



LSC TRANSPORTATION CONSULTANTS, INC.
545 East Pikes Peak Avenue, Suite 210
Colorado Springs, CO 80903
(719) 633-2868
FAX (719) 633-5430
E-mail: lsc@lsctrans.com
Website: <http://www.lsctrans.com>

Judge Orr RV Park
Traffic Impact Study
PPR-16-040
(LSC #164650)
May 3, 2019

Traffic Engineer's Statement

This traffic report and supporting information were prepared under my responsible charge and they comport with the standard of care. So far as is consistent with the standard of care, said report was prepared in general conformance with the criteria established by the County for traffic reports.



Developer's Statement

I, the Developer, have read and will comply with all commitments made on my behalf within this report.

Date



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May 3, 2019

Mr. Bill Guman, RLA, ASLA
William Guman & Associates, Ltd.
731 North Weber Street, Suite 10
Colorado Springs, CO 80903

RE: Judge Orr RV Park
El Paso County, CO
PPR-16-040
Traffic Impact Study
LSC #164650

Dear Mr. Guman,

LSC Transportation Consultants, Inc. has prepared this updated Traffic Impact Study for the proposed Judge Orr RV Park. This report addresses the proposed Judge Orr RV Park and storage development to be located northeast of the intersection of Judge Orr Road and Cessna Drive in El Paso County, Colorado.

The proposed RV park and storage site is a 40-acre portion of the former Meadowlake Commons PUD site, which was originally studied in a traffic report for Meadowlake Commons (prepared by Springs Engineers in 2008 when the property was zoned to PUD).

REPORT CONTENTS

The report contains the following:

- Existing street and traffic conditions adjacent to the site including intersection lane geometries, traffic controls, posted speed limits, street classifications, etc.
- Existing peak-hour turning movement traffic counts at the intersection of Judge Orr Road/Cessna Drive and estimates of future background traffic volumes.
- Description of the proposed land uses.
- Estimates of the average weekday and peak-hour vehicle-trips to be generated by the site.
- Assigned site-generated projected traffic volumes to and the access point intersection.
- Estimates of future background traffic volumes.
- Resulting traffic impacts from the site.
- Findings and recommendations.

LAND USE AND ACCESS

The proposed Judge Orr RV Park site is located northeast of the intersection of Judge Orr Road and Cessna Drive in El Paso County, Colorado. US Highway 24 intersects with Judge Orr Road approximately 0.4 miles west of the proposed site. The 39.9-acre RV park development is planned to contain 120 recreational vehicle camp sites at buildout. RV/vehicle storage is also proposed. Figure 1 provides a visual of the site relative to the nearby roadway network.

Access is proposed to Judge Orr Road via two new access driveways, one of which would align with existing Cessna Drive at the Cessna/Judge Orr Road intersection. The new access drive would be called Range Flower Way and the second (emergency access only) would be located approximately 1,000 feet to the east. No apparent sight distance restrictions at the proposed site access points were evident at the time of the field visit. Judge Orr Road has a straight horizontal alignment with level grades in the vicinity of Cessna Drive.

The PUD Commercial development to the west will eventually share the Range Flower Way connection to Judge Orr Road (aligning with Cessna Drive) with this RV park site.

Proposed site land uses were categorized using the *Trip Generation Manual, 10th Edition, 2017* by the Institute of Transportation Engineers (ITE). The following ITE land use codes were used for trip generation estimates for the proposed site:

- Mini Warehouse – 151
- Campground/RV Park – 416
- RV/Vehicle Storage – No ITE category (trip generation rates developed by LSC based on actual 2018 counts at area RV storage facilities)

A context map of the site location relative to the remainder of the former overall Meadowlake Commons PUD is shown in Figure 2.

Recommended Stacking Distance at the Site North Entrance to the Storage Facility

Per comments on the site plan, the following is a recommendation for the entry stacking distance at the north entry drive to the storage facility. The stacking distance would be measured east of the east edge of Range Flower Way to the point at which a vehicle would potentially stop prior to turning left or right to access storage unit aisles. The objective is to provide sufficient storage to accommodate the maximum length of the design vehicle to avoid queue blockage of the future public street.

Most vehicles entering the storage facility will be passenger vehicles and pickup trucks, potentially towing trailers. Single-unit trucks such as U-Haul/rental trucks could potentially use this access. LSC recommends a 65-foot stacking distance east of the east edge of Range Flower Way. This would allow for a 30-foot-long single-unit truck or a 35-foot-long U-Haul truck (largest size) plus an additional 30 feet to allow for a towed utility trailer, moving trailer, or following passenger vehicle.

ROAD AND TRAFFIC CONDITIONS

Area Roads

Figure 1 shows the roads in the vicinity of the site. The major roads are identified below followed by a brief description of each:

US Highway 24 extends northeast from Colorado Springs through unincorporated El Paso County and is classified as a four-lane Expressway in the *El Paso County 2040 Major Transportation Corridors Plan (MTCP)*. The intersection of US 24/Judge Orr Road is signalized, with protected-permitted left-turn phases for eastbound left-turning vehicles on US 24. Both the eastbound and westbound approaches on Judge Orr Road are single-lane approaches with split phasing.

Judge Orr Road is currently classified as a two-lane Minor Arterial in El Paso County's 2040 *MTCP*. The preserved corridors plan shows a four-lane minor arterial. Judge Orr Road extends west approximately 0.7 miles to the intersection of Eastonville Road/Meridian Ranch Boulevard, and east to North Davenport Road. There are currently no turn lanes at existing driveways along Judge Orr Road within the study area limits. Adjacent to the site, the posted speed limit is 45 mph.

Cessna Drive is a two-lane County road that extends south from Judge Orr Road into Meadow Lake Airport. The intersection of Cessna/Judge Orr is located about 2,175 feet east of US Highway 24 (centerline spacing) and is Stop-sign controlled.

Range Flower Way (proposed): The proposed access drive to serve the RV Park and storage facility is planned to align with Cessna Drive and extend north from Judge Orr Road to serve the RV Park. The applicant intends to construct this access drive to El Paso County Urban Non-Residential Collector standards with the intent to convert this to a public roadway in the future and dedicate the right-of-way to the County. Although the initial construction of this roadway will be built to County standards, the access to Judge Orr will remain a private access to Judge Orr Road to serve the RV park in the interim. .

Future East-West Road along the North Property Line: The site plan shows a future road easement to accommodate a future east-west roadway as depicted on the Stapleton Corridor Plan (attached for reference). This road is shown to extend from the future US Highway 24 frontage Road to parcel number 4233000015 which is just over one-half mile to the east. The intent is to provide access and circulation to properties within the area bounded by US Highway 24, Curtis Road, and Judge Orr Road. This road and others were identified as needed due to the access control plans for US Highway 24 and Stapleton Drive.

Traffic Volumes

Existing traffic volumes have been based on turning movement counts conducted from 4:00 to 6:00 p.m. on Tuesday, August 11, 2016 and from 6:30 to 8:30 a.m. on Tuesday, August 16, 2016 at the intersection of Judge Orr Road/Cessna Drive. Adjustments to the 2016 counts have been made based on more recent nearby count data. Existing evening weekday peak-hour traffic volumes at this intersection are shown in Figure 3. Count reports are attached. Figure 3 also shows the estimates of average daily traffic volumes on Judge Orr Road (based on factored peak-hour volumes).

TRIP GENERATION

Estimates of the vehicle-trips projected to be generated by the proposed development have been made using the nationally published trip generation rates from *Trip Generation, 10th Edition, 2017* by the Institute of Transportation Engineers (ITE).

Table 1 presents a summary of the estimated site trip generation for Phase 1 and site buildout. The detailed trip generation estimate for the development, including ITE rates for the proposed land uses, is presented in Table 6.

Table 1: Estimated Site Vehicle-Trip Generation

Analysis Period	In	Out	Total
Phase 1			
A.M. Peak Hour	13	12	25
P.M. Peak Hour	18	17	35
Daily 24-Hour	71	71	142
Buildout			
A.M. Peak Hour	18	22	40
P.M. Peak Hour	30	24	54
Daily 24-Hour	110	110	219

Phase 1

Only 48 of the 120 planned campground sites are scheduled to be developed for Phase 1. All 431 proposed RV/vehicle storage spaces and 77 mini warehouse storage units are scheduled to be constructed during Phase 1. During Phase 1 only, the proposed site is projected to generate about 142 total vehicle-trips on the average weekday during a 24-hour period. During the morning peak hour, approximately 13 vehicles would enter and 12 vehicles would exit the site. During the evening peak hour, approximately 18 vehicles would enter and 17 vehicles would exit the site.

Buildout (Phases 1 and 2)

During the long-term buildout analysis period, the remaining 72 of the 120 total planned campground sites will have been constructed. All 431 proposed RV/vehicle storage spaces and 77 mini warehouse storage units are scheduled to have already been constructed during Phase 1. During the long-term buildout phase, the proposed site is projected to generate about 219 total vehicle-trips on the average weekday during a 24-hour period. During the morning peak hour, approximately 18 vehicles would enter and 22 vehicles would exit the site. During the evening peak hour, approximately 30 vehicles would enter and 24 vehicles would exit the site.

TRIP GENERATION COMPARISON

Previously Approved Land Use

Judge Orr RV Park is located in the 39.9-acre southeast portion of the previously approved Meadowlake Commons Zoning and Conceptual Plan (ZCP), which was approved on September 21, 2010. The southeast

portion of the concept plan, which will be replaced by the RV park, showed 18.71 acres of proposed retail/office land use and 3.81 acres of proposed retail/restaurant land use.

Trip Generation Comparison

The previously completed traffic report (prepared by Springs Engineers in 2008 when the property was zoned to PUD) contained vehicle-trip estimates for the entire Meadowlake Commons development. In order to provide an accurate trip generation comparison between the previously approved land uses and the proposed RV park, only trips generated from the 39.9-acre southeast portion of the Meadowlake Commons ZCP were considered. Springs Engineers estimated that the previous retail/office and retail/restaurant land uses would generate 6,331 vehicle-trips on an average weekday, with 142 total trips during the morning peak hour and 550 total trips during the afternoon peak hour. Table 2 compares the change in trip generation estimates from the previously-approved site plan with estimates for Phase 1 and after long-term site buildout.

