	-	-	-	-	677	728	-	746	733	-
Stage 1	-	-	-	-	-	-	932	828	-	912	813	-
Stage 2	-	-	-	-	-	-	749	805	-	847	823	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.4			1.2			10.2			10.6		
HCM LOS							B			B		

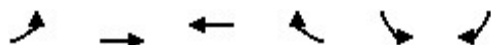
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	757	1495	-	-	1515	-	-	755
HCM Lane V/C Ratio	0.083	0.006	-	-	0.008	-	-	0.154
HCM Control Delay (s)	10.2	7.4	-	-	7.4	0	-	10.6
HCM Lane LOS	B	A	-	-	A	A	-	B
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-	-	0.5

Lanes, Volumes, Timings

Year 2025 Existing Plus Project Traffic Conditions

101: Jewel Valley Rd & Phase 1 and Phase 2 Access C

Phase 1 - Weekday AM Peak Hour



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	94	9	17	0	0	44
Future Volume (vph)	94	9	17	0	0	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.865	
Flt Protected		0.956				
Satd. Flow (prot)	0	1651	1727	0	1494	0
Flt Permitted		0.956				
Satd. Flow (perm)	0	1651	1727	0	1494	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		1936	515		186	
Travel Time (s)		44.0	11.7		4.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	99	9	18	0	0	46
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	108	18	0	46	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 22.3% ICU Level of Service A

Analysis Period (min) 15

HCM 6th TWSC
101: Jewel Valley Rd & Phase 1 and Phase 2 Access C

Year 2025 Existing Plus Project Traffic Conditions

Phase 1 - Weekday AM Peak Hour

Intersection						
Int Delay, s/veh	6.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	94	9	17	0	0	44
Future Vol, veh/h	94	9	17	0	0	44
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	95	95	95	95	95	95
Heavy Vehicles, %	10	10	10	10	10	10
Mvmt Flow	99	9	18	0	0	46
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	18	0	-	0	225	18
Stage 1	-	-	-	-	18	-
Stage 2	-	-	-	-	207	-
Critical Hdwy	4.2	-	-	-	6.5	6.3
Critical Hdwy Stg 1	-	-	-	-	5.5	-
Critical Hdwy Stg 2	-	-	-	-	5.5	-
Follow-up Hdwy	2.29	-	-	-	3.59	3.39
Pot Cap-1 Maneuver	1548	-	-	-	746	1038
Stage 1	-	-	-	-	984	-
Stage 2	-	-	-	-	809	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1548	-	-	-	698	1038
Mov Cap-2 Maneuver	-	-	-	-	698	-
Stage 1	-	-	-	-	921	-
Stage 2	-	-	-	-	809	-
Approach	EB	WB		SB		
HCM Control Delay, s	6.8	0		8.6		
HCM LOS	A					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1548	-	-	-	-	1038
HCM Lane V/C Ratio	0.064	-	-	-	-	0.045
HCM Control Delay (s)	7.5	0	-	-	-	8.6
HCM Lane LOS	A	A	-	-	-	A
HCM 95th %tile Q(veh)	0.2	-	-	-	-	0.1

Lanes, Volumes, Timings
201: Jewel Valley Rd & Phase 2 Access A

Year 2025 Existing Plus Project Traffic Conditions

Phase 1 - Weekday AM Peak Hour

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	61	0	0	103
Future Volume (vph)	0	0	61	0	0	103
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1727	0	1727	0	0	1727
Flt Permitted						
Satd. Flow (perm)	1727	0	1727	0	0	1727
Link Speed (mph)	30		30			30
Link Distance (ft)	260		798			135
Travel Time (s)	5.9		18.1			3.1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	64	0	0	108
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	64	0	0	108
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type: Unsignalized						
Intersection Capacity Utilization 15.4%			ICU Level of Service A			
Analysis Period (min) 15						

HCM 6th TWSC
201: Jewel Valley Rd & Phase 2 Access A

Year 2025 Existing Plus Project Traffic Conditions
Phase 1 - Weekday AM Peak Hour

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	61	0	0	103
Future Vol, veh/h	0	0	61	0	0	103
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	95	95	95	95	95	95
Heavy Vehicles, %	10	10	10	10	10	10
Mvmt Flow	0	0	64	0	0	108
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	172	64	0	0	64	0
Stage 1	64	-	-	-	-	-
Stage 2	108	-	-	-	-	-
Critical Hdwy	6.5	6.3	-	-	4.2	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	-	-	2.29	-
Pot Cap-1 Maneuver	800	978	-	-	1489	-
Stage 1	939	-	-	-	-	-
Stage 2	897	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	800	978	-	-	1489	-
Mov Cap-2 Maneuver	800	-	-	-	-	-
Stage 1	939	-	-	-	-	-
Stage 2	897	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	0	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	-	1489	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	-	-	0	0	-	
HCM Lane LOS	-	-	A	A	-	
HCM 95th %tile Q(veh)	-	-	-	0	-	

Lanes, Volumes, Timings
202: Jewel Valley Rd & Phase 2 Access B

Year 2025 Existing Plus Project Traffic Conditions

Phase 1 - Weekday AM Peak Hour

						
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	61	103	0
Future Volume (vph)	0	0	0	61	103	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1727	0	0	1727	1727	0
Flt Permitted						
Satd. Flow (perm)	1727	0	0	1727	1727	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	201			1936	798	
Travel Time (s)	4.6			44.0	18.1	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	64	108	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	64	108	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	
Intersection Summary						
Area Type:	Other					
Control Type: Unsignalized						
Intersection Capacity Utilization 15.4%				ICU Level of Service A		
Analysis Period (min) 15						

HCM 6th TWSC
202: Jewel Valley Rd & Phase 2 Access B

Year 2025 Existing Plus Project Traffic Conditions
Phase 1 - Weekday AM Peak Hour

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	61	103	0
Future Vol, veh/h	0	0	0	61	103	0
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	95	95	95	95	95	95
Heavy Vehicles, %	10	10	10	10	10	10
Mvmt Flow	0	0	0	64	108	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	172	108	108	0	-	0
Stage 1	108	-	-	-	-	-
Stage 2	64	-	-	-	-	-
Critical Hdwy	6.5	6.3	4.2	-	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	2.29	-	-	-
Pot Cap-1 Maneuver	800	925	1434	-	-	-
Stage 1	897	-	-	-	-	-
Stage 2	939	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	800	925	1434	-	-	-
Mov Cap-2 Maneuver	800	-	-	-	-	-
Stage 1	897	-	-	-	-	-
Stage 2	939	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	0	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1434	-	-	-	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	0	-	0	-	-	
HCM Lane LOS	A	-	A	-	-	
HCM 95th %tile Q(veh)	0	-	-	-	-	

Lanes, Volumes, Timings

Year 2025 Existing Plus Project Traffic Conditions

1: Ribbonwood Rd & I-8 WB Ramps

Phase 1 - Weekday PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	11	2	0	63	1	0	0	1	2
Future Volume (vph)	0	0	0	11	2	0	63	1	0	0	1	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	10		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	0		0
Taper Length (ft)	25			50			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt											0.919	
Flt Protected				0.950				0.953				
Satd. Flow (prot)	0	0	0	1641	1727	0	0	1298	0	0	1587	0
Flt Permitted				0.950				0.953				
Satd. Flow (perm)	0	0	0	1641	1727	0	0	1298	0	0	1587	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1175			1143			734			1473	
Travel Time (s)		26.7			26.0			16.7			33.5	
Peak Hour Factor	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58
Heavy Vehicles (%)	10%	10%	10%	10%	10%	10%	40%	10%	10%	10%	10%	10%
Adj. Flow (vph)	0	0	0	19	3	0	109	2	0	0	2	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	19	3	0	0	111	0	0	5	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Stop			Free			Free	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	20.2%											
Analysis Period (min)	15											
	ICU Level of Service A											

HCM 6th TWSC
1: Ribbonwood Rd & I-8 WB Ramps

Year 2025 Existing Plus Project Traffic Conditions
Phase 1 - Weekday PM Peak Hour

Intersection												
Int Delay, s/veh	6.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↰	↱			↰			↱	
Traffic Vol, veh/h	0	0	0	11	2	0	63	1	0	0	1	2
Future Vol, veh/h	0	0	0	11	2	0	63	1	0	0	1	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	10	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	58	58	58	58	58	58	58	58	58	58	58	58
Heavy Vehicles, %	10	10	10	10	10	10	40	10	10	10	10	10
Mvmt Flow	0	0	0	19	3	0	109	2	0	0	2	3

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	224	225	2	5	0	-
Stage 1	220	220	-	-	-	-
Stage 2	4	5	-	-	-	-
Critical Hdwy	6.5	6.6	6.3	4.5	-	-
Critical Hdwy Stg 1	5.5	5.6	-	-	-	-
Critical Hdwy Stg 2	5.5	5.6	-	-	-	-
Follow-up Hdwy	3.59	4.09	3.39	2.56	-	-
Pot Cap-1 Maneuver	747	660	1059	1400	-	0
Stage 1	798	706	-	-	0	0
Stage 2	999	876	-	-	0	0
Platoon blocked, %					-	-
Mov Cap-1 Maneuver	689	0	1059	1400	-	-
Mov Cap-2 Maneuver	689	0	-	-	-	-
Stage 1	736	0	-	-	-	-
Stage 2	999	0	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s		7.7	0
HCM LOS	-		

Minor Lane/Major Mvmt	NBL	NBTWBLn1WBLn2	SBT	SBR
Capacity (veh/h)	1400	- 689	-	-
HCM Lane V/C Ratio	0.078	- 0.028	-	-
HCM Control Delay (s)	7.8	0 10.4	-	-
HCM Lane LOS	A	A B	-	-
HCM 95th %tile Q(veh)	0.3	- 0.1	-	-