Table 2: Change in Trip Generation Estimates by Site Plan

Scenario	Avg Weekday Traffic	A.M.			P.M.		
		In	Out	Total	In	Out	Total
Phase 1							
Previously-Approved Land Use	6331	89	53	142	264	286	550
Phase 1	142	13	12	25	18	17	35
Change in Trip Generation	-6189	-76	-41	-117	-246	-269	-515
Buildout							
Previously-Approved Land Use	6331	89	53	142	264	286	550
Buildout	219	18	22	40	30	24	54
Change in Trip Generation	-6112	-71	-31	-102	-234	-262	-496

Phase 1

During the morning peak hour of Phase 1, approximately 76 and 41 fewer vehicles are projected to enter and exit the site compared the previously approved site plan. About 246 and 269 fewer vehicles are projected to enter and exit the site during the evening peak hour, respectively, based on the most recently approved site layout. The site is expected to generate about 6,189 fewer daily vehicle-trips during Phase 1 than the estimate of 6,331 “new” trips for the land uses shown on the approved Meadowlake Commons ZCP for the southeast 39.9-acre parcel. A detailed summary of this trip generation comparison is attached in Table 6.

Buildout (Phases 1 and 2)

During the morning peak hour after site buildout, approximately 71 and 31 fewer vehicles are projected to enter and exit the site, respectively, compared to the previously approved site plan. Approximately 2,341 and 262 fewer vehicles would enter and exit the site, respectively, upon total site buildout than were estimated based on the existing and approved land uses. The site is expected to generate about 6,112 fewer daily vehicle-trips during Phase 1 than the estimate of 6,331 “new” non-pass-by trips for the land uses shown on the approved Meadowlake Commons ZCP for the southeast 39.9-acre parcel.

TRIP DISTRIBUTION AND ASSIGNMENT

Trip Directional Distribution

An estimate of the directional distribution of site-generated vehicle-trips to the study area roads and intersections is a necessary component in determining the site's traffic impacts. The directional distribution estimate for the site-generated trips is shown on both Figure 4 and Figure 5. These figures show the percentages of the site-generated vehicle-trips projected to be oriented to and from the site's major approaches. Estimates were based on the following factors: existing area development, the area roadway system, and the site's proposed land use.

Phase 1

Phase 1 site-generated traffic volumes at the intersection of the proposed site access intersection with Judge Orr/Cessna have been calculated by applying the directional distribution percentages estimated by LSC (from Figure 4) to the trip generation estimates (from Table 1). Figure 4 shows the projected Phase 1 site-generated traffic volumes for the weekday afternoon and evening peak hours.

Buildout

Long-term site-generated traffic volumes at the intersection of the proposed site access intersection with Judge Orr/Cessna have been calculated by applying the directional distribution percentages estimated by LSC (from Figure 5) to the trip generation estimates (from Table 1). Figure 5 shows the projected buildout site-generated traffic volumes for the weekday afternoon and evening peak hours.

SHORT-TERM TRAFFIC PROJECTIONS

Figure 6 shows the sum of the existing 2017 traffic volumes (from Figure 3) and Phase 1 site-generated peak-hour traffic volumes (shown in Figure 4). These volumes represent the projected short-term total traffic following Phase 1.

Figure 7 shows projected short-term background traffic. These volumes represent estimated 2020 traffic assuming a three-percent-per-year annual growth rate. These volumes assume no development yet completed on the adjacent PUD site.

Figure 8 shows the sum of the projected short-term background traffic volumes (from Figure 7) and buildout (Phases 1 and 2) site-generated peak-hour traffic volumes (shown in Figure 5). These volumes represent the projected short-term total traffic following site buildout completion of Phases 1 and 2 but prior to any development on the adjacent PUD site to the west.

2040 LONG-TERM TRAFFIC PROJECTIONS

Figure 9 shows the sum of projected 2040 background traffic volumes and buildout site-generated peak-hour traffic volumes (shown in Figure 5). These volumes represent the projected long-term total traffic including Phases 1 and 2 of the site-generated traffic. The 2040 background/baseline through traffic volumes on Judge Orr Road are based on approximately a three-percent-per-year annual growth rate. The background traffic includes preliminary estimates of traffic to be generated by the adjacent PUD commercial/business park site and an estimate of other traffic generated by potential future development

to the north and east of this site. A copy of the preliminary trip generation estimate for the adjacent PUD commercial site is attached for reference.

The Stapleton Corridor study preferred access control concept was used as the basis for the area future road system. The area background traffic estimates indicate a rough estimate of approximately 6,000 vehicles per day on the north/south access road north of Cessna Drive (along the west side of the site). This volume may vary considerably depending on area land uses, trip generation intensity, timing of development, and actual road connections.

LEVEL OF SERVICE ANALYSIS

Level of service (LOS) is a quantitative measure of the level of congestion or delay at an intersection and is indicated on a scale from "A" to "F." LOS A is indicative of little congestion or delay. LOS F indicates a high level of congestion or delay. Table 3 shows the level of service delay ranges for signalized and unsignalized intersections.

Table 3: Intersection Levels of Service Delay Ranges

Level of Service	Signalized Intersections	Unsignalized Intersections
	Average Control Delay (seconds per vehicle)	Average Control Delay (seconds per vehicle) ¹
A	≤ 10.0	≤ 10.0
B	10.1 – 20.0	10.1 – 15.0
C	20.1 – 35.0	15.1 – 25.0
D	35.1 – 55.0	25.1 – 35.0
E	55.1 – 80.0	35.1 – 50.0
F	≥ 80.1	≥ 50.1

¹ For unsignalized intersections, if V/C is > 1.00, then LOS is LOS F regardless of the projected average control delay per vehicle

The proposed Judge Orr Road/Cessna Drive/Range Flower Way intersection has been analyzed to determine the projected control delay and corresponding levels of service and for the key turning movements. As the intersection will be two-way Stop-sign controlled (TWSC), traffic on the southbound and northbound approaches incur delay given the Stop-sign control.





This level of service analysis includes the following analysis scenarios:

- Existing conditions
- Existing plus RV park site condition
- 2040 background traffic (Including the future PUD development and development to the north, but not including the RV Park traffic)
- 2040 background traffic plus the RV park site traffic

Morning Peak Hour

A summary of current and projected 2040 traffic conditions during the morning peak hour—both with and without considering site-generated traffic—is shown in Table 4. LOS and control delays during the morning peak hour are shown in this table. Detailed Synchro reports are attached.

Table 4: Level of Service Comparison by Scenario (Morning Peak)

Scenario	Traffic Control	EB	EBL	SB	SBL
					
A.M. Peak Hour					
Existing	TWSC*	-	-	-	-
Existing + Site (Phase 1)		A	-	A	-
Short-Term Background		A	-	A	-
Short-Term Total (Phases 1 + 2)		-	A	B	-
2040 Background		-	A	-	F
2040 Background + Site (Buildout)		-	A	-	F
* TWSC = two-way stop sign-controlled					

The eastbound left-turning movement at the proposed site access intersection with Judge Orr currently operates at LOS A and is projected to remain at LOS A for all short- and long-term morning peak-hour traffic conditions, with or without the RV park site development.

The southbound left-turning movement currently operates at LOS A but is projected to operate at LOS F during the long-term morning peak-hour, with or without this development (background and total volumes). This level of service F is based on initial estimates of and inclusion of future PUD commercial traffic and future traffic estimated to be added by future area developments to the north and northeast of this RV park. As only the RV park is proposed at this time, the level of service analysis has been provided for reference. The level of service will be reevaluated with the commercial PUD traffic report (which is anticipated to be submitted soon). That report will update the level of service, and if the LOS continues to be shown as LOS F, the report will include discussion/recommendations of steps that can be taken to bring the intersection to a satisfactory LOS since the applicant is planning to eventually convert Range Flower Way to a public road and dedicate the right-of-way to the County. As per the comment, the LOS will need to be resolved with the traffic impact study of the adjacent property's PUD application.

Evening Peak Hour

A summary of current and projected 2040 background traffic conditions during the evening peak hour—both with and without considering site-generated traffic—is shown in Table 5. LOS and control delays during the weekday evening peak hour are shown in this table. Detailed Synchro reports are attached.

Table 5: Level of Service Comparison by Scenario (Weekday P.M. Peak)

Scenario	Traffic Control	EB	EBL	SB	SBL
P.M. Peak Hour					
Existing ^{1,2}	TWSC*	-	-	-	-
Existing + Site (Phase 1) ^{1,2}		A	-	A	-
Short-Term Background ^{1,2}		A	-	A	-
Short-Term Total (Phases 1 + 2) ^{2,3}		-	A	B	-
2040 Background ^{3,4}		-	A	-	E
2040 Background + Site (Buildout) ^{3,4}		-	A	-	F
* TWSC = two-way stop sign-controlled					

The eastbound left- and southbound left-turning movements at this intersection are projected to operate at LOS A for all short-term evening traffic conditions upon site buildout. During the long term, the eastbound left-turning movement is projected to remain at LOS A, with or without development. The southbound left-turning movement is projected to operate at LOS E or worse during the long-term evening peak hour, with or without RV park site buildout.

PROPOSED ACCESS DRIVE INFRASTRUCTURE

The site access drive (Range Flower Way) shown on the site plan would extend north from the existing Judge Orr Road/Cessna Drive intersection and would initially serve as the access to this RV park and storage development. In the future, Range Flower Way would be converted to a public road and would serve this RV park site, the commercial PUD site immediately adjacent to the west, and other future developments to the north.

As requested by staff, this report contains estimates of background traffic including the future PUD site to the west and potential future traffic volumes that may be generated by area parcels to the north and east if this north/south access road is added to the roadway plan shown on the Stapleton Corridor Study. Estimates by LSC as described in the Background Traffic section indicate volumes under the maximum design ADT for an Urban Non-Residential Collector.

DEVIATIONS INCLUDED WITH THIS SUBMITTAL

- Private driveway access to a Rural Minor Arterial and access width

Note: The deviation for the emergency access to Judge Orr Road was previously approved.

FINDINGS AND CONCLUSIONS

- Significantly fewer vehicle-trips would be generated by the proposed Judge Orr RV Park than if the site were developed per the approved Zoning Conceptual Plan.