Lanes, Volumes, Timings
2: Jewel Valley Rd & I-8 EB Ramps

Year 2025 Existing Plus Project Traffic Conditions

Phase 1 - Weekday PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	1	54	0	0	0	0	53	22	3	9	0
Future Volume (vph)	11	1	54	0	0	0	0	53	22	3	9	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	10		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	50			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.852						0.960				
Flt Protected	0.950										0.989	
Satd. Flow (prot)	1641	1160	0	0	0	0	0	1390	0	0	1708	0
Flt Permitted	0.950										0.989	
Satd. Flow (perm)	1641	1160	0	0	0	0	0	1390	0	0	1708	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		396			467			115			734	
Travel Time (s)		9.0			10.6			2.6			16.7	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	10%	10%	40%	10%	10%	10%	10%	40%	10%	10%	10%	10%
Adj. Flow (vph)	12	1	61	0	0	0	0	60	25	3	10	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	12	62	0	0	0	0	0	85	0	0	13	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Free			Free			Free	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	14.2%											
Analysis Period (min)	15											
	ICU Level of Service A											

HCM 6th TWSC
2: Jewel Valley Rd & I-8 EB Ramps

Year 2025 Existing Plus Project Traffic Conditions
Phase 1 - Weekday PM Peak Hour

Intersection												
Int Delay, s/veh	4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	1	54	0	0	0	0	53	22	3	9	0
Future Vol, veh/h	11	1	54	0	0	0	0	53	22	3	9	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	10	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	10	10	40	10	10	10	10	40	10	10	10	10
Mvmt Flow	12	1	61	0	0	0	0	60	25	3	10	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	89	101	10	-	0	0	85	0	0
Stage 1	16	16	-	-	-	-	-	-	-
Stage 2	73	85	-	-	-	-	-	-	-
Critical Hdwy	6.5	6.6	6.6	-	-	-	4.2	-	-
Critical Hdwy Stg 1	5.5	5.6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.5	5.6	-	-	-	-	-	-	-
Follow-up Hdwy	3.59	4.09	3.66	-	-	-	2.29	-	-
Pot Cap-1 Maneuver	892	774	971	0	-	-	1462	-	0
Stage 1	986	866	-	0	-	-	-	-	0
Stage 2	930	809	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	890	0	971	-	-	-	1462	-	-
Mov Cap-2 Maneuver	890	0	-	-	-	-	-	-	-
Stage 1	986	0	-	-	-	-	-	-	-
Stage 2	928	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9	0	1.9
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBL	SBT
Capacity (veh/h)	-	-	890	971	1462	-
HCM Lane V/C Ratio	-	-	0.014	0.064	0.002	-
HCM Control Delay (s)	-	-	9.1	9	7.5	0
HCM Lane LOS	-	-	A	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0.2	0	-



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	3	4	6	77	57	2
Future Volume (vph)	3	4	6	77	57	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.916				0.996	
Flt Protected	0.982			0.996		
Satd. Flow (prot)	1554	0	0	1352	1352	0
Flt Permitted	0.982			0.996		
Satd. Flow (perm)	1554	0	0	1352	1352	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	385			176	115	
Travel Time (s)	8.8			4.0	2.6	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	10%	10%	40%	40%	40%	40%
Adj. Flow (vph)	3	5	7	88	65	2
Shared Lane Traffic (%)						
Lane Group Flow (vph)	8	0	0	95	67	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 19.0%

ICU Level of Service A

Analysis Period (min) 15

Intersection

Int Delay, s/veh 0.8

Movement EBL EBR NBL NBT SBT SBRLane Configurations 

Traffic Vol, veh/h 3 4 6 77 57 2

Future Vol, veh/h 3 4 6 77 57 2

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 88 88 88 88 88 88

Heavy Vehicles, % 10 10 40 40 40 40

Mvmt Flow 3 5 7 88 65 2

Major/Minor Minor2 Major1 Major2

Conflicting Flow All 168 66 67 0 - 0

Stage 1 66 - - - - -

Stage 2 102 - - - - -

Critical Hdwy 6.5 6.3 4.5 - - -

Critical Hdwy Stg 1 5.5 - - - - -

Critical Hdwy Stg 2 5.5 - - - - -

Follow-up Hdwy 3.59 3.39 2.56 - - -

Pot Cap-1 Maneuver 804 976 1324 - - -

Stage 1 937 - - - - -

Stage 2 902 - - - - -

Platoon blocked, % - - -

Mov Cap-1 Maneuver 799 976 1324 - - -

Mov Cap-2 Maneuver 799 - - - - -

Stage 1 931 - - - - -

Stage 2 902 - - - - -

Approach EB NB SB

HCM Control Delay, s 9.1 0.6 0

HCM LOS A

Minor Lane/Major Mvmt NBL NBT EBLn1 SBT SBR

Capacity (veh/h) 1324 - 891 - -

HCM Lane V/C Ratio 0.005 - 0.009 - -

HCM Control Delay (s) 7.7 0 9.1 - -

HCM Lane LOS A A A - -

HCM 95th %tile Q(veh) 0 - 0 - -

Lanes, Volumes, Timings

Year 2025 Existing Plus Project Traffic Conditions

4: SR-95 (Jewel Valley Rd) & Old Highway 80

Phase 1 - Weekday PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	40	7	2	29	4	8	58	7	27	23	14
Future Volume (vph)	23	40	7	2	29	4	8	58	7	27	23	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.977			0.983			0.987			0.970	
Flt Protected	0.950				0.998			0.995			0.979	
Satd. Flow (prot)	1641	1688	0	0	1695	0	0	1333	0	0	1289	0
Flt Permitted	0.950				0.998			0.995			0.979	
Satd. Flow (perm)	1641	1688	0	0	1695	0	0	1333	0	0	1289	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		577			650			1281			697	
Travel Time (s)		13.1			14.8			29.1			15.8	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	10%	10%	10%	10%	10%	10%	40%	40%	40%	40%	40%	40%
Adj. Flow (vph)	26	45	8	2	33	5	9	66	8	31	26	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	26	53	0	0	40	0	0	83	0	0	73	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	24.2%											
Analysis Period (min)	15											
ICU Level of Service A												

Intersection

Int Delay, s/veh 6.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	23	40	7	2	29	4	8	58	7	27	23	14
Future Vol, veh/h	23	40	7	2	29	4	8	58	7	27	23	14
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	10	10	10	10	10	10	40	40	40	40	40	40
Mvmt Flow	26	45	8	2	33	5	9	66	8	31	26	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	38	0	0	53	0	0	162	143	49	178	145	36
Stage 1	-	-	-	-	-	-	101	101	-	40	40	-
Stage 2	-	-	-	-	-	-	61	42	-	138	105	-
Critical Hdwy	4.2	-	-	4.2	-	-	7.5	6.9	6.6	7.5	6.9	6.6
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.9	-	6.5	5.9	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.9	-	6.5	5.9	-
Follow-up Hdwy	2.29	-	-	2.29	-	-	3.86	4.36	3.66	3.86	4.36	3.66
Pot Cap-1 Maneuver	1522	-	-	1503	-	-	725	684	922	707	682	938
Stage 1	-	-	-	-	-	-	820	743	-	886	792	-
Stage 2	-	-	-	-	-	-	863	791	-	782	740	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1522	-	-	1503	-	-	682	672	922	640	670	938
Mov Cap-2 Maneuver	-	-	-	-	-	-	682	672	-	640	670	-
Stage 1	-	-	-	-	-	-	806	730	-	871	791	-
Stage 2	-	-	-	-	-	-	820	790	-	693	727	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	2.4			0.4			10.9			10.7		
HCM LOS							B			B		

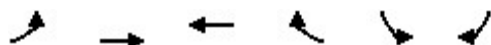
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	691	1522	-	-	1503	-	-	700
HCM Lane V/C Ratio	0.12	0.017	-	-	0.002	-	-	0.104
HCM Control Delay (s)	10.9	7.4	-	-	7.4	0	-	10.7
HCM Lane LOS	B	A	-	-	A	A	-	B
HCM 95th %tile Q(veh)	0.4	0.1	-	-	0	-	-	0.3

Lanes, Volumes, Timings

Year 2025 Existing Plus Project Traffic Conditions

101: Jewel Valley Rd & Phase 1 and Phase 2 Access C

Phase 1 - Weekday PM Peak Hour



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↰	↰		↰	
Traffic Volume (vph)	21	14	5	0	0	71
Future Volume (vph)	21	14	5	0	0	71
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Fr _t					0.865	
Fl _t Protected		0.971				
Satd. Flow (prot)	0	1318	1357	0	1174	0
Fl _t Permitted		0.971				
Satd. Flow (perm)	0	1318	1357	0	1174	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		1936	515		186	
Travel Time (s)		44.0	11.7		4.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	40%	40%	40%	10%	10%	40%
Adj. Flow (vph)	22	15	5	0	0	75
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	37	5	0	75	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 19.6% ICU Level of Service A

Analysis Period (min) 15

HCM 6th TWSC
101: Jewel Valley Rd & Phase 1 and Phase 2 Access C

Year 2025 Existing Plus Project Traffic Conditions

Phase 1 - Weekday PM Peak Hour

Intersection						
Int Delay, s/veh	7.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	21	14	5	0	0	71
Future Vol, veh/h	21	14	5	0	0	71
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	95	95	95	95	95	95
Heavy Vehicles, %	40	40	40	10	10	40
Mvmt Flow	22	15	5	0	0	75
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	5	0	-	0	64	5
Stage 1	-	-	-	-	5	-
Stage 2	-	-	-	-	59	-
Critical Hdwy	4.5	-	-	-	6.5	6.6
Critical Hdwy Stg 1	-	-	-	-	5.5	-
Critical Hdwy Stg 2	-	-	-	-	5.5	-
Follow-up Hdwy	2.56	-	-	-	3.59	3.66
Pot Cap-1 Maneuver	1400	-	-	-	922	977
Stage 1	-	-	-	-	998	-
Stage 2	-	-	-	-	944	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1400	-	-	-	907	977
Mov Cap-2 Maneuver	-	-	-	-	907	-
Stage 1	-	-	-	-	982	-
Stage 2	-	-	-	-	944	-
Approach	EB	WB		SB		
HCM Control Delay, s	4.6	0		9		
HCM LOS	A					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1400	-	-	-	977	
HCM Lane V/C Ratio	0.016	-	-	-	0.076	
HCM Control Delay (s)	7.6	0	-	-	9	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0.2	

Lanes, Volumes, Timings
201: Jewel Valley Rd & Phase 2 Access A

Year 2025 Existing Plus Project Traffic Conditions

Phase 1 - Weekday PM Peak Hour

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	76	0	0	35
Future Volume (vph)	0	0	76	0	0	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1727	0	1357	0	0	1357
Flt Permitted						
Satd. Flow (perm)	1727	0	1357	0	0	1357
Link Speed (mph)	30		30			30
Link Distance (ft)	260		148			784
Travel Time (s)	5.9		3.4			17.8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	10%	10%	40%	10%	10%	40%
Adj. Flow (vph)	0	0	80	0	0	37
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	80	0	0	37
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	14.0%			ICU Level of Service A		
Analysis Period (min)	15					

HCM 6th TWSC
201: Jewel Valley Rd & Phase 2 Access A

Year 2025 Existing Plus Project Traffic Conditions
Phase 1 - Weekday PM Peak Hour

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	76	0	0	35
Future Vol, veh/h	0	0	76	0	0	35
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	95	95	95	95	95	95
Heavy Vehicles, %	10	10	40	10	10	40
Mvmt Flow	0	0	80	0	0	37
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	117	80	0	0	80	0
Stage 1	80	-	-	-	-	-
Stage 2	37	-	-	-	-	-
Critical Hdwy	6.5	6.3	-	-	4.2	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	-	-	2.29	-
Pot Cap-1 Maneuver	860	958	-	-	1469	-
Stage 1	923	-	-	-	-	-
Stage 2	965	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	860	958	-	-	1469	-
Mov Cap-2 Maneuver	860	-	-	-	-	-
Stage 1	923	-	-	-	-	-
Stage 2	965	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	0	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	-	1469	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	-	-	0	0	-	
HCM Lane LOS	-	-	A	A	-	
HCM 95th %tile Q(veh)	-	-	-	0	-	

Lanes, Volumes, Timings
202: Jewel Valley Rd & Phase 2 Access B

Year 2025 Existing Plus Project Traffic Conditions

Phase 1 - Weekday PM Peak Hour

						
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	76	35	0
Future Volume (vph)	0	0	0	76	35	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
Satd. Flow (prot)	1727	0	0	1357	1357	0
Flt Permitted						
Satd. Flow (perm)	1727	0	0	1357	1357	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	201			1936	148	
Travel Time (s)	4.6			44.0	3.4	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	10%	10%	10%	40%	40%	10%
Adj. Flow (vph)	0	0	0	80	37	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	80	37	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	14.0%			ICU Level of Service A		
Analysis Period (min)	15					

HCM 6th TWSC
202: Jewel Valley Rd & Phase 2 Access B

Year 2025 Existing Plus Project Traffic Conditions

Phase 1 - Weekday PM Peak Hour

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	76	35	0
Future Vol, veh/h	0	0	0	76	35	0
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	95	95	95	95	95	95
Heavy Vehicles, %	10	10	10	40	40	10
Mvmt Flow	0	0	0	80	37	0
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	117	37	37	0	-	0
Stage 1	37	-	-	-	-	-
Stage 2	80	-	-	-	-	-
Critical Hdwy	6.5	6.3	4.2	-	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	2.29	-	-	-
Pot Cap-1 Maneuver	860	1013	1523	-	-	-
Stage 1	965	-	-	-	-	-
Stage 2	923	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	860	1013	1523	-	-	-
Mov Cap-2 Maneuver	860	-	-	-	-	-
Stage 1	965	-	-	-	-	-
Stage 2	923	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	0	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1523	-	-	-	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	0	-	0	-	-	
HCM Lane LOS	A	-	A	-	-	
HCM 95th %tile Q(veh)	0	-	-	-	-	

Lanes, Volumes, Timings

Year 2027 Existing Plus Project Traffic Conditions

1: Ribbonwood Rd & I-8 WB Ramps

Phase 2 - Weekday AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	35	0	0	96	3	0	0	1	17
Future Volume (vph)	0	0	0	35	0	0	96	3	0	0	1	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	10		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	0		0
Taper Length (ft)	25			50			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt											0.870	
Flt Protected				0.950				0.954				
Satd. Flow (prot)	0	0	0	1641	1727	0	0	1648	0	0	1503	0
Flt Permitted				0.950				0.954				
Satd. Flow (perm)	0	0	0	1641	1727	0	0	1648	0	0	1503	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1175			1143			734			1473	
Travel Time (s)		26.7			26.0			16.7			33.5	
Peak Hour Factor	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67
Adj. Flow (vph)	0	0	0	52	0	0	143	4	0	0	1	25
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	52	0	0	0	147	0	0	26	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Stop			Free			Free	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	22.1%						ICU Level of Service A					
Analysis Period (min)	15											

HCM 6th TWSC
1: Ribbonwood Rd & I-8 WB Ramps

Year 2027 Existing Plus Project Traffic Conditions
Phase 2 - Weekday AM Peak Hour

Intersection												
Int Delay, s/veh	7.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↰	↱			↰			↱	
Traffic Vol, veh/h	0	0	0	35	0	0	96	3	0	0	1	17
Future Vol, veh/h	0	0	0	35	0	0	96	3	0	0	1	17
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	10	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	67	67	67	67	67	67	67	67	67	67	67	67
Heavy Vehicles, %	10	10	10	10	10	10	10	10	10	10	10	10
Mvmt Flow	0	0	0	52	0	0	143	4	0	0	1	25

Major/Minor	Minor1		Major1		Major2		
Conflicting Flow All	304	316	4	26	0	-	0
Stage 1	290	290	-	-	-	-	-
Stage 2	14	26	-	-	-	-	-
Critical Hdwy	6.5	6.6	6.3	4.2	-	-	-
Critical Hdwy Stg 1	5.5	5.6	-	-	-	-	-
Critical Hdwy Stg 2	5.5	5.6	-	-	-	-	-
Follow-up Hdwy	3.59	4.09	3.39	2.29	-	-	-
Pot Cap-1 Maneuver	671	587	1057	1538	-	0	0
Stage 1	741	658	-	-	-	0	0
Stage 2	988	858	-	-	-	0	0
Platoon blocked, %					-	-	-
Mov Cap-1 Maneuver	609	0	1057	1538	-	-	-
Mov Cap-2 Maneuver	609	0	-	-	-	-	-
Stage 1	672	0	-	-	-	-	-
Stage 2	988	0	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.5	7.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBTWBLn1WBLn2	SBT	SBR
Capacity (veh/h)	1538	- 609	-	-
HCM Lane V/C Ratio	0.093	- 0.086	-	-
HCM Control Delay (s)	7.6	0 11.5	0	-
HCM Lane LOS	A	A B	A	-
HCM 95th %tile Q(veh)	0.3	- 0.3	-	-

Lanes, Volumes, Timings
2: Jewel Valley Rd & I-8 EB Ramps

Year 2027 Existing Plus Project Traffic Conditions

Phase 2 - Weekday AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	1	182	0	0	0	0	96	32	3	33	0
Future Volume (vph)	3	1	182	0	0	0	0	96	32	3	33	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	10		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	50			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.851						0.966				
Flt Protected	0.950										0.996	
Satd. Flow (prot)	1641	1470	0	0	0	0	0	1669	0	0	1720	0
Flt Permitted	0.950										0.996	
Satd. Flow (perm)	1641	1470	0	0	0	0	0	1669	0	0	1720	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		396			467			115			734	
Travel Time (s)		9.0			10.6			2.6			16.7	
Peak Hour Factor	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
Adj. Flow (vph)	4	1	239	0	0	0	0	126	42	4	43	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	4	240	0	0	0	0	0	168	0	0	47	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Free			Free			Free	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	25.0%						ICU Level of Service A					
Analysis Period (min)	15											

HCM 6th TWSC
2: Jewel Valley Rd & I-8 EB Ramps

Year 2027 Existing Plus Project Traffic Conditions
Phase 2 - Weekday AM Peak Hour

Intersection												
Int Delay, s/veh	5.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	1	182	0	0	0	0	96	32	3	33	0
Future Vol, veh/h	3	1	182	0	0	0	0	96	32	3	33	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	10	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	76	76	76	76	76	76	76	76	76	76	76	76
Heavy Vehicles, %	10	10	10	10	10	10	10	10	10	10	10	10
Mvmt Flow	4	1	239	0	0	0	0	126	42	4	43	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	198	219	43	-	0	0	168	0	0
Stage 1	51	51	-	-	-	-	-	-	-
Stage 2	147	168	-	-	-	-	-	-	-
Critical Hdwy	6.5	6.6	6.3	-	-	-	4.2	-	-
Critical Hdwy Stg 1	5.5	5.6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.5	5.6	-	-	-	-	-	-	-
Follow-up Hdwy	3.59	4.09	3.39	-	-	-	2.29	-	-
Pot Cap-1 Maneuver	773	665	1005	0	-	-	1363	-	0
Stage 1	951	837	-	0	-	-	-	-	0
Stage 2	861	745	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	771	0	1005	-	-	-	1363	-	-
Mov Cap-2 Maneuver	771	0	-	-	-	-	-	-	-
Stage 1	951	0	-	-	-	-	-	-	-
Stage 2	858	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.7	0	0.6
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBL	SBT
Capacity (veh/h)	-	-	771	1005	1363	-
HCM Lane V/C Ratio	-	-	0.005	0.24	0.003	-
HCM Control Delay (s)	-	-	9.7	9.7	7.6	0
HCM Lane LOS	-	-	A	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0.9	0	-