- The eastbound left-turning movement at the site access/Cessna Drive intersection is projected to continue to operate at a satisfactory level of service based on the projected existing plus site-generated and 2040 total traffic volumes.
- The southbound left-turning movement is projected to operate at LOS E or worse during all long-term traffic scenarios, with or without site buildout. The levels of service will be reevaluated with the commercial PUD traffic report (which is anticipated to be submitted soon). That report will update the level of service, and if the LOS continues to be shown as LOS F, the report will include discussion/recommendations of steps that can be taken to bring the intersection to a satisfactory LOS since the applicant is planning to eventually convert Range Flower Way to a public road and dedicate the right-of-way to the County. As per the comment, the LOS will need to be resolved with the traffic impact study of the adjacent property's PUD application.
- The proposed access to the RV park to Judge Orr Road is planned align with Cessna Drive and extend north from Judge Orr Road to serve the RV park. The applicant intends to construct this access drive to El Paso County Urban Non-Residential Collector standards with the intent to convert this to a public roadway in the future and dedicate the right-of-way to the County. Although the initial construction of this roadway will be built to County standards, the access to Judge Orr will remain a private access to Judge Orr Road to serve the RV park in the interim. This future county roadway is projected to carry traffic volumes below the maximum design ADT for an Urban Non-Residential Collector.
- Based on the buildout trip generation and traffic analysis included in this report, the *Engineering Criteria Manual* threshold for an eastbound left-turn lane on Judge Orr Road would be met. However, although this report includes a Phase 1 analysis for the storage plus 48 RV campsites. The requirement for the eastbound left-turn lane would not be triggered with the first phase. Once the first phase is completed and after the RV park and storage facility open, actual traffic data could be collected. Based upon actual trip generation and turning movement data, the future need for a left-turn lane at buildout could be reevaluated.
- This project will be required to participate in the El Paso County Road Improvement Fee Program. For the RV park land use, the most applicable established fee program land use category is Hotel/Motel. However, ITE peak-hour trip generation rates used in this report reflect lower peak-hour trip generation per unit when compared to ITE peak-hour rates for Hotel/Motel. Per fee program guidelines, an independent study would be needed to utilize a land use category/unit rate other than those shown in the "Road Impact Fee Schedule."

* * * *

Please contact me if you have any questions regarding this report.

Sincerely,

LSC TRANSPORTATION CONSULTANTS, INC.

By: Jeffrey C. Hodsdon, P.E.
Principal

JCH:JAB/bjwb

Enclosures: Table 6
 Figure 1 – Figure 9
 Appendix Table – Preliminary Trip Generation Estimate for the PUD Commercial
 Site Plan Exhibit
 Stapleton Corridor Study Exhibit
 Traffic Count Reports
 Level of Service Reports

Table 6: Detailed Trip Generation Estimate

ITE		Value	Units	Trip Generation Rates ⁽¹⁾					Driveway Trips Generated					
				Avg Weekday Traffic	A.M.		P.M.		Avg Weekday Traffic	A.M.		P.M.		
Code	Description					In	Out	In		Out		In	Out	In
Previously-Approved Land Use (Meadowlake Commons ZCP)														
820	Shopping Center	148.27	KSF	42.70	0.60	0.36	1.78	1.93	6331	89	53	264	286	
Phase 1														
416	Campground/RV Park	48	Occupied Campsites	1.06	0.08	0.13	0.18	0.09	51	4	6	8	5	
---	RV/Vehicle Storage	3.879	Hundred Occupied Spaces	20.00	2.28	1.37	1.98	2.81	78	9	5	8	11	
151	Mini Warehouse	0.77	Hundred Storage Units	17.96	0.71	0.68	2.07	2.07	14	1	1	2	2	
Total									142	13	12	18	17	
Buildout														
416	Campground/RV Park	120	Occupied Campsites	1.06	0.08	0.13	0.18	0.09	127	9	16	21	11	
---	RV/Vehicle Storage	3.879	Hundred Occupied Spaces	20.00	2.28	1.37	1.98	2.81	78	9	5	8	11	
151	Mini Warehouse	0.77	Hundred Storage Units	17.96	0.71	0.68	2.07	2.07	14	1	1	2	2	
Total									219	18	22	30	24	
Change in Trip Generation														
Phase 1									-6189	-76	-41	-246	-269	
Site Buildout									-6113	-71	-31	-234	-262	

(1) Source: *Trip Generation, 10th Edition, 2017* by the Institute of Transportation Engineers (ITE)



Approximate Scale
Scale: 1" = 2,000'

Figure 1
**Vicinity
Map**

Honeywood RV Park (LSC #164650)

Note: Future intersection Judge Orr/Frontage Rd./Blue Gill
(realigned shown at 650' east of the Judge Orr/US 24
intersection on the current PEL study. Change to prior US 24
access management plan has not yet been adopted.

Approximate Scale
Scale: 1" = 600'

Remaining portion of the
original Meadowlake
Commons Sketch Plan site;
Current application: Commercial
PUD site (LSC #174540)

ROW for east-west future
roadway along the N. side
of the site

SITE:
Proposed RV Park
(39.9 acres)
Please refer to the site plan exhibit
attached to this report.

Site

RV Park & Storage -
West Site Full
Movement Access

Judge Orr Road

East Site Access-
Emergency Only

1,000'

Cessna Drive

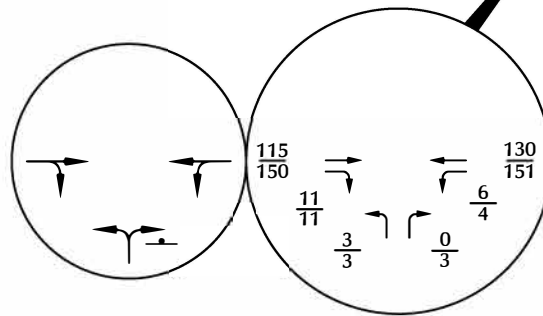
Figure 2

Site Context Map

Judge Orr RV Park (LSC #164650)



Approximate Scale
Scale: 1" = 2,000'



LEGEND:

└ = Stop Sign

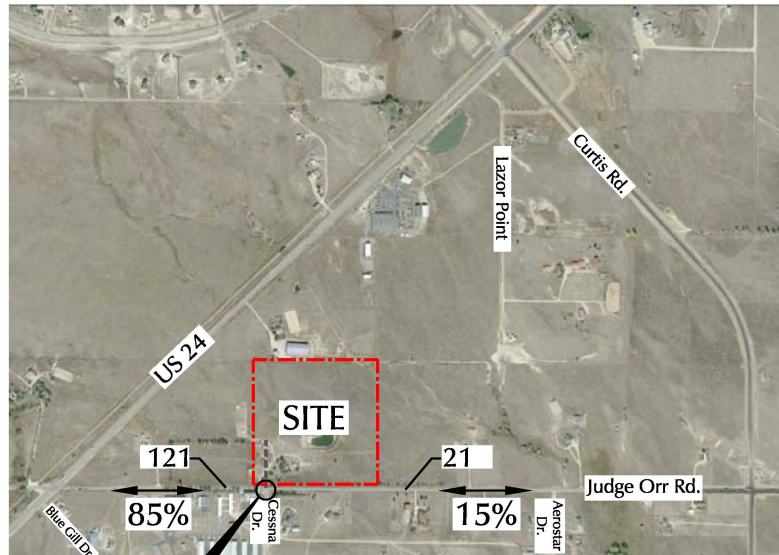
$\frac{26}{31}$ = AM Weekday Peak-Hour Traffic (vehicles per hour)
PM Weekday Peak-Hour Traffic (vehicles per hour)

LSC 500 = Average Weekday Traffic (vehicles per day)
TRANSPORTATION
CONSULTANTS, INC.

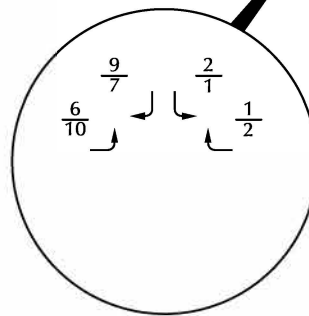
Figure 3

Existing Traffic, Lane Geometry and Traffic Control

Honeywood RV Park (LSC #164650)



Approximate Scale
Scale: 1" = 2,000'



LEGEND:

$\frac{26}{31}$ = AM Weekday Peak-Hour Traffic (vehicles per hour)
 $\frac{31}{500}$ = PM Weekday Peak-Hour Traffic (vehicles per hour)
 $\frac{500}{500}$ = Average Weekday Traffic (vehicles per day)

$\frac{65\%}{65\%}$ = Percent Directional Distribution



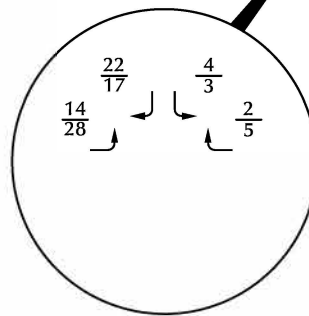
Directional Distribution and Assignment of Phase 1 Site-Generated Traffic

Honeywood RV Park (LSC #164650)

Figure 4



Approximate Scale
Scale: 1" = 2,000'



LEGEND:

$\frac{26}{31}$ = AM Weekday Peak-Hour Traffic (vehicles per hour)
 $\frac{31}{500}$ = PM Weekday Peak-Hour Traffic (vehicles per hour)
 500 = Average Weekday Traffic (vehicles per day)

$\frac{65\%}{\text{Distribution}}$ = Percent Directional Distribution



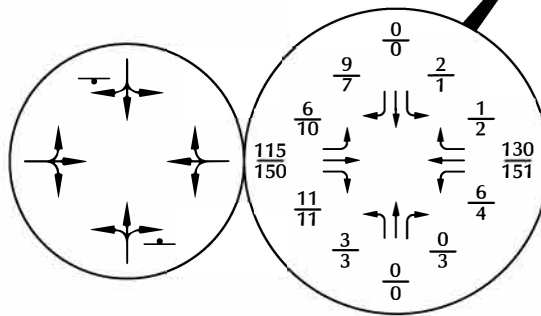
Directional Distribution and Assignment of Buildout Site-Generated Traffic

Honeywood RV Park (LSC #164650)

Figure 5



Approximate Scale
Scale: 1" = 2,000'



LEGEND:

⊥ = Stop Sign

$\frac{26}{31}$ = AM Weekday Peak-Hour Traffic (vehicles per hour)
PM Weekday Peak-Hour Traffic (vehicles per hour)

LSC 500 = Average Weekday Traffic (vehicles per day)
TRANSPORTATION
CONSULTANTS, INC.