						
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	1	5	2	127	215	1
Future Volume (vph)	1	5	2	127	215	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.882					
Flt Protected	0.994			0.999		
Satd. Flow (prot)	1514	0	0	1726	1727	0
Flt Permitted	0.994			0.999		
Satd. Flow (perm)	1514	0	0	1726	1727	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	385			176	115	
Travel Time (s)	8.8			4.0	2.6	
Peak Hour Factor	0.76	0.76	0.76	0.76	0.76	0.76
Adj. Flow (vph)	1	7	3	167	283	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	8	0	0	170	284	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	21.4%			ICU Level of Service A		
Analysis Period (min)	15					

Intersection

Int Delay, s/veh 0.2

Movement EBL EBR NBL NBT SBT SBRLane Configurations 

Traffic Vol, veh/h 1 5 2 127 215 1

Future Vol, veh/h 1 5 2 127 215 1

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 76 76 76 76 76 76

Heavy Vehicles, % 10 10 10 10 10 10

Mvmt Flow 1 7 3 167 283 1

Major/Minor Minor2 Major1 Major2

Conflicting Flow All 457 284 284 0 - 0

Stage 1 284 - - - - -

Stage 2 173 - - - - -

Critical Hdwy 6.5 6.3 4.2 - - -

Critical Hdwy Stg 1 5.5 - - - - -

Critical Hdwy Stg 2 5.5 - - - - -

Follow-up Hdwy 3.59 3.39 2.29 - - -

Pot Cap-1 Maneuver 547 736 1234 - - -

Stage 1 746 - - - - -

Stage 2 838 - - - - -

Platoon blocked, % - - -

Mov Cap-1 Maneuver 545 736 1234 - - -

Mov Cap-2 Maneuver 545 - - - - -

Stage 1 744 - - - - -

Stage 2 838 - - - - -

Approach EB NB SB

HCM Control Delay, s 10.2 0.1 0

HCM LOS B

Minor Lane/Major Mvmt NBL NBT EBLn1 SBT SBR

Capacity (veh/h) 1234 - 695 - -

HCM Lane V/C Ratio 0.002 - 0.011 - -

HCM Control Delay (s) 7.9 0 10.2 - -

HCM Lane LOS A A B - -

HCM 95th %tile Q(veh) 0 - 0 - -

Lanes, Volumes, Timings

Year 2027 Existing Plus Project Traffic Conditions

4: SR-95 (Jewel Valley Rd) & Old Highway 80

Phase 2 - Weekday AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	23	26	25	31	21	14	100	16	11	199	10
Future Volume (vph)	8	23	26	25	31	21	14	100	16	11	199	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.921			0.964			0.983			0.994	
Flt Protected	0.950				0.984			0.995			0.997	
Satd. Flow (prot)	1641	1591	0	0	1638	0	0	1689	0	0	1712	0
Flt Permitted	0.950				0.984			0.995			0.997	
Satd. Flow (perm)	1641	1591	0	0	1638	0	0	1689	0	0	1712	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		577			650			1281			697	
Travel Time (s)		13.1			14.8			29.1			15.8	
Confl. Peds. (#/hr)			2	2								
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Adj. Flow (vph)	9	27	30	29	36	24	16	116	19	13	231	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	9	57	0	0	89	0	0	151	0	0	256	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	30.9%						ICU Level of Service A					
Analysis Period (min)	15											

Intersection

Int Delay, s/veh 9.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	23	26	25	31	21	14	100	16	11	199	10
Future Vol, veh/h	8	23	26	25	31	21	14	100	16	11	199	10
Conflicting Peds, #/hr	0	0	2	2	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	10	10	10	10	10	10	10	10	10	10	10	10
Mvmt Flow	9	27	30	29	36	24	16	116	19	13	231	12

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	60	0	0	59	0	0	290	180	44	234	183	48
Stage 1	-	-	-	-	-	-	62	62	-	106	106	-
Stage 2	-	-	-	-	-	-	228	118	-	128	77	-
Critical Hdwy	4.2	-	-	4.2	-	-	7.2	6.6	6.3	7.2	6.6	6.3
Critical Hdwy Stg 1	-	-	-	-	-	-	6.2	5.6	-	6.2	5.6	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.2	5.6	-	6.2	5.6	-
Follow-up Hdwy	2.29	-	-	2.29	-	-	3.59	4.09	3.39	3.59	4.09	3.39
Pot Cap-1 Maneuver	1494	-	-	1495	-	-	647	700	1004	704	697	999
Stage 1	-	-	-	-	-	-	929	828	-	880	792	-
Stage 2	-	-	-	-	-	-	757	783	-	857	815	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1494	-	-	1492	-	-	460	680	1002	589	677	999
Mov Cap-2 Maneuver	-	-	-	-	-	-	460	680	-	589	677	-
Stage 1	-	-	-	-	-	-	922	821	-	875	776	-
Stage 2	-	-	-	-	-	-	515	767	-	718	808	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	1			2.4			11.9			13.4		
HCM LOS							B			B		

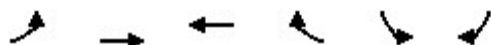
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	672	1494	-	-	1492	-	-	682
HCM Lane V/C Ratio	0.225	0.006	-	-	0.019	-	-	0.375
HCM Control Delay (s)	11.9	7.4	-	-	7.5	0	-	13.4
HCM Lane LOS	B	A	-	-	A	A	-	B
HCM 95th %tile Q(veh)	0.9	0	-	-	0.1	-	-	1.7

Lanes, Volumes, Timings

Year 2027 Existing Plus Project Traffic Conditions

101: Jewel Valley Rd & Phase 1 and Phase 2 Access C

Phase 2 - Weekday AM Peak Hour



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↰	↰		↰	
Traffic Volume (vph)	24	9	18	0	0	12
Future Volume (vph)	24	9	18	0	0	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.865	
Flt Protected		0.965				
Satd. Flow (prot)	0	1667	1727	0	1494	0
Flt Permitted		0.965				
Satd. Flow (perm)	0	1667	1727	0	1494	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		1936	515		186	
Travel Time (s)		44.0	11.7		4.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	25	9	19	0	0	13
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	34	19	0	13	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 18.5% ICU Level of Service A

Analysis Period (min) 15

HCM 6th TWSC
101: Jewel Valley Rd & Phase 1 and Phase 2 Access C

Year 2027 Existing Plus Project Traffic Conditions
Phase 2 - Weekday AM Peak Hour

Intersection						
Int Delay, s/veh	4.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	24	9	18	0	0	12
Future Vol, veh/h	24	9	18	0	0	12
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	95	95	95	95	95	95
Heavy Vehicles, %	10	10	10	10	10	10
Mvmt Flow	25	9	19	0	0	13
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	19	0	-	0	78	19
Stage 1	-	-	-	-	19	-
Stage 2	-	-	-	-	59	-
Critical Hdwy	4.2	-	-	-	6.5	6.3
Critical Hdwy Stg 1	-	-	-	-	5.5	-
Critical Hdwy Stg 2	-	-	-	-	5.5	-
Follow-up Hdwy	2.29	-	-	-	3.59	3.39
Pot Cap-1 Maneuver	1547	-	-	-	905	1036
Stage 1	-	-	-	-	983	-
Stage 2	-	-	-	-	944	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1547	-	-	-	891	1036
Mov Cap-2 Maneuver	-	-	-	-	891	-
Stage 1	-	-	-	-	967	-
Stage 2	-	-	-	-	944	-
Approach	EB	WB		SB		
HCM Control Delay, s	5.4	0		8.5		
HCM LOS	A					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1547	-	-	-	1036	
HCM Lane V/C Ratio	0.016	-	-	-	0.012	
HCM Control Delay (s)	7.4	0	-	-	8.5	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0.1	-	-	-	0	

Lanes, Volumes, Timings
201: Jewel Valley Rd & Phase 2 Access A

Year 2027 Existing Plus Project Traffic Conditions
Phase 2 - Weekday AM Peak Hour

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	48	90	0	98	155
Future Volume (vph)	0	48	90	0	98	155
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865					
Flt Protected						0.981
Satd. Flow (prot)	1494	0	1727	0	0	1694
Flt Permitted						0.981
Satd. Flow (perm)	1494	0	1727	0	0	1694
Link Speed (mph)	30		30			30
Link Distance (ft)	260		148			784
Travel Time (s)	5.9		3.4			17.8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	51	95	0	103	163
Shared Lane Traffic (%)						
Lane Group Flow (vph)	51	0	95	0	0	266
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	30.2%			ICU Level of Service A		
Analysis Period (min)	15					

HCM 6th TWSC
201: Jewel Valley Rd & Phase 2 Access A

Year 2027 Existing Plus Project Traffic Conditions
Phase 2 - Weekday AM Peak Hour

Intersection						
Int Delay, s/veh	3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	48	90	0	98	155
Future Vol, veh/h	0	48	90	0	98	155
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	95	95	95	95	95	95
Heavy Vehicles, %	10	10	10	10	10	10
Mvmt Flow	0	51	95	0	103	163
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	464	95	0	0	95	0
Stage 1	95	-	-	-	-	-
Stage 2	369	-	-	-	-	-
Critical Hdwy	6.5	6.3	-	-	4.2	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	-	-	2.29	-
Pot Cap-1 Maneuver	542	940	-	-	1450	-
Stage 1	909	-	-	-	-	-
Stage 2	682	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	500	940	-	-	1450	-
Mov Cap-2 Maneuver	500	-	-	-	-	-
Stage 1	909	-	-	-	-	-
Stage 2	629	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	9	0		3		
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	- 940		1450	-	
HCM Lane V/C Ratio	-	- 0.054		0.071	-	
HCM Control Delay (s)	-	- 9		7.7	0	
HCM Lane LOS	-	- A		A	A	
HCM 95th %tile Q(veh)	-	- 0.2		0.2	-	