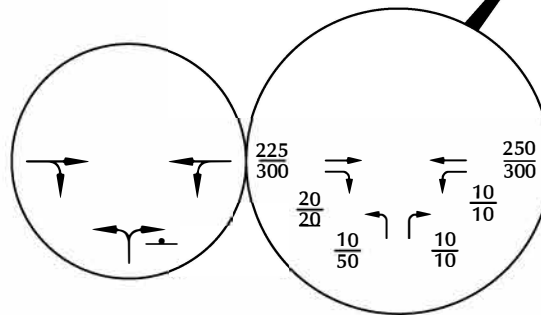
Figure 6

Existing plus Phase 1 Site-Generated Traffic, Lane Geometry and Traffic Control

Honeywood RV Park (LSC #164650)



Approximate Scale
Scale: 1" = 2,000'



LEGEND:

⊥ = Stop Sign

$\frac{26}{31}$ = AM Weekday Peak-Hour Traffic (vehicles per hour)

$\frac{31}{26}$ = PM Weekday Peak-Hour Traffic (vehicles per hour)

LSC 500 = Average Weekday Traffic (vehicles per day)

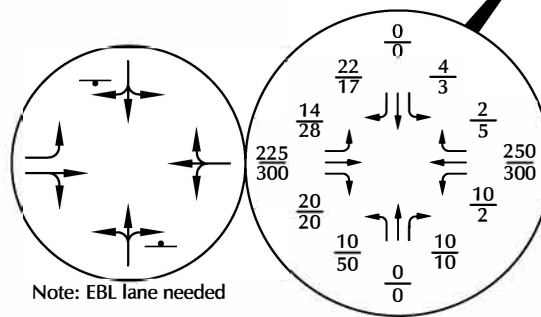
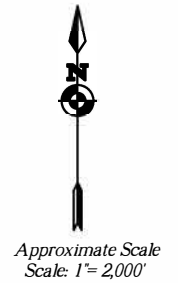
Note: Represents 3%/year growth rate



Short-Term Background Traffic, Lane Geometry and Traffic Control

Honeywood RV Park (LSC #164650)

Figure 7



LEGEND:

⊥ = Stop Sign

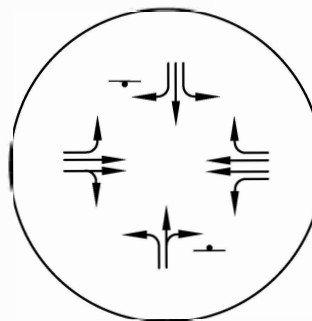
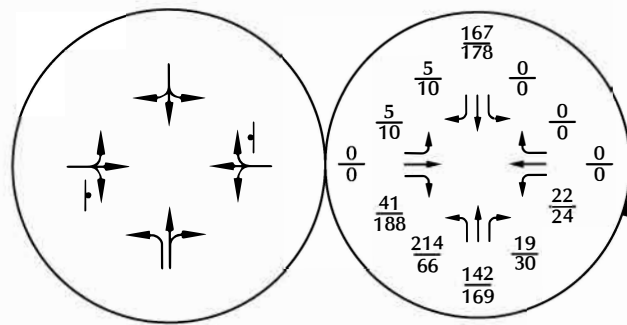
$\frac{26}{31}$ = AM Weekday Peak-Hour Traffic (vehicles per hour)
PM Weekday Peak-Hour Traffic (vehicles per hour)

LSC 500 = Average Weekday Traffic (vehicles per day)
TRANSPORTATION
CONSULTANTS, INC.

Short-term Background + Site Buildout Traffic Lane Geometry Traffic Control

Figure 8

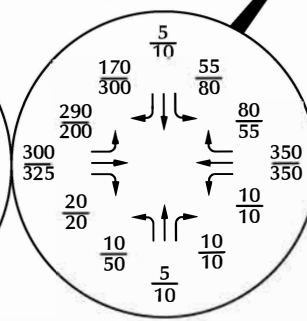
Honeywood RV Park (LSC #164650)



Note: EBL lane needed



Approximate Scale
Scale: 1" = 2,000'



LEGEND:

┆ = Stop Sign

$\frac{26}{31}$ = AM Weekday Peak-Hour Traffic (vehicles per hour)

$\frac{31}{26}$ = PM Weekday Peak-Hour Traffic (vehicles per hour)

500 = Average Weekday Traffic (vehicles per day)

Year 2040 Background + Site Buildout Traffic Lane Geometry Traffic Control

Honeywood RV Park (LSC #164650)

Figure 9

LSC Transportation Consultants, Inc.
545 E. Pikes Peak Ave., #210
Colorado Springs, CO 80903
(719) 633-2868

LSC Transportation Consultants, Inc.

Site Name : Judge Orr Rd - Cessna Dr AM
 Site Code : 00164650
 Start Date : 08/16/2016
 Page No : 1

Groups Printed- Unshifted

	From North				Judge Orr Rd From East				Cessna Dr From South				Judge Orr Rd From West				Int. Total
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
06:30 AM	0	0	0	0	0	26	1	0	0	0	1	0	2	24	0	0	54
06:45 AM	0	0	0	0	0	30	2	0	0	0	0	0	4	28	0	0	64
Total	0	0	0	0	0	56	3	0	0	0	1	0	6	52	0	0	118
07:00 AM	0	0	0	0	0	26	2	0	0	0	2	0	1	32	0	0	63
07:15 AM	0	0	0	0	0	48	1	0	0	0	0	0	4	31	0	0	84
07:30 AM	0	0	0	0	0	29	0	0	0	0	0	0	4	21	0	0	54
07:45 AM	0	0	0	0	0	32	2	0	0	0	3	0	4	14	0	0	55
Total	0	0	0	0	0	135	5	0	0	0	5	0	13	98	0	0	256
08:00 AM	0	0	0	0	0	29	1	0	0	0	3	0	8	21	0	0	62
08:15 AM	0	0	0	0	0	33	0	0	0	0	3	0	7	20	0	0	63
Grand Total	0	0	0	0	0	253	9	0	0	0	12	0	34	191	0	0	499
Apprch %	0.0	0.0	0.0	0.0	0.0	96.6	3.4	0.0	0.0	0.0	100.0	0.0	15.1	84.9	0.0	0.0	
Total %	0.0	0.0	0.0	0.0	0.0	50.7	1.8	0.0	0.0	0.0	2.4	0.0	6.8	38.3	0.0	0.0	

LSC Transportation Consultants, Inc.
545 E. Pikes Peak Ave., #210
Colorado Springs, CO 80903
(719) 633-2868

Site Name : Judge Orr Rd - Cessna Dr AM
 Site Code : 00164650
 Start Date : 08/16/2016
 Page No : 2

	From North					Judge Orr Rd From East					Cessna Dr From South					Judge Orr Rd From West					
Start Time	Rig ht	Thr u	Lef t	Pe ds	App. Total	Rig ht	Thr u	Lef t	Pe ds	App. Total	Rig ht	Thr u	Lef t	Pe ds	App. Total	Rig ht	Thr u	Lef t	Pe ds	App. Total	Int. Total
Peak Hour From 06:30 AM to 08:15 AM - Peak 1 of 1																					
Intersection	06:30 AM																				
Volume	0	0	0	0	0	0	130	6	0	136	0	0	3	0	3	11	115	0	0	126	265
Percent	0.0	0.0	0.0	0.0		0.0	95.6	4.4	0.0		0.0	0.0	10.0	0.0		8.7	91.3	0.0	0.0		
07:15 Volume	0	0	0	0	0	0	48	1	0	49	0	0	0	0	0	4	31	0	0	35	84
Peak Factor																					0.789
High Int.	6:15:00 AM					07:15 AM					07:00 AM					07:15 AM					
Volume	0	0	0	0	0	0	48	1	0	49	0	0	2	0	2	4	31	0	0	35	
Peak Factor											0.69 4					0.37 5					0.90 0

LSC Transportation Consultants, Inc.
545 E. Pikes Peak Ave., #210
Colorado Springs, CO 80903
(719) 633-2868

LSC Transportation Consultants, Inc.

Site Name : Judge Orr Rd - Cessna Dr PM
 Site Code : 00164650
 Start Date : 08/11/2016
 Page No : 1

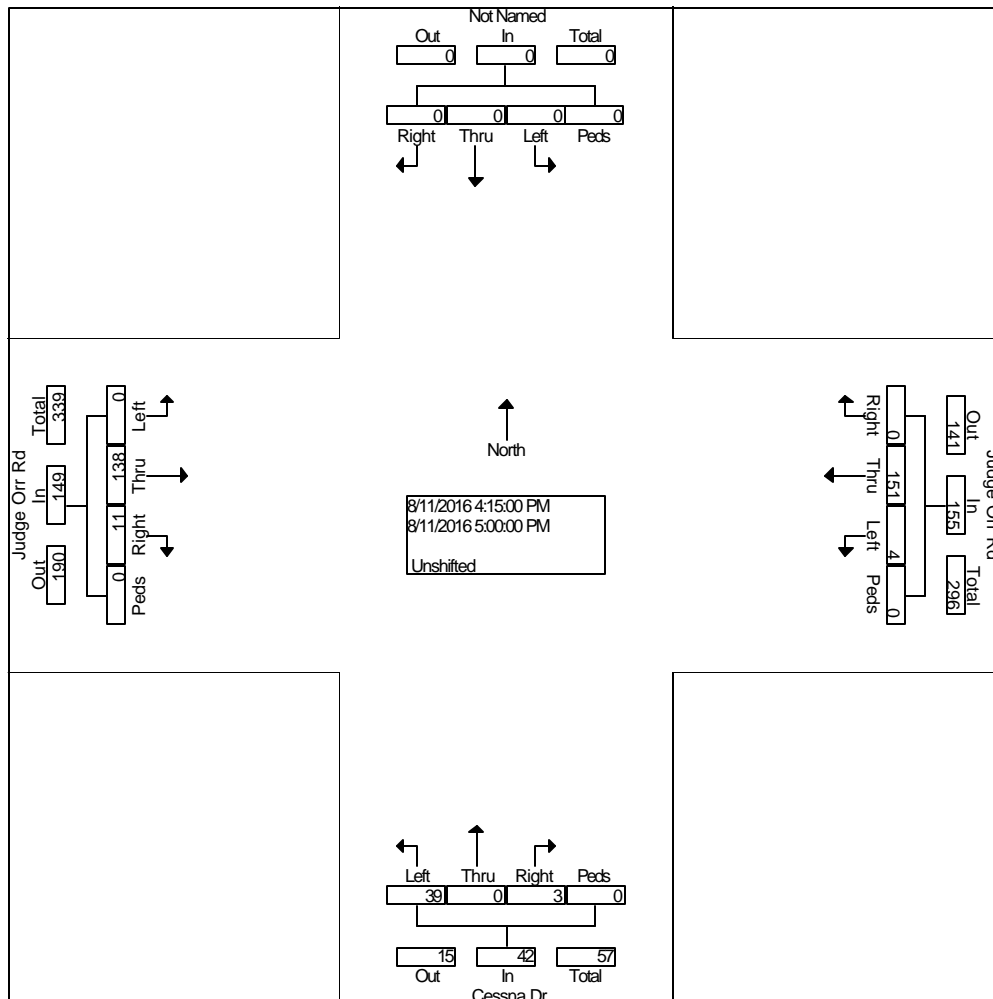
Groups Printed- Unshifted

	From North				Judge Orr Rd From East				Cessna Dr From South				Judge Orr Rd From West				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
04:00 PM	0	0	0	0	0	31	0	0	0	0	4	0	7	35	0	0	77
04:15 PM	0	0	0	0	0	38	2	0	0	0	6	0	1	31	0	0	78
04:30 PM	0	0	0	0	0	47	0	0	2	0	7	0	1	29	0	0	86
04:45 PM	0	0	0	0	0	41	0	0	0	0	13	0	5	39	0	0	98
Total	0	0	0	0	0	157	2	0	2	0	30	0	14	134	0	0	339
05:00 PM	0	0	0	0	0	25	2	0	1	0	13	0	4	39	0	0	84
05:15 PM	0	0	0	0	0	32	1	0	1	0	2	0	3	38	0	0	77
05:30 PM	0	0	0	0	0	23	0	0	0	0	4	0	5	37	0	0	69
05:45 PM	0	0	0	0	0	20	0	0	2	0	5	0	5	35	0	0	67
Total	0	0	0	0	0	100	3	0	4	0	24	0	17	149	0	0	297
Grand Total	0	0	0	0	0	257	5	0	6	0	54	0	31	283	0	0	636
Apprch %	0.0	0.0	0.0	0.0	0.0	98.1	1.9	0.0	10.0	0.0	90.0	0.0	9.9	90.1	0.0	0.0	
Total %	0.0	0.0	0.0	0.0	0.0	40.4	0.8	0.0	0.9	0.0	8.5	0.0	4.9	44.5	0.0	0.0	

LSC Transportation Consultants, Inc.
545 E. Pikes Peak Ave., #210
Colorado Springs, CO 80903
(719) 633-2868

Site Name : Judge Orr Rd - Cessna Dr PM
 Site Code : 00164650
 Start Date : 08/11/2016
 Page No : 2

	From North					Judge Orr Rd From East					Cessna Dr From South					Judge Orr Rd From West					
Start Time	Rig ht	Thru	Lef t	Pe ds	App. Total	Rig ht	Thru	Lef t	Pe ds	App. Total	Rig ht	Thru	Lef t	Pe ds	App. Total	Rig ht	Thru	Lef t	Pe ds	App. Total	Int. Total
Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Intersection	04:15 PM																				
Volume	0	0	0	0	0	0	15	4	0	155	3	0	39	0	42	11	13	0	0	149	346
Percent	0.0	0.0	0.0	0.0		0.0	97.4	2.6	0.0		7.1	0.0	92.9	0.0		7.4	92.6	0.0	0.0		
04:45 Volume	0	0	0	0	0	0	41	0	0	41	0	0	13	0	13	5	39	0	0	44	98
Peak Factor																					0.883
High Int.	3:45:00 PM					04:30 PM					05:00 PM					04:45 PM					
Volume	0	0	0	0	0	0	47	0	0	47	1	0	13	0	14	5	39	0	0	44	
Peak Factor											0.824					0.757					



Intersection												
Int Delay, s/veh	0.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	105	11	6	150	0	3	0	0	0	0	0
Future Vol, veh/h	0	105	11	6	150	0	3	0	0	0	0	0
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	92	90	90	69	69	92	92	92	92	92	92	92
Heavy Vehicles, %	20	2	2	2	2	20	2	2	2	20	2	20
Mvmt Flow	0	117	12	9	217	0	3	0	0	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	217	0	0	129	0	0	358	358	123	358	364	217
Stage 1	-	-	-	-	-	-	123	123	-	235	235	-
Stage 2	-	-	-	-	-	-	235	235	-	123	129	-
Critical Hdwy	4.3	-	-	4.12	-	-	7.12	6.52	6.22	7.3	6.52	6.4
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.3	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.3	5.52	-
Follow-up Hdwy	2.38	-	-	2.218	-	-	3.518	4.018	3.318	3.68	4.018	3.48
Pot Cap-1 Maneuver	1253	-	-	1457	-	-	597	568	928	565	564	780
Stage 1	-	-	-	-	-	-	881	794	-	729	710	-
Stage 2	-	-	-	-	-	-	768	710	-	839	789	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1253	-	-	1457	-	-	594	564	928	562	560	780
Mov Cap-2 Maneuver	-	-	-	-	-	-	594	564	-	562	560	-
Stage 1	-	-	-	-	-	-	881	794	-	729	705	-
Stage 2	-	-	-	-	-	-	763	705	-	839	789	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.3			11.1			0		
HCM LOS							B			A		

Minor Lane/Major Mvm	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	NBLn1	SBLn1
Capacity (veh/h)	594	1253	-	-	1457	-	-	-	-
HCM Lane V/C Ratio	0.005	-	-	-	0.006	-	-	-	-
HCM Control Delay (s)	11.1	0	-	-	7.5	0	-	0	-
HCM Lane LOS	B	A	-	-	A	A	-	A	-
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	-	-

Intersection												
Int Delay, s/veh	0.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	150	11	4	145	0	3	0	3	0	0	0
Future Vol, veh/h	0	150	11	4	145	0	3	0	3	0	0	0
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	92	85	85	95	95	92	81	92	81	92	92	92
Heavy Vehicles, %	20	2	2	2	2	20	2	2	2	20	2	20
Mvmt Flow	0	176	13	4	153	0	4	0	4	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	153	0	0	189	0	0	344	344	183	346	350	153
Stage 1	-	-	-	-	-	-	183	183	-	161	161	-
Stage 2	-	-	-	-	-	-	161	161	-	185	189	-
Critical Hdwy	4.3	-	-	4.12	-	-	7.12	6.52	6.22	7.3	6.52	6.4
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.3	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.3	5.52	-
Follow-up Hdwy	2.38	-	-	2.218	-	-	3.518	4.018	3.318	3.68	4.018	3.48
Pot Cap-1 Maneuver	1325	-	-	1385	-	-	610	579	859	576	574	848
Stage 1	-	-	-	-	-	-	819	748	-	800	765	-
Stage 2	-	-	-	-	-	-	841	765	-	777	744	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1325	-	-	1385	-	-	609	577	859	572	572	848
Mov Cap-2 Maneuver	-	-	-	-	-	-	609	577	-	572	572	-
Stage 1	-	-	-	-	-	-	819	748	-	800	763	-
Stage 2	-	-	-	-	-	-	838	763	-	774	744	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.2			10.1			0		
HCM LOS							B			A		

Minor Lane/Major Mvm	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	713	1325	-	-	1385	-	-	-
HCM Lane V/C Ratio	0.01	-	-	-	0.003	-	-	-
HCM Control Delay (s)	10.1	0	-	-	7.6	0	-	0
HCM Lane LOS	B	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	-

HCM 6th TWSC
2: Cessna Dr/Range Flower Way & Judge Orr Rd

Existing + Site
AM (Ph. 1)

Intersection												
Int Delay, s/veh	0.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	11	105	11	6	130	2	3	0	0	2	0	10
Future Vol, veh/h	11	105	11	6	130	2	3	0	0	2	0	10
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	92	90	90	69	69	92	92	92	92	92	92	92
Heavy Vehicles, %	20	2	2	2	2	20	2	2	2	20	2	20
Mvmt Flow	12	117	12	9	188	2	3	0	0	2	0	11

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	190	0	0	129	0	0	360	355	123	354	360	189
Stage 1	-	-	-	-	-	-	147	147	-	207	207	-
Stage 2	-	-	-	-	-	-	213	208	-	147	153	-
Critical Hdwy	4.3	-	-	4.12	-	-	7.12	6.52	6.22	7.3	6.52	6.4
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.3	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.3	5.52	-
Follow-up Hdwy	2.38	-	-	2.218	-	-	3.518	4.018	3.318	3.68	4.018	3.48
Pot Cap-1 Maneuver	1283	-	-	1457	-	-	596	571	928	569	567	809
Stage 1	-	-	-	-	-	-	856	775	-	756	731	-
Stage 2	-	-	-	-	-	-	789	730	-	815	771	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1283	-	-	1457	-	-	581	561	928	562	557	809
Mov Cap-2 Maneuver	-	-	-	-	-	-	581	561	-	562	557	-
Stage 1	-	-	-	-	-	-	847	767	-	748	726	-
Stage 2	-	-	-	-	-	-	773	725	-	807	763	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.7			0.3			11.2			9.9		
HCM LOS							B			A		

Minor Lane/Major Mvm	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	581	1283	-	-	1457	-	-	754
HCM Lane V/C Ratio	0.006	0.009	-	-	0.006	-	-	0.017
HCM Control Delay (s)	11.2	7.8	0	-	7.5	0	-	9.9
HCM Lane LOS	B	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.1

Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	15	150	11	4	100	3	3	0	3	3	0	14
Future Vol, veh/h	15	150	11	4	100	3	3	0	3	3	0	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	92	85	85	95	95	92	81	92	81	92	92	92
Heavy Vehicles, %	20	2	2	2	2	20	2	2	2	20	2	20
Mvmt Flow	16	176	13	4	105	3	4	0	4	3	0	15