Lanes, Volumes, Timings
202: Jewel Valley Rd & Phase 2 Access B

Year 2027 Existing Plus Project Traffic Conditions
Phase 2 - Weekday AM Peak Hour

						
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	24	0	0	30	33	122
Future Volume (vph)	24	0	0	30	33	122
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.894					
Flt Protected	0.950					
Satd. Flow (prot)	1641	0	0	1727	1544	0
Flt Permitted	0.950					
Satd. Flow (perm)	1641	0	0	1727	1544	0
Link Speed (mph)	30					
Link Distance (ft)	201					
Travel Time (s)	4.6					
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	25	0	0	32	35	128
Shared Lane Traffic (%)						
Lane Group Flow (vph)	25	0	0	32	163	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12					
Link Offset(ft)	0					
Crosswalk Width(ft)	16					
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15	9		
Sign Control	Stop	Free				Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	19.2%			ICU Level of Service A		
Analysis Period (min)	15					

HCM 6th TWSC
202: Jewel Valley Rd & Phase 2 Access B

Year 2027 Existing Plus Project Traffic Conditions
Phase 2 - Weekday AM Peak Hour

Intersection						
Int Delay, s/veh	1.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	24	0	0	30	33	122
Future Vol, veh/h	24	0	0	30	33	122
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	95	95	95	95	95	95
Heavy Vehicles, %	10	10	10	10	10	10
Mvmt Flow	25	0	0	32	35	128
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	131	99	163	0	-	0
Stage 1	99	-	-	-	-	-
Stage 2	32	-	-	-	-	-
Critical Hdwy	6.5	6.3	4.2	-	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	2.29	-	-	-
Pot Cap-1 Maneuver	844	935	1368	-	-	-
Stage 1	905	-	-	-	-	-
Stage 2	970	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	844	935	1368	-	-	-
Mov Cap-2 Maneuver	844	-	-	-	-	-
Stage 1	905	-	-	-	-	-
Stage 2	970	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	9.4	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1368	-	844	-	-	
HCM Lane V/C Ratio	-	-	0.03	-	-	
HCM Control Delay (s)	0	-	9.4	-	-	
HCM Lane LOS	A	-	A	-	-	
HCM 95th %tile Q(veh)	0	-	0.1	-	-	

Lanes, Volumes, Timings

Year 2027 Existing Plus Project Traffic Conditions

1: Ribbonwood Rd & I-8 WB Ramps

Phase 2 - Weekday PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	15	2	0	142	1	0	0	1	2
Future Volume (vph)	0	0	0	15	2	0	142	1	0	0	1	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	10		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	0		0
Taper Length (ft)	25			50			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt											0.919	
Flt Protected				0.950				0.953				
Satd. Flow (prot)	0	0	0	1641	1727	0	0	1646	0	0	1587	0
Flt Permitted				0.950				0.953				
Satd. Flow (perm)	0	0	0	1641	1727	0	0	1646	0	0	1587	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1175			1143			734			1473	
Travel Time (s)		26.7			26.0			16.7			33.5	
Peak Hour Factor	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58
Adj. Flow (vph)	0	0	0	26	3	0	245	2	0	0	2	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	26	3	0	0	247	0	0	5	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Stop			Free			Free	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	24.6%						ICU Level of Service A					
Analysis Period (min)	15											

HCM 6th TWSC
1: Ribbonwood Rd & I-8 WB Ramps

Year 2027 Existing Plus Project Traffic Conditions
Phase 2 - Weekday PM Peak Hour

Intersection												
Int Delay, s/veh	6.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↰	↰			↱			↱	
Traffic Vol, veh/h	0	0	0	15	2	0	142	1	0	0	1	2
Future Vol, veh/h	0	0	0	15	2	0	142	1	0	0	1	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	10	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	58	58	58	58	58	58	58	58	58	58	58	58
Heavy Vehicles, %	10	10	10	10	10	10	10	10	10	10	10	10
Mvmt Flow	0	0	0	26	3	0	245	2	0	0	2	3

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	496	497	2	5	0	-
Stage 1	492	492	-	-	-	-
Stage 2	4	5	-	-	-	-
Critical Hdwy	6.5	6.6	6.3	4.2	-	-
Critical Hdwy Stg 1	5.5	5.6	-	-	-	-
Critical Hdwy Stg 2	5.5	5.6	-	-	-	-
Follow-up Hdwy	3.59	4.09	3.39	2.29	-	-
Pot Cap-1 Maneuver	519	463	1059	1565	-	0
Stage 1	598	534	-	-	0	0
Stage 2	999	876	-	-	0	0
Platoon blocked, %					-	-
Mov Cap-1 Maneuver	438	0	1059	1565	-	-
Mov Cap-2 Maneuver	438	0	-	-	-	-
Stage 1	504	0	-	-	-	-
Stage 2	999	0	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s		7.7	0
HCM LOS	-		

Minor Lane/Major Mvmt	NBL	NBTWBLn1WBLn2	SBT	SBR
Capacity (veh/h)	1565	- 438	-	-
HCM Lane V/C Ratio	0.156	- 0.059	-	-
HCM Control Delay (s)	7.7	0 13.7	-	-
HCM Lane LOS	A	A B	-	-
HCM 95th %tile Q(veh)	0.6	- 0.2	-	-

Lanes, Volumes, Timings
2: Jewel Valley Rd & I-8 EB Ramps

Year 2027 Existing Plus Project Traffic Conditions

Phase 2 - Weekday PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	1	81	0	0	0	0	131	34	3	13	0
Future Volume (vph)	11	1	81	0	0	0	0	131	34	3	13	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	10		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	50			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.852						0.972				
Flt Protected	0.950										0.992	
Satd. Flow (prot)	1641	1472	0	0	0	0	0	1679	0	0	1713	0
Flt Permitted	0.950										0.992	
Satd. Flow (perm)	1641	1472	0	0	0	0	0	1679	0	0	1713	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		396			467			115			734	
Travel Time (s)		9.0			10.6			2.6			16.7	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	12	1	91	0	0	0	0	147	38	3	15	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	12	92	0	0	0	0	0	185	0	0	18	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Free			Free			Free	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	20.7%						ICU Level of Service A					
Analysis Period (min)	15											

HCM 6th TWSC
2: Jewel Valley Rd & I-8 EB Ramps

Year 2027 Existing Plus Project Traffic Conditions
Phase 2 - Weekday PM Peak Hour

Intersection												
Int Delay, s/veh	3.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	1	81	0	0	0	0	131	34	3	13	0
Future Vol, veh/h	11	1	81	0	0	0	0	131	34	3	13	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	10	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	10	10	10	10	10	10	10	10	10	10	10	10
Mvmt Flow	12	1	91	0	0	0	0	147	38	3	15	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	187	206	15	-	0	0	185	0	0
Stage 1	21	21	-	-	-	-	-	-	-
Stage 2	166	185	-	-	-	-	-	-	-
Critical Hdwy	6.5	6.6	6.3	-	-	-	4.2	-	-
Critical Hdwy Stg 1	5.5	5.6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.5	5.6	-	-	-	-	-	-	-
Follow-up Hdwy	3.59	4.09	3.39	-	-	-	2.29	-	-
Pot Cap-1 Maneuver	784	677	1042	0	-	-	1343	-	0
Stage 1	981	862	-	0	-	-	-	-	0
Stage 2	844	732	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	782	0	1042	-	-	-	1343	-	-
Mov Cap-2 Maneuver	782	0	-	-	-	-	-	-	-
Stage 1	981	0	-	-	-	-	-	-	-
Stage 2	842	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.9	0	1.4
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBL	SBT
Capacity (veh/h)	-	-	782	1042	1343	-
HCM Lane V/C Ratio	-	-	0.016	0.088	0.003	-
HCM Control Delay (s)	-	-	9.7	8.8	7.7	0
HCM Lane LOS	-	-	A	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0.3	0	-

Lanes, Volumes, Timings

Year 2027 Existing Plus Project Traffic Conditions

3: SR-95 (Jewel Valley Rd) & Avenue de Robles Verdes

Phase 2 - Weekday PM Peak Hour



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	3	4	6	167	88	2
Future Volume (vph)	3	4	6	167	88	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.916				0.997	
Flt Protected	0.982			0.998		
Satd. Flow (prot)	1554	0	0	1724	1722	0
Flt Permitted	0.982			0.998		
Satd. Flow (perm)	1554	0	0	1724	1722	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	385			176	115	
Travel Time (s)	8.8			4.0	2.6	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	3	5	7	190	100	2
Shared Lane Traffic (%)						
Lane Group Flow (vph)	8	0	0	197	102	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 23.6% ICU Level of Service A