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	108	0	0	189	0	0	337	331	183	332	336	107
Stage 1	-	-	-	-	-	-	215	215	-	115	115	-
Stage 2	-	-	-	-	-	-	122	116	-	217	221	-
Critical Hdwy	4.3	-	-	4.12	-	-	7.12	6.52	6.22	7.3	6.52	6.4
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.3	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.3	5.52	-
Follow-up Hdwy	2.38	-	-	2.218	-	-	3.518	4.018	3.318	3.68	4.018	3.48
Pot Cap-1 Maneuver	1378	-	-	1385	-	-	617	588	859	588	585	900
Stage 1	-	-	-	-	-	-	787	725	-	848	800	-
Stage 2	-	-	-	-	-	-	882	800	-	746	720	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1378	-	-	1385	-	-	599	579	859	579	576	900
Mov Cap-2 Maneuver	-	-	-	-	-	-	599	579	-	579	576	-
Stage 1	-	-	-	-	-	-	777	716	-	837	798	-
Stage 2	-	-	-	-	-	-	864	798	-	733	711	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.6			0.3			10.2			9.5		
HCM LOS							B			A		

Minor Lane/Major Mvm	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	NBLn1	SBLn1
Capacity (veh/h)	706	1378	-	-	1385	-	-	820	
HCM Lane V/C Ratio	0.01	0.012	-	-	0.003	-	-	0.023	
HCM Control Delay (s)	10.2	7.6	0	-	7.6	0	-	9.5	
HCM Lane LOS	B	A	A	-	A	A	-	A	
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.1	






Intersection												
Int Delay, s/veh	0.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	110	11	4	160	0	3	0	0	0	0	0
Future Vol, veh/h	0	110	11	4	160	0	3	0	0	0	0	0
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	92	90	90	69	69	92	92	92	92	92	92	92
Heavy Vehicles, %	20	2	2	2	2	20	2	2	2	20	2	20
Mvmt Flow	0	122	12	6	232	0	3	0	0	0	0	0
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	232	0	0	134	0	0	372	372	128	372	378	232
Stage 1	-	-	-	-	-	-	128	128	-	244	244	-
Stage 2	-	-	-	-	-	-	244	244	-	128	134	-
Critical Hdwy	4.3	-	-	4.12	-	-	7.12	6.52	6.22	7.3	6.52	6.4
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.3	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.3	5.52	-
Follow-up Hdwy	2.38	-	-	2.218	-	-	3.518	4.018	3.318	3.68	4.018	3.48
Pot Cap-1 Maneuver	237	-	-	1451	-	-	585	558	922	553	554	765
Stage 1	-	-	-	-	-	-	876	790	-	721	704	-
Stage 2	-	-	-	-	-	-	760	704	-	834	785	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	237	-	-	1451	-	-	583	555	922	551	551	765
Mov Cap-2 Maneuver	-	-	-	-	-	-	583	555	-	551	551	-
Stage 1	-	-	-	-	-	-	876	790	-	721	700	-
Stage 2	-	-	-	-	-	-	756	700	-	834	785	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.2			11.2			0		
HCM LOS							B			A		
Minor Lane/Major Mvm	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	583	1237	-	-	1451	-	-	-				
HCM Lane V/C Ratio	0.006	-	-	-	0.004	-	-	-				
HCM Control Delay (s)	11.2	0	-	-	7.5	0	-	0				
HCM Lane LOS	B	A	-	-	A	A	-	A				
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	-				






Intersection												
Int Delay, s/veh	0.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	160	11	4	155	0	3	0	3	0	0	0
Future Vol, veh/h	0	160	11	4	155	0	3	0	3	0	0	0
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	92	85	85	95	95	92	81	92	81	92	92	92
Heavy Vehicles, %	20	2	2	2	2	20	2	2	2	20	2	20
Mvmt Flow	0	188	13	4	163	0	4	0	4	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	163	0	0	201	0	0	366	366	195	368	372	163
Stage 1	-	-	-	-	-	-	195	195	-	171	171	-
Stage 2	-	-	-	-	-	-	171	171	-	197	201	-
Critical Hdwy	4.3	-	-	4.12	-	-	7.12	6.52	6.22	7.3	6.52	6.4
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.3	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.3	5.52	-
Follow-up Hdwy	2.38	-	-	2.218	-	-	3.518	4.018	3.318	3.68	4.018	3.48
Pot Cap-1 Maneuver	1313	-	-	1371	-	-	590	562	846	557	558	837
Stage 1	-	-	-	-	-	-	807	739	-	790	757	-
Stage 2	-	-	-	-	-	-	831	757	-	765	735	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1313	-	-	1371	-	-	589	560	846	553	556	837
Mov Cap-2 Maneuver	-	-	-	-	-	-	589	560	-	553	556	-
Stage 1	-	-	-	-	-	-	807	739	-	790	755	-
Stage 2	-	-	-	-	-	-	829	755	-	762	735	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.2			10.2			0		
HCM LOS							B			A		

Minor Lane/Major Mvm	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	694	1313	-	-	1371	-	-	-
HCM Lane V/C Ratio	0.011	-	-	-	0.003	-	-	-
HCM Control Delay (s)	10.2	0	-	-	7.6	0	-	0
HCM Lane LOS	B	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	-

Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	16	110	11	6	160	3	3	0	0	3	0	19
Future Vol, veh/h	16	110	11	6	160	3	3	0	0	3	0	19
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	300	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	90	90	69	69	92	92	92	92	92	92	92
Heavy Vehicles, %	20	2	2	2	2	20	2	2	2	20	2	20
Mvmt Flow	17	122	12	9	232	3	3	0	0	3	0	21
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	235	0	0	134	0	0	424	415	128	414	420	234
Stage 1	-	-	-	-	-	-	162	162	-	252	252	-
Stage 2	-	-	-	-	-	-	262	253	-	162	168	-
Critical Hdwy	4.3	-	-	4.12	-	-	7.12	6.52	6.22	7.3	6.52	6.4
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.3	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.3	5.52	-
Follow-up Hdwy	2.38	-	-	2.218	-	-	3.518	4.018	3.318	3.68	4.018	3.48
Pot Cap-1 Maneuver	233	-	-	1451	-	-	540	528	922	518	525	763
Stage 1	-	-	-	-	-	-	840	764	-	714	698	-
Stage 2	-	-	-	-	-	-	743	698	-	799	759	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	233	-	-	1451	-	-	517	517	922	510	514	763
Mov Cap-2 Maneuver	-	-	-	-	-	-	517	517	-	510	514	-
Stage 1	-	-	-	-	-	-	828	753	-	704	693	-
Stage 2	-	-	-	-	-	-	718	693	-	788	748	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.9			0.3			12			10.2		
HCM LOS							B			B		
Minor Lane/Major Mvm	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)		517	1233	-	-	1451	-	-	715			
HCM Lane V/C Ratio		0.006	0.014	-	-	0.006	-	-	0.033			
HCM Control Delay (s)		12	8	-	-	7.5	0	-	10.2			
HCM Lane LOS		B	A	-	-	A	A	-	B			
HCM 95th %tile Q(veh)		0	0	-	-	0	-	-	0.1			












Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	25	160	11	4	155	5	0	0	3	4	0	20
Future Vol, veh/h	25	160	11	4	155	5	0	0	3	4	0	20
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	300	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	0	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	85	85	95	95	92	81	92	81	92	92	92
Heavy Vehicles, %	20	2	2	2	2	20	2	2	2	20	2	20
Mvmt Flow	27	188	13	4	163	5	0	0	4	4	0	22











Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	168	0	0	201	0	0	434	425	195	425	429	166
Stage 1	-	-	-	-	-	-	249	249	-	174	174	-
Stage 2	-	-	-	-	-	-	185	176	-	251	255	-
Critical Hdwy	4.3	-	-	4.12	-	-	7.12	6.52	6.22	7.3	6.52	6.4
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.3	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.3	5.52	-
Follow-up Hdwy	2.38	-	-	2.218	-	-	3.518	4.018	3.318	3.68	4.018	3.48
Pot Cap-1 Maneuver	1308	-	-	1371	-	-	532	521	846	509	518	834
Stage 1	-	-	-	-	-	-	755	701	-	788	755	-
Stage 2	-	-	-	-	-	-	817	753	-	715	696	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1308	-	-	1371	-	-	509	508	846	498	506	834
Mov Cap-2 Maneuver	-	-	-	-	-	-	509	508	-	498	506	-
Stage 1	-	-	-	-	-	-	739	686	-	771	753	-
Stage 2	-	-	-	-	-	-	793	751	-	697	681	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.9			0.2			9.3			10		
HCM LOS							A			B		

Minor Lane/Major Mvm	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	846	1308	-	-	1371	-	-	750
HCM Lane V/C Ratio	0.004	0.021	-	-	0.003	-	-	0.035
HCM Control Delay (s)	9.3	7.8	-	-	7.6	0	-	10
HCM Lane LOS	A	A	-	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0.1	-	-	0	-	-	0.1

Intersection												
Int Delay, s/veh	6.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↰↱		↰	↰↱	↰	↰	↰		↰	↰	↰
Traffic Vol, veh/h	275	300	20	10	350	75	10	5	10	50	5	150
Future Vol, veh/h	275	300	20	10	350	75	10	5	10	50	5	150
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	385	-	-	285	-	235	0	-	-	125	-	170
Veh in Median Storage, #	0	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	289	316	21	11	368	79	11	5	11	53	5	158
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	447	0	0	337	0	0	1114	1374	169	1129	1305	184
Stage 1	-	-	-	-	-	-	905	905	-	390	390	-
Stage 2	-	-	-	-	-	-	209	469	-	739	915	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	110	-	-	1219	-	-	163	144	845	159	159	827
Stage 1	-	-	-	-	-	-	298	353	-	606	606	-
Stage 2	-	-	-	-	-	-	774	559	-	375	350	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	110	-	-	1219	-	-	101	106	845	120	117	827
Mov Cap-2 Maneuver	-	-	-	-	-	-	101	106	-	120	117	-
Stage 1	-	-	-	-	-	-	221	261	-	448	601	-
Stage 2	-	-	-	-	-	-	615	554	-	268	259	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	4.3			0.2			29.9			22.3		
HCM LOS							D			C		
Minor Lane/Major Mvm	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	SBLn3	
Capacity (veh/h)	101	254	1110	-	-	1219	-	-	120	117	827	
HCM Lane V/C Ratio	0.104	0.062	0.261	-	-	0.009	-	-	0.439	0.045	0.191	
HCM Control Delay (s)	44.7	20.1	9.4	-	-	8	-	-	56.6	37.2	10.4	
HCM Lane LOS	E	C	A	-	-	A	-	-	F	E	B	
HCM 95th %tile Q(veh)	0.3	0.2	1	-	-	0	-	-	1.9	0.1	0.7	