Analysis Period (min) 15

Intersection

Int Delay, s/veh 0.4

Movement EBL EBR NBL NBT SBT SBRLane Configurations 

Traffic Vol, veh/h 3 4 6 167 88 2

Future Vol, veh/h 3 4 6 167 88 2

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 88 88 88 88 88 88

Heavy Vehicles, % 10 10 10 10 10 10

Mvmt Flow 3 5 7 190 100 2

Major/Minor Minor2 Major1 Major2

Conflicting Flow All 305 101 102 0 - 0

Stage 1 101 - - - - -

Stage 2 204 - - - - -

Critical Hdwy 6.5 6.3 4.2 - - -

Critical Hdwy Stg 1 5.5 - - - - -

Critical Hdwy Stg 2 5.5 - - - - -

Follow-up Hdwy 3.59 3.39 2.29 - - -

Pot Cap-1 Maneuver 671 933 1441 - - -

Stage 1 903 - - - - -

Stage 2 811 - - - - -

Platoon blocked, % - - -

Mov Cap-1 Maneuver 668 933 1441 - - -

Mov Cap-2 Maneuver 668 - - - - -

Stage 1 898 - - - - -

Stage 2 811 - - - - -

Approach EB NB SB

HCM Control Delay, s 9.6 0.3 0

HCM LOS A

Minor Lane/Major Mvmt NBL NBT EBLn1 SBT SBR

Capacity (veh/h) 1441 - 797 - -

HCM Lane V/C Ratio 0.005 - 0.01 - -

HCM Control Delay (s) 7.5 0 9.6 - -

HCM Lane LOS A A A - -

HCM 95th %tile Q(veh) 0 - 0 - -

Lanes, Volumes, Timings

Year 2027 Existing Plus Project Traffic Conditions

4: SR-95 (Jewel Valley Rd) & Old Highway 80

Phase 2 - Weekday PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	41	11	6	29	4	19	147	19	27	53	15
Future Volume (vph)	24	41	11	6	29	4	19	147	19	27	53	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.967			0.985			0.986			0.979	
Flt Protected	0.950				0.992			0.995			0.986	
Satd. Flow (prot)	1641	1670	0	0	1688	0	0	1695	0	0	1667	0
Flt Permitted	0.950				0.992			0.995			0.986	
Satd. Flow (perm)	1641	1670	0	0	1688	0	0	1695	0	0	1667	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		577			650			1281			697	
Travel Time (s)		13.1			14.8			29.1			15.8	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	27	47	13	7	33	5	22	167	22	31	60	17
Shared Lane Traffic (%)												
Lane Group Flow (vph)	27	60	0	0	45	0	0	211	0	0	108	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	24.5%				ICU Level of Service A							
Analysis Period (min)	15											

Intersection

Int Delay, s/veh 8.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	24	41	11	6	29	4	19	147	19	27	53	15
Future Vol, veh/h	24	41	11	6	29	4	19	147	19	27	53	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	10	10	10	10	10	10	10	10	10	10	10	10
Mvmt Flow	27	47	13	7	33	5	22	167	22	31	60	17

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	38	0	0	60	0	0	196	160	54	252	164	36
Stage 1	-	-	-	-	-	-	108	108	-	50	50	-
Stage 2	-	-	-	-	-	-	88	52	-	202	114	-
Critical Hdwy	4.2	-	-	4.2	-	-	7.2	6.6	6.3	7.2	6.6	6.3
Critical Hdwy Stg 1	-	-	-	-	-	-	6.2	5.6	-	6.2	5.6	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.2	5.6	-	6.2	5.6	-
Follow-up Hdwy	2.29	-	-	2.29	-	-	3.59	4.09	3.39	3.59	4.09	3.39
Pot Cap-1 Maneuver	1522	-	-	1494	-	-	746	718	991	685	714	1014
Stage 1	-	-	-	-	-	-	878	791	-	943	838	-
Stage 2	-	-	-	-	-	-	900	836	-	782	786	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1522	-	-	1494	-	-	674	701	991	538	698	1014
Mov Cap-2 Maneuver	-	-	-	-	-	-	674	701	-	538	698	-
Stage 1	-	-	-	-	-	-	862	777	-	926	834	-
Stage 2	-	-	-	-	-	-	817	832	-	590	772	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	2.3			1.1			12			11.4		
HCM LOS							B			B		

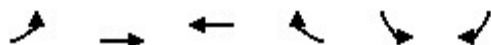
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	720	1522	-	-	1494	-	-	674
HCM Lane V/C Ratio	0.292	0.018	-	-	0.005	-	-	0.16
HCM Control Delay (s)	12	7.4	-	-	7.4	0	-	11.4
HCM Lane LOS	B	A	-	-	A	A	-	B
HCM 95th %tile Q(veh)	1.2	0.1	-	-	0	-	-	0.6

Lanes, Volumes, Timings

Year 2027 Existing Plus Project Traffic Conditions

101: Jewel Valley Rd & Phase 1 and Phase 2 Access C

Phase 2 - Weekday PM Peak Hour



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↰	↰		↰	
Traffic Volume (vph)	5	15	5	0	0	18
Future Volume (vph)	5	15	5	0	0	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.865	
Flt Protected		0.988				
Satd. Flow (prot)	0	1707	1727	0	1494	0
Flt Permitted		0.988				
Satd. Flow (perm)	0	1707	1727	0	1494	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		1936	515		186	
Travel Time (s)		44.0	11.7		4.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	5	16	5	0	0	19
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	21	5	0	19	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 15.2% ICU Level of Service A

Analysis Period (min) 15

HCM 6th TWSC
101: Jewel Valley Rd & Phase 1 and Phase 2 Access C

Year 2027 Existing Plus Project Traffic Conditions

Phase 2 - Weekday PM Peak Hour

Intersection

Int Delay, s/veh 4.4

Movement EBL EBT WBT WBR SBL SBR

Lane Configurations 

Traffic Vol, veh/h 5 15 5 0 0 18

Future Vol, veh/h 5 15 5 0 0 18

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 95 95 95 95 95 95

Heavy Vehicles, % 10 10 10 10 10 10

Mvmt Flow 5 16 5 0 0 19

Major/Minor Major1 Major2 Minor2

Conflicting Flow All 5 0 - 0 31 5

Stage 1 - - - - 5 -

Stage 2 - - - - 26 -

Critical Hdwy 4.2 - - - 6.5 6.3

Critical Hdwy Stg 1 - - - - 5.5 -

Critical Hdwy Stg 2 - - - - 5.5 -

Follow-up Hdwy 2.29 - - - 3.59 3.39

Pot Cap-1 Maneuver 1565 - - - 963 1055

Stage 1 - - - - 998 -

Stage 2 - - - - 976 -

Platoon blocked, % - - - -

Mov Cap-1 Maneuver 1565 - - - 960 1055

Mov Cap-2 Maneuver - - - - 960 -

Stage 1 - - - - 995 -

Stage 2 - - - - 976 -

Approach EB WB SB

HCM Control Delay, s 1.8 0 8.5

HCM LOS A

Minor Lane/Major Mvmt EBL EBT WBT WBR SBLn1

Capacity (veh/h) 1565 - - - 1055

HCM Lane V/C Ratio 0.003 - - - 0.018

HCM Control Delay (s) 7.3 0 - - 8.5

HCM Lane LOS A A - - A

HCM 95th %tile Q(veh) 0 - - - 0.1

Lanes, Volumes, Timings
201: Jewel Valley Rd & Phase 2 Access A

Year 2027 Existing Plus Project Traffic Conditions

Phase 2 - Weekday PM Peak Hour

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	73	115	0	24	50
Future Volume (vph)	0	73	115	0	24	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865					
Flt Protected	0.984					
Satd. Flow (prot)	1494	0	1727	0	0	1700
Flt Permitted	0.984					
Satd. Flow (perm)	1494	0	1727	0	0	1700
Link Speed (mph)	30		30			30
Link Distance (ft)	260		148			784
Travel Time (s)	5.9		3.4			17.8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	77	121	0	25	53
Shared Lane Traffic (%)						
Lane Group Flow (vph)	77	0	121	0	0	78
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type: Unsignalized						
Intersection Capacity Utilization 21.8%				ICU Level of Service A		
Analysis Period (min) 15						

HCM 6th TWSC
201: Jewel Valley Rd & Phase 2 Access A

Year 2027 Existing Plus Project Traffic Conditions
Phase 2 - Weekday PM Peak Hour

Intersection						
Int Delay, s/veh	3.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	73	115	0	24	50
Future Vol, veh/h	0	73	115	0	24	50
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	95	95	95	95	95	95
Heavy Vehicles, %	10	10	10	10	10	10
Mvmt Flow	0	77	121	0	25	53
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	224	121	0	0	121	0
Stage 1	121	-	-	-	-	-
Stage 2	103	-	-	-	-	-
Critical Hdwy	6.5	6.3	-	-	4.2	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	-	-	2.29	-
Pot Cap-1 Maneuver	747	909	-	-	1418	-
Stage 1	885	-	-	-	-	-
Stage 2	902	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	734	909	-	-	1418	-
Mov Cap-2 Maneuver	734	-	-	-	-	-
Stage 1	885	-	-	-	-	-
Stage 2	886	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	9.3	0		2.5		
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	- 909		1418	-	
HCM Lane V/C Ratio	-	- 0.085		0.018	-	
HCM Control Delay (s)	-	- 9.3		7.6	0	
HCM Lane LOS	-	- A		A	A	
HCM 95th %tile Q(veh)	-	- 0.3		0.1	-	