Intersection												
Int Delay, s/veh	8.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	175	325	20	10	350	50	50	10	10	75	10	275
Future Vol, veh/h	175	325	20	10	350	50	50	10	10	75	10	275
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	385	-	-	285	-	235	0	-	-	125	-	170
Veh in Median Storage, #	0	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	184	342	21	11	368	53	53	11	11	79	11	289
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	421	0	0	363	0	0	933	1164	182	935	1121	184
Stage 1	-	-	-	-	-	-	721	721	-	390	390	-
Stage 2	-	-	-	-	-	-	212	443	-	545	731	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	135	-	-	1192	-	-	221	193	829	220	205	827
Stage 1	-	-	-	-	-	-	385	430	-	606	606	-
Stage 2	-	-	-	-	-	-	770	574	-	490	425	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	135	-	-	1192	-	-	119	160	829	180	170	827
Mov Cap-2 Maneuver	-	-	-	-	-	-	119	160	-	180	170	-
Stage 1	-	-	-	-	-	-	323	360	-	508	601	-
Stage 2	-	-	-	-	-	-	487	569	-	393	356	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	3			0.2			46.5			18		
HCM LOS							E			C		
Minor Lane/Major Mvm	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	SBLn3	
Capacity (veh/h)	119	268	1135	-	-	1192	-	-	180	170	827	
HCM Lane V/C Ratio	0.442	0.079	0.162	-	-	0.009	-	-	0.439	0.062	0.35	
HCM Control Delay (s)	57.3	19.6	8.8	-	-	8	-	-	39.8	27.6	11.7	
HCM Lane LOS	F	C	A	-	-	A	-	-	E	D	B	
HCM 95th %tile Q(veh)	1.9	0.3	0.6	-	-	0	-	-	2	0.2	1.6	

Intersection												
Int Delay, s/veh	7.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	290	300	20	10	350	80	10	5	10	55	5	170
Future Vol, veh/h	290	300	20	10	350	80	10	5	10	55	5	170
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	385	-	-	285	-	235	0	-	-	125	-	170
Veh in Median Storage, #	0	-	-	0	-	-	0	-	-	0	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	305	316	21	11	368	84	11	5	11	58	5	179

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	452	0	0	337	0	0	1146	1411	169	1161	1337	184
Stage 1	-	-	-	-	-	-	937	937	-	390	390	-
Stage 2	-	-	-	-	-	-	209	474	-	771	947	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	105	-	-	1219	-	-	154	137	845	150	152	827
Stage 1	-	-	-	-	-	-	285	342	-	606	606	-
Stage 2	-	-	-	-	-	-	774	556	-	359	338	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	105	-	-	1219	-	-	91	98	845	111	109	827
Mov Cap-2 Maneuver	-	-	-	-	-	-	91	98	-	111	109	-
Stage 1	-	-	-	-	-	-	206	248	-	439	601	-
Stage 2	-	-	-	-	-	-	596	551	-	251	245	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	4.5			0.2			32.5			25.1		
HCM LOS							D			D		

Minor Lane/Major Mvm	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	91	239	1105	-	-	1219	-	-	111	109	827
HCM Lane V/C Ratio	0.116	0.066	0.276	-	-	0.009	-	-	0.522	0.048	0.216
HCM Control Delay (s)	49.7	21.1	9.5	-	-	8	-	-	68.4	39.7	10.6
HCM Lane LOS	E	C	A	-	-	A	-	-	F	E	B
HCM 95th %tile Q(veh)	0.4	0.2	1.1	-	-	0	-	-	2.4	0.1	0.8

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	200	325	20	10	350	55	50	10	10	80	10	300
Future Vol, veh/h	200	325	20	10	350	55	50	10	10	80	10	300
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	385	-	-	285	-	235	0	-	-	125	-	170
Veh in Median Storage, #	0	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	211	342	21	11	368	58	53	11	11	84	11	316
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	426	0	0	363	0	0	987	1223	182	989	1175	184
Stage 1	-	-	-	-	-	-	775	775	-	390	390	-
Stage 2	-	-	-	-	-	-	212	448	-	599	785	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	130	-	-	1192	-	-	202	178	829	201	190	827
Stage 1	-	-	-	-	-	-	357	406	-	606	606	-
Stage 2	-	-	-	-	-	-	770	571	-	455	402	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	130	-	-	1192	-	-	101	143	829	160	153	827
Mov Cap-2 Maneuver	-	-	-	-	-	-	101	143	-	160	153	-
Stage 1	-	-	-	-	-	-	290	330	-	493	601	-
Stage 2	-	-	-	-	-	-	463	566	-	354	327	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	3.3			0.2			59			20.3		
HCM LOS							F			C		
Minor Lane/Major Mvm	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	SBLn3	
Capacity (veh/h)	101	244	1130	-	-	1192	-	-	160	153	827	
HCM Lane V/C Ratio	0.521	0.086	0.186	-	-	0.009	-	-	0.526	0.069	0.382	
HCM Control Delay (s)	74.2	21.1	8.9	-	-	8	-	-	50.1	30.3	12	
HCM Lane LOS	F	C	A	-	-	A	-	-	F	D	B	
HCM 95th %tile Q(veh)	2.4	0.3	0.7	-	-	0	-	-	2.6	0.2	1.8	

SITE DEVELOPMENT PLAN

JUDGE ORR ROAD RV PARK AND STORAGE

TOWNSHIP: 12 SW4 SW4 SEC 33-12-64 TOG WITH THE ELY 20.0 FT OF THE SE4SE4 SEC 32-12-64: EL PASO COUNTY, COLORADO

PROPERTY OWNER:

PRAIRIE STONE LLC
9476 DAKOTA DUNES LANE
PEYTON, CO 80831-4138

PREPARED BY:

WILLIAM GUMAN & ASSOCIATES, LTD.
731 NORTH WEBER STREET
COLORADO SPRINGS, CO 80903

STREET ADDRESS AND LEGAL DESCRIPTION:

14010 JUDGE ORR ROAD
PEYTON, CO 80831

SW4SW4 SEC 33-12-64 TOG WITH THE ELY 20.0 FT OF
THE SE4SE4 SEC 32-12-64

SCHEDULE NO.:

4233000027

EXISTING ADJACENT ROAD DATA:

Road Name	Width	Classification / Surface
Judge Orr Road	40.0'	Major Arterial / Asphalt
State Highway 24	40.0'	State Highway / Asphalt
Cessna Drive	25.0'	Local / Asphalt

SITE DATA:

Land Use	Gross AC	%
Vacant	35.03	100.00%
Total:	35.03	100.00%

ZONING:

THE PROPERTY IS ZONED RV-P: RECREATIONAL
VEHICLE PARK.

ALLOWED USES PER LDC CHAPTER 5:

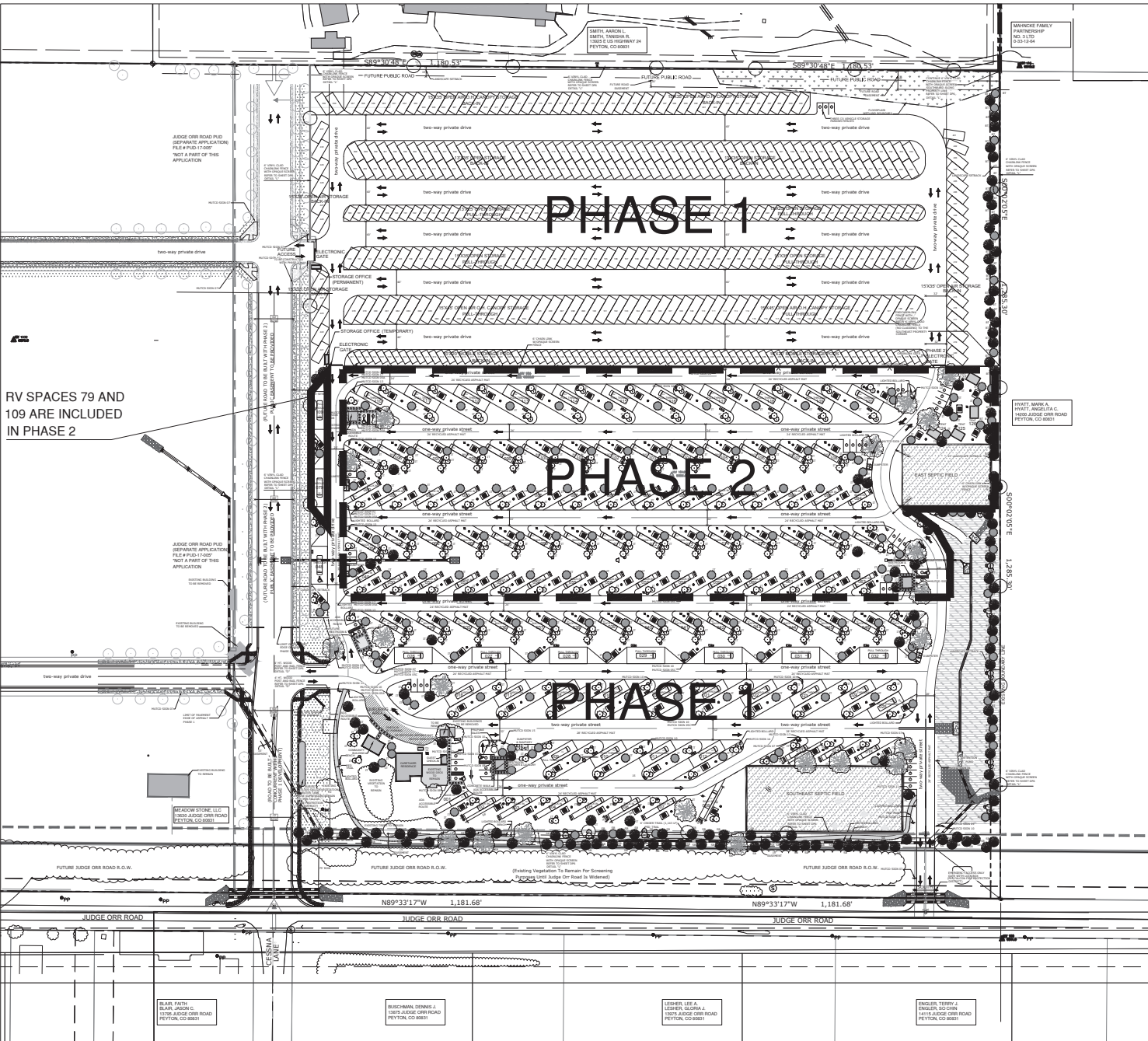
THE RVP DISTRICT IS INTENDED TO ACCOMMODATE
RECREATIONAL VEHICLE PARKS, WHICH ARE SITES
USED FOR TEMPORARY LOCATION OF OCCUPIED
RECREATIONAL VEHICLES. THESE FACILITIES COVER
A RANGE OF SHORT OVERNIGHT STOPS TO LONGER
DESTINATION TYPE STAYS OF SEVERAL DAYS OR
WEEKS.