Lanes, Volumes, Timings
202: Jewel Valley Rd & Phase 2 Access B

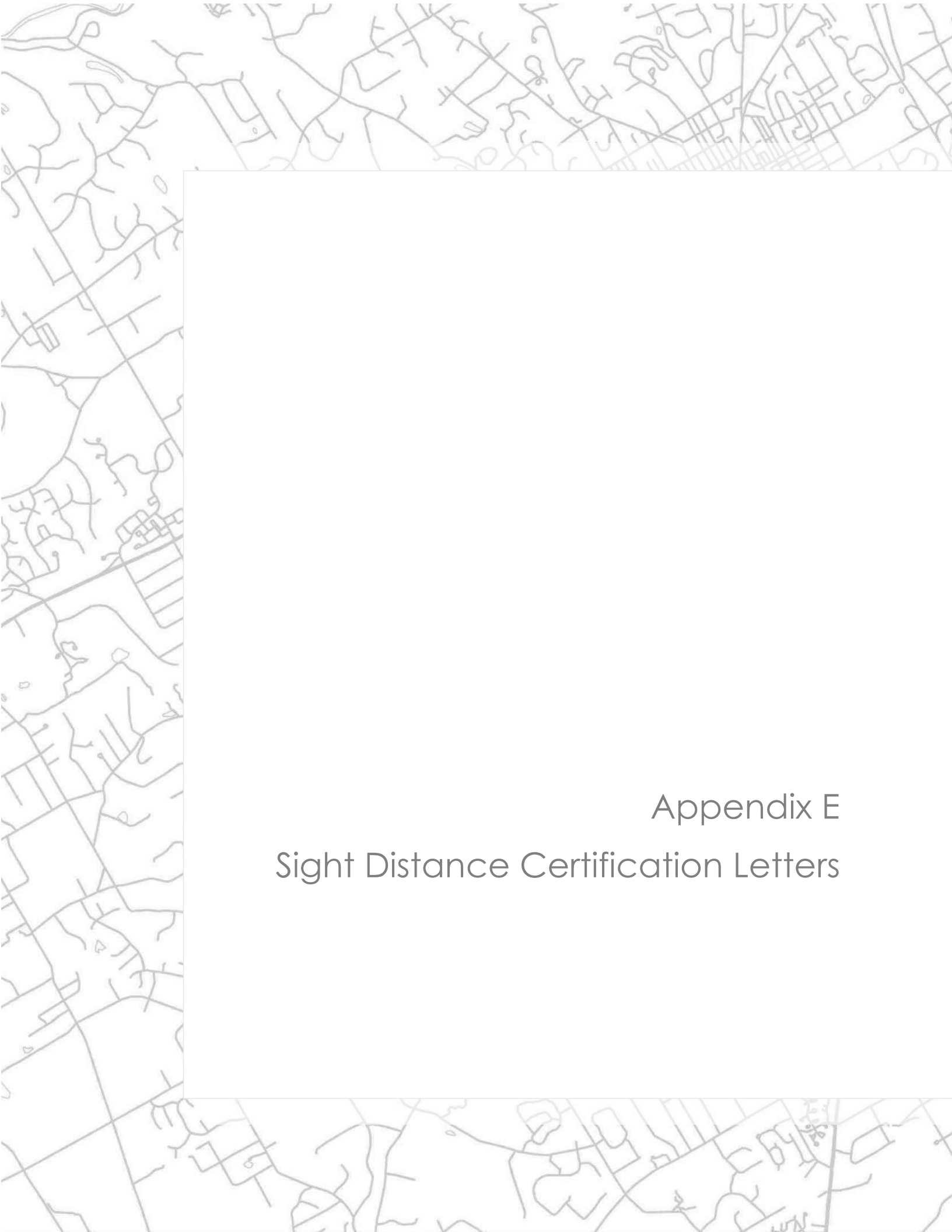
Year 2027 Existing Plus Project Traffic Conditions
Phase 2 - Weekday PM Peak Hour

						
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	92	0	0	23	20	12
Future Volume (vph)	92	0	0	23	20	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.948					
Flt Protected	0.950					
Satd. Flow (prot)	1641	0	0	1727	1637	0
Flt Permitted	0.950					
Satd. Flow (perm)	1641	0	0	1727	1637	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	201			1936	148	
Travel Time (s)	4.6			44.0	3.4	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	97	0	0	24	21	13
Shared Lane Traffic (%)						
Lane Group Flow (vph)	97	0	0	24	34	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	15.1%			ICU Level of Service A		
Analysis Period (min)	15					

HCM 6th TWSC
202: Jewel Valley Rd & Phase 2 Access B

Year 2027 Existing Plus Project Traffic Conditions
Phase 2 - Weekday PM Peak Hour

Intersection						
Int Delay, s/veh	5.8					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	92	0	0	23	20	12
Future Vol, veh/h	92	0	0	23	20	12
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	95	95	95	95	95	95
Heavy Vehicles, %	10	10	10	10	10	10
Mvmt Flow	97	0	0	24	21	13
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	52	28	34	0	-	0
Stage 1	28	-	-	-	-	-
Stage 2	24	-	-	-	-	-
Critical Hdwy	6.5	6.3	4.2	-	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	2.29	-	-	-
Pot Cap-1 Maneuver	937	1025	1527	-	-	-
Stage 1	974	-	-	-	-	-
Stage 2	978	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	937	1025	1527	-	-	-
Mov Cap-2 Maneuver	937	-	-	-	-	-
Stage 1	974	-	-	-	-	-
Stage 2	978	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	9.3	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1527	-	937	-	-	
HCM Lane V/C Ratio	-	-	0.103	-	-	
HCM Control Delay (s)	0	-	9.3	-	-	
HCM Lane LOS	A	-	A	-	-	
HCM 95th %tile Q(veh)	0	-	0.3	-	-	

A faint, light gray line-art map pattern is visible in the background, showing a network of streets and building footprints. A large, solid white rectangular area is positioned in the center of the page, partially obscuring the map.

Appendix E

Sight Distance Certification Letters

June 13, 2023

JN185614

County of San Diego, PDS Land Development
5510 Overland Ave, Ste 310
San Diego, California 92123

RE: Starlight Solar – Site Distance Certification – Gate ‘2’

To Whom It May Concern:

I, Jake Wragg, R.C.E. 90623, state that physically there is a minimum of 300 feet of unobstructed sight distance in both directions of Jewel Valley Road from the Gate ‘2’ exit of the Starlight Solar Site, per the Design Standards of Section 6.1.E of the County of San Diego Public Road Standards (approved March 2012). Jewel Valley Road is non-mobility element road with a design speed of 30 MPH, pursuant to Table 2B of the County of San Diego Public Roads Standards. Please see attached supporting site distance exhibits.

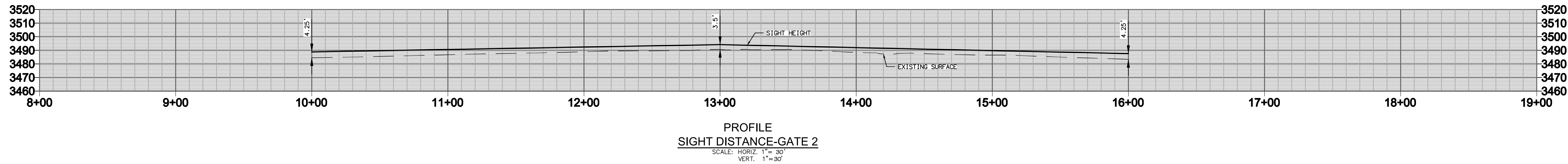
Sincerely,



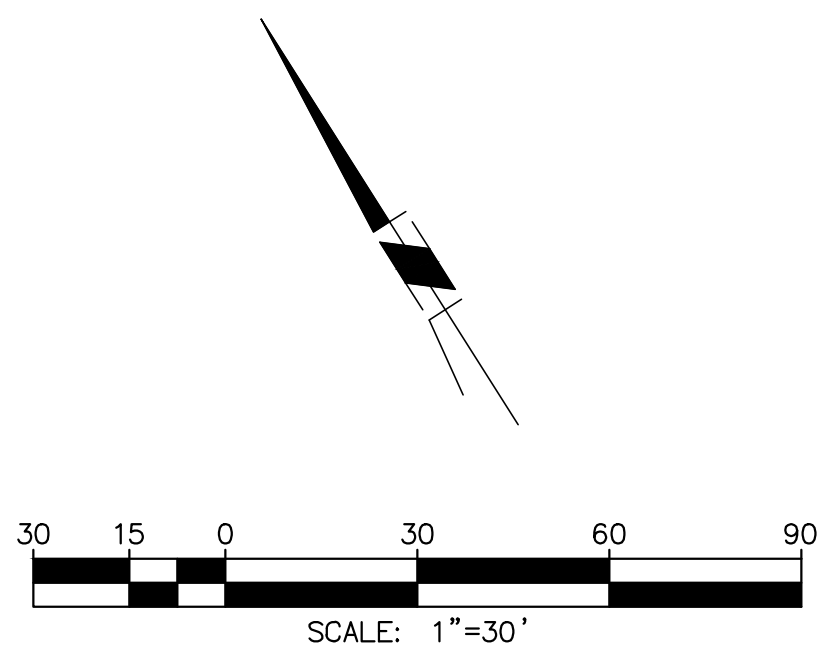
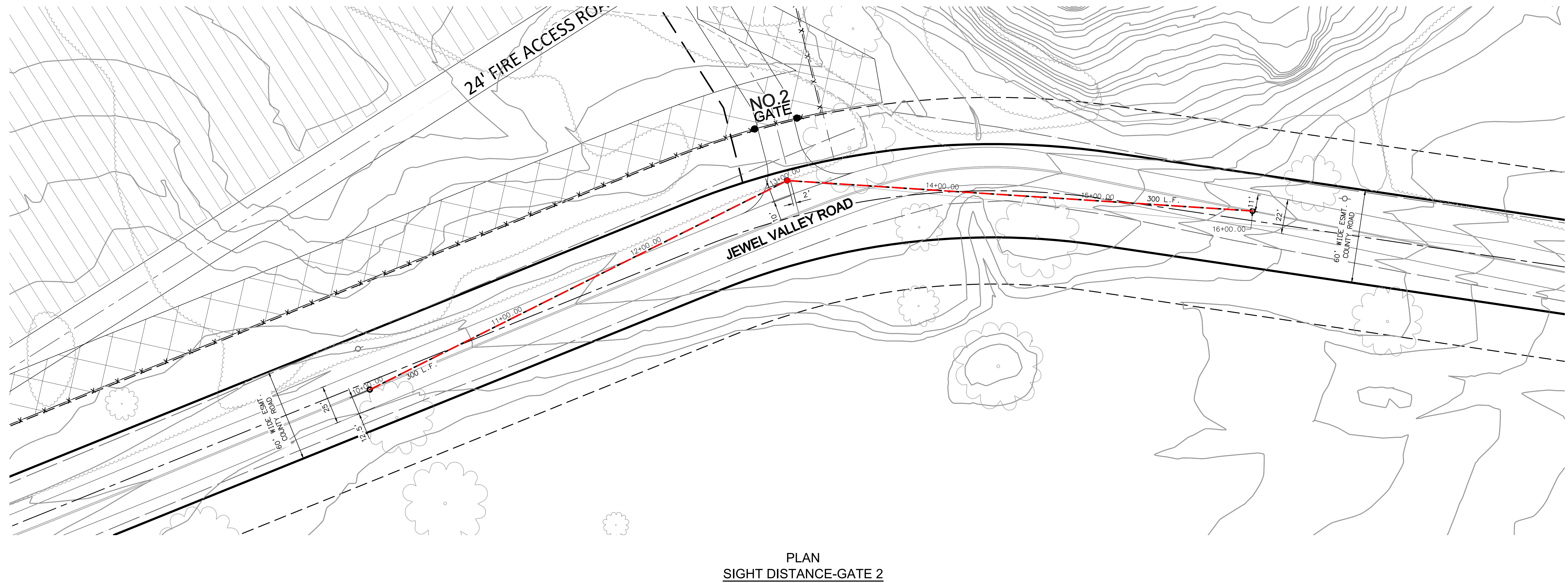
Jake Wragg
R.C.E. 90623
Civil Engineer



STARLIGHT SOLAR
COUNTY OF SAN DIEGO, CA
MAJOR USE PERMIT



SIGHT DISTANCE EXHIBIT
-PER COUNTY OF SAN DIEGO CLEAR SPACE EASEMENT TYPE A, STD DWG. DS-20A
-THE EYE POINT HAS BEEN SET 10' BEHIND THE EDGE OF PAVEMENT.
-THE OBJECT HAS BEEN SET AS C/L OF THE PAVEMENT LOOKING WEST.
-THE OBJECT HAS BEEN SET AS 8' FROM OUTSIDE EDGE OF LANE LOOKING EAST.
-NO SPEED LIMIT SIGNS ARE POSTED.
-30 MPH WAS USED PER COUNTY PUBLIC ROAD STANDARDS. SIGHT DISTANCE 300 L.F.
-ROADWAY CLASSIFICATION LOCAL PUBLIC ROAD PER THE COUNTY MOBILITY ELEMENT.



STARLIGHT SOLAR
COUNTY OF SAN DIEGO, CA
MAJOR USE PERMIT

June 13, 2023

JN185614

County of San Diego, PDS Land Development
5510 Overland Ave, Ste 310
San Diego, California 92123

RE: Starlight Solar – Site Distance Certification – Gate ‘4’

To Whom It May Concern:

I, Jake Wragg, R.C.E. 90623, state that physically there is a minimum of 300 feet of unobstructed sight distance in both directions of Jewel Valley Road from the Gate ‘4’ exit of the Starlight Solar Site, per the Design Standards of Section 6.1.E of the County of San Diego Public Road Standards (approved March 2012). Jewel Valley Road is non-mobility element road with a design speed of 30 MPH, pursuant to Table 2B of the County of San Diego Public Roads Standards. Please see attached supporting site distance exhibits.

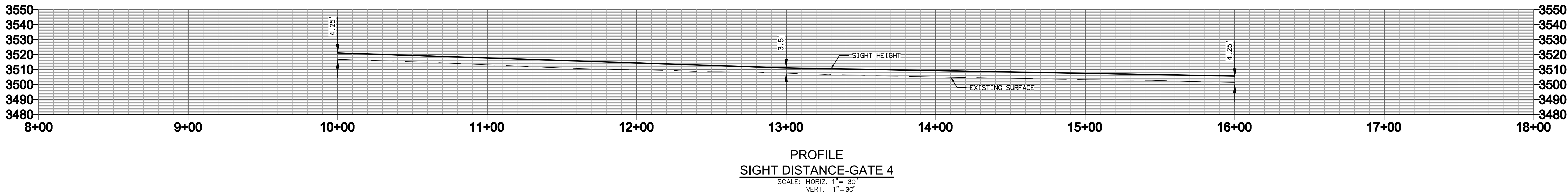
Sincerely,



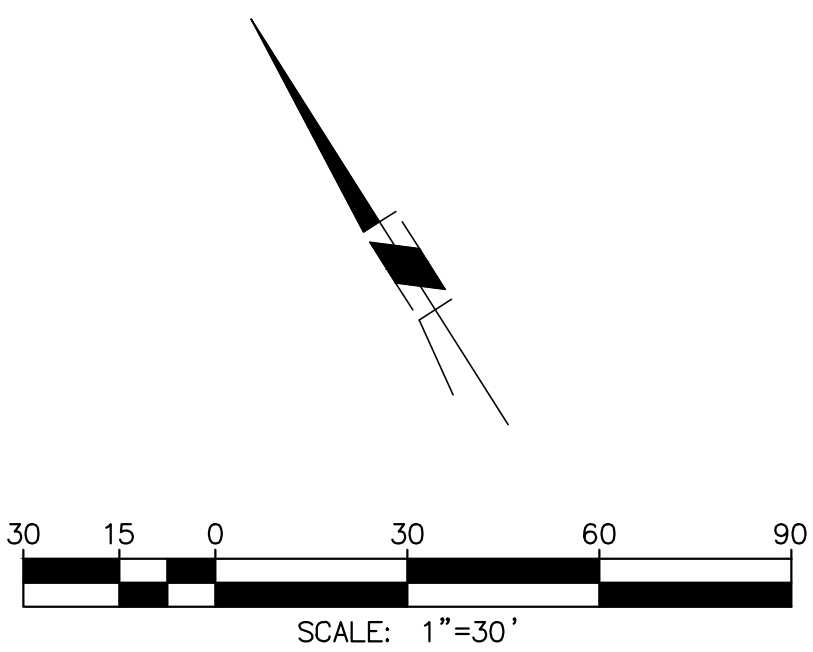
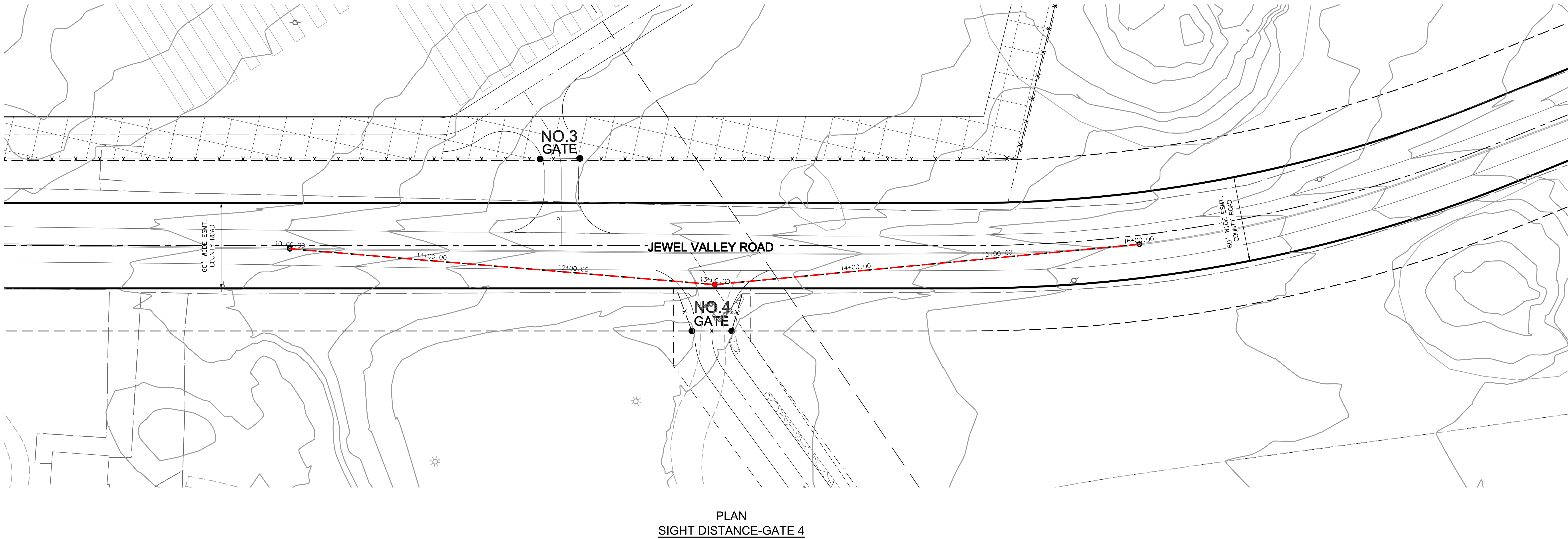
Jake Wragg
R.C.E. 90623
Civil Engineer



STARLIGHT SOLAR
COUNTY OF SAN DIEGO, CA
MAJOR USE PERMIT



SIGHT DISTANCE EXHIBIT
-PER COUNTY OF SAN DIEGO CLEAR SPACE EASEMENT TYPE A, STD DWG. DS-20A
-THE 'EYE' POINT HAS BEEN SET 10' BEHIND THE EDGE OF PAVEMENT.
-THE OBJECT HAS BEEN SET AS C/L OF THE PAVEMENT LOOKING WEST.
-THE OBJECT HAS BEEN SET AS 8' FROM OUTSIDE EDGE OF LANE LOOKING EAST.
-NO SPEED LIMIT SIGNS ARE POSTED.
-30 MPH WAS USED PER COUNTY PUBLIC ROAD STANDARDS. SIGHT DISTANCE 300 L.F.
-ROADWAY CLASSIFICATION LOCAL PUBLIC ROAD PER THE COUNTY MOBILITY ELEMENT.



STARLIGHT SOLAR
COUNTY OF SAN DIEGO, CA
MAJOR USE PERMIT