1. COMMUNITY BUILDING
2. EMERGENCY FACILITY, PUBLIC
3. INERT MATERIAL DISPOSAL SITE - MINOR
4. PUBLIC BUILDING, WAY OR SPACE
5. PUBLIC PARK AND OPEN SPACE
6. RELIGIOUS INSTITUTION
7. TINY HOUSE, RECREATIONAL VEHICLE PARK

ADDITIONAL REQUESTED USES:

1. LAUNDROMAT (RV PARK GUESTS ONLY)
2. RECREATIONAL VEHICLE AND BOAT STORAGE
3. FUEL SALES AND STORAGE (RV PROPANE SALES ONLY)
4. CONVENIENCE STORE (RV SUPPLIES)
5. CARETAKER'S QUARTERS

VICINITY MAP:



Americans with Disabilities Act (ADA)

Site Accessibility:

The parties responsible for this plan have familiarized themselves with all current accessibility criteria and specifications and the proposed plan reflects all site elements required by the applicable ADA design standards and guidelines as published by the United States Department of Justice. Approval of this plan by El Paso County does not assure compliance with the ADA or any regulations or guidelines enacted or promulgated under or with respect to such laws.

Adjacent Property Owners:

Blair, Faith & Jason C.	13795 Judge Orr Road	TSN 4305005022
Buschman, Dennis J.	13875 Judge Orr Road	TSN 4304001001
Leshner, Lee A. & Gloria J.	13975 Judge Orr Road	TSN 4304001002
Engler, Terry J. & So Chin	14115 Judge Orr Road	TSN 4304001003
Hyatt, Mark A. & Angelita C.	14200 Judge Orr Road	TSN 4233000028
Mahncke Family Partnership No. 3 Ltd.	33-12-64	TSN 4233000012
Smith, Aaron L. & Tanisha R.	13925 E. Highway 24	TSN 4233001001
Meadow Stone LLC	13630 Judge Orr Road	TSN 4200000249

Existing Adjacent Road Data

Road Name	Width	Classification / Surface
State Highway 24	40.0'	State Highway / Asphalt
Judge Orr Road	40.0'	Major Arterial / Asphalt
Cessna Drive	25.0'	Local / Asphalt

Site Density

TOTAL SITE ACREAGE	35.03 AC.
OCCUPIED RV ACREAGE (120 SPACES)	3.16 AC.
OPEN AIR STORAGE PAD ACREAGE (225 SPACES)	2.49 AC.
COVERED STORAGE PAD ACREAGE (128 SPACES)	1.14 AC.
POD ACREAGE (76 PODS)	.52 AC.
R.O.W. ACREAGE	12.96 AC.
DRAINAGE & BUFFER TRACTS ACREAGE	6.67 AC.
OPEN SPACE ACREAGE	8.09 AC.
NET DENSITY (LESS DEDICATED R.O.W. AND OPEN SPACE)	8.58 RVs/AC.
GROSS DENSITY	3.43 RVs/AC.

* RVs - RECREATIONAL VEHICLE SPACES

RV Space Phasing Data:

Phase 1	Phase 2
48 RV Spaces	72 RV Spaces
26.67 Acres	8.36 Acres

DRAWING INDEX

ABBR.		SHEET
DP1	FINAL DEVELOPMENT PLAN COVER	COVER
DP2	FINAL DEVELOPMENT PLAN LANDSCAPE	2
DP3	FINAL DEVELOPMENT PLAN LANDSCAPE	3
DP4	FINAL DEVELOPMENT PLAN LANDSCAPE	4
DP5	FINAL DEVELOPMENT PLAN LANDSCAPE	5
DP6	FINAL DEVELOPMENT PLAN LANDSCAPE DETAILS	6
DP7	FINAL DEVELOPMENT PLAN LANDSCAPE DETAILS	7

Site Data (Overall):

Land Use	Gross AC	%
Occupied RV (120 Spaces)	3.16 AC.	9.0%
Open Air Storage (225 Spaces)	2.49 AC.	7.1%
Covered Storage Pad (128 Spaces)	1.14 AC.	3.3%
Pods (76 Pods)	.52 AC.	1.5%
Total Storage Spaces: 429 Spaces		
Total RV Spaces: 120 Spaces		
Total Tent Spaces: 4 Spaces		
Standard Parking Spaces: 43 Spaces		
Handicap Parking Spaces: 4 Spaces		
Land Use Subtotal:	7.31 AC.	20.9%
Useable Open Space	8.09 AC.	23.1%
Drainage & Buffer Tracts	6.67 AC.	19.0%
Subtotal:	22.07 AC.	63.0%
Road R.O.W.:	12.96 AC.	37.0%
Total:	35.03 AC.	100%

*The Parking Space area is included in Road R.O.W.
Gross AC

Site Data phase 1:

Land Use	Gross AC	%
Occupied RV (48 Spaces)	1.61 AC.	6.0%
Open Air Storage (225 Spaces)	2.49 AC.	9.2%
Covered Storage Pad (128 Spaces)	1.14 AC.	4.2%
Pods (76 Pods)	.52 AC.	1.9%
Total Storage Spaces: 429 Spaces		
Total RV Spaces: 48 Spaces		
Total Tent Spaces: 0 Spaces		
Standard Parking Spaces: 18 Spaces*		
Handicap Parking Spaces: 2 Spaces*		
Land Use Subtotal:	5.76 AC.	21.3%
Useable Open Space	3.59 AC.	13.2%
Drainage & Buffer Tracts	6.17 AC.	22.8%
Subtotal:	15.52 AC.	57.3%
Road R.O.W.:	11.55 AC.	42.7%
Total:	27.07 AC.	100%

*The Parking Space area is included in Road R.O.W.
Gross AC

Site Data phase 2:

Land Use	Gross AC	%
Occupied RV (72 Spaces)	1.55 AC.	19.5%
Open Air Storage (0 Spaces)	NA	
Covered Storage Pad (0 Spaces)	NA	
Pods (0 Pods)	NA	
Total Storage Spaces: 0 Spaces	NA	
Total RV Spaces: 72 Spaces		
Total Tent Spaces: 4 Spaces**		
Standard Parking Spaces: 25 Spaces*		
Handicap Parking Spaces: 2 Spaces*		
Land Use Subtotal:	1.55 AC.	19.5%
Useable Open Space	4.50 AC.	56.5%
Drainage & Buffer Tracts	0.50 AC.	6.3%
Subtotal:	6.55 AC.	82.3%
Road R.O.W.:	1.41 AC.	17.7%
Total:	7.96 AC.	100%

*The Parking Space area is included in Road R.O.W.
Gross AC

**The Tent Space area is included in Useable Open
Space Gross AC

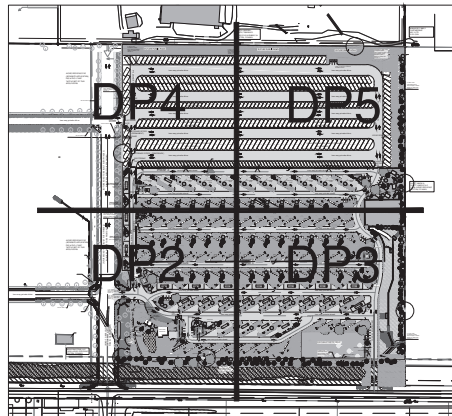
Parking Data:

120 Total RV Spaces
40 Standard Parking Spaces
4 Handicap Parking Spaces
3 Vehicle Storage Parking Spaces

Parking Detail:



SHEET KEY



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AN AMENDED DEVELOPMENT PLAN MAY
RESULT IN DELAY OF FINAL ACCEPTANCE
AND ISSUANCE OF CERTIFICATE OF
OCCUPANCY.

JUDGE ORR ROAD RV PARK
AND STORAGE
14010 Judge Orr Road | Peyton, CO 80831
SITE DEVELOPMENT PLAN

DATE: 07/25/18
DRAWN: WFG GEM
CHECKED: WFG

DATE:	BY:	COMMENTS:
07/25/18	GEM/WFG	REVISED SITE LAYOUT

SITE
DEVELOPMENT PLAN
COVER

SHEET NO.

DP1

1 of 7 SHEETS

File number: PPR-16-040



<p align="center"> Appendix Table Preliminary Trip Generation Estimate Adjacent Property - Judge Orr Commercial PUD </p>

Land Use Code	Land Use Description	Area (Acres)	FAR	Trip Generation Units	Trip Generation Rates ⁽¹⁾					Total Trips Generated				
					Average Weekday Traffic	Morning Peak Hour		Afternoon Peak Hour		Average Weekday Traffic	Morning Peak Hour		Afternoon Peak Hour	
						In	Out	In	Out		In	Out	In	Out
Phase 1														
770	Business Park	15.603	0.3	204 KSF ⁽³⁾	12.69	1.16	0.21	0.34	0.97	2,590	238	42	69	197
Buildout														
770	Business Park	26.386	0.3	345 KSF	12.69	1.16	0.21	0.34	0.97	4,380	402	71	117	333
Notes: (1) Source: "Trip Generation, 9th Edition, 2012" by the Institute of Transportation Engineers (ITE) (2) Source: "Trip Generation Handbook - An ITE Proposed Recommended Practice, Second Edition June 2004" by ITE (3) KSF = thousand square feet of floor space														
Source: LSC Transportation Consultants, Inc.														