

February 3, 2023

Nico Fricchione
Principal
ONETEN REI
140 E Rio Salado Pkwy, Suite 1104
Tempe, AZ 85281

Re: Oro Valley Tropical Smoothie | Traffic Impact Statement
SWC La Canada Dr/Lambert Ln, Oro Valley, AZ

1 INTRODUCTION

This Traffic Impact Statement (TIS) was prepared for the Oro Valley Tropical Smoothie (Project) located on the southwest corner of La Canada Drive and Lambert Lane in the Town of Oro Valley, Arizona (Town).

The purpose of this study was to document existing conditions and the proposed Project site plan, as well as calculate anticipated site-generated trips associated with the Project.

The Project will develop a 0.81-acre parcel with 1,544 square feet (SF) of gross floor area (GFA) of fast-food restaurant use, as shown in the site plan (Attachment A). The Project is forecast to generate 69 AM peak hour trips, 51 PM peak hour trips, and 722 average daily trips (ADT) based on the Institute of Transportation Engineers (ITE) Land Use 934 "Fast-Food Restaurant with Drive-Through Window". After adjustments for pass-by trips, the Project is forecast to generate approximately 33 AM peak hour trips, 21 PM peak hour trips, and 656 daily trips.

Since the Project is expected to generate fewer than 100 peak hour trips, the Project warrants a TIS. This TIS has been prepared in accordance with the Arizona Department of Transportation's (ADOT) Traffic Guidelines and Processes (TGP) 240 Traffic Impact Analysis & Statement for review and approval by the Town, as the Town defaults to ADOT's traffic study scoping guidelines.

2 PROJECT BACKGROUND

The Project site is located on the southwest corner of La Canada Drive and Lambert Lane in Oro Valley, Arizona, as shown in Figure 1. The Project site is an existing undeveloped parcel. The site is bounded by parking to the north, La Canada Drive to the east, and the Canada Crossroads strip mall buildings to the south and west.

The Project's primary site access will be achieved through one existing full-access driveway along La Canada Drive. Motorists can access the site via existing right-in/right-out driveways along Lambert Lane and La Canada Drive using the internal circulation within the larger commercial development. The anticipated Project opening year is 2023.

Figure 1: Project Location



3 EXISTING CONDITIONS

3.1 Existing Roadways

Lambert Lane is a 4-lane, east-west divided roadway. The cross section includes pavement, raised median, and curb and gutter on both sides of the roadway. The north side of the roadway provides sidewalk, and the south side of the roadway provides a bi-directional bike path. There is a 45 mile per hour (mph) posted speed limit on Lambert Lane. Lambert Lane is classified as an Urban Minor Arterial based on the ADOT Statewide Federal Functional System Online Map.

La Canada Drive is a 4-lane, north-south divided roadway. The cross section includes pavement, raised median, and curb and gutter on both sides of the roadway. The west side of the roadway provides sidewalk, and the east side of the roadway provides a bi-directional bike path. The posted speed limit is 45 mph adjacent to the Project site. La Canada Drive is classified as an Urban Minor Arterial based on the ADOT Statewide Federal Functional System Online Map.

3.2 Intersections

Lambert Lane and La Canada Drive is a four-leg signalized intersection. The northbound, southbound, and eastbound approaches consist of one dedicated left-turn lane, two through lanes and one dedicated right turn lane; the westbound approach consists of one dedicated left-turn lane, one dedicated through lane, and one shared through/right-turn lane.

4 PROPOSED SITE CONDITIONS

4.1 Site Access, Circulation and Parking

The Project primary site access will be achieved through one existing full access driveway along La Canada Drive. Motorists can access the site via existing right-in/right-out driveways along Lambert Lane and La Canada Drive

using the internal circulation within the larger commercial development. There are no sight distance concerns at any of the existing site access driveway locations.

Operations information was provided by the tenant who operates the Houghton Town Center restaurant, located at Houghton Road/Old Vail Road in Tucson, AZ. The peak business hours of the restaurant are between 11 AM – 1 PM, with 11 AM – 12 PM being the typical peak hour. The busiest day occurred in May 2021 with a peak hour of approximately 26 entering vehicles. The typical peak hour maximum number of vehicles in the drive-through queue is 6-7. Vehicles typically complete the entire drive-through transaction within about 2 minutes.

There is a single-lane drive-through proposed on the site. The driveway will begin at the northwest corner of the site which travels along the west side of the building and continues to the pickup window on the south side of the building. The drive-through exit will be on the southeast corner of the site.

Parking will be provided for this development on all sides of the building. There will be a total of 32 parking spaces, including 2 accessible spaces, provided by the Project.

4.2 Trip Generation

Before reductions due to pass-by trips, the Project is forecast to generate approximately 69 AM peak hour trips, 51 PM peak hour trips, and 722 daily trips on a typical weekday based on the Institute of Transportation Engineers (ITE) Trip Generation Manual (TGM), 11th Edition.

After adjustments for pass-by trips, the Project is forecast to generate approximately 33 AM peak hour trips, 21 PM peak hour trips and 656 daily trips. These are the estimated new trips that are expected to be added to the roadway network. Calculated trip values are shown in Table 1. A detailed trip generation calculation sheet is included in Attachment B.

4.3 Pass-By Trips

Pass-by trips are intermediate stops made by motorists traveling from an origin to a primary trip destination. Pass-by trips are attracted to a trip generator from existing adjacent street traffic “passing by” the use. These trips are not new trips added to the roadway by the proposed development; however, they are still accounted for at the site driveways. Since pass-by trips come from existing traffic already traveling past the site, these trips are deducted from the total new trips generated by the proposed development.

Based on appendices contained within the ITE TGM, Fast-Food Restaurant with Drive-Through Window AM/PM peak hour average pass-by percentages are 50%/55%.

Table 1: Project Trip Generation

Land Use	ITE Code ¹	Size	Unit	AM Peak Hour			PM Peak Hour			Daily Volume
				In	Out	Total	In	Out	Total	
Fast-Food Restaurant with Drive-Through Window	934	1.54	KSF GFA ²	35	34	69	27	24	51	722
Total Driveway Trips				35	34	69	27	24	51	722
Fast-Food Restaurant with Drive-Through Window Pass-By Trips at 50% and 55% (AM and PM) ³				-18	-18	-36	-15	-15	-30	-66
Pass-By Driveway Trips				-18	-18	-36	-15	-15	-30	-66
Total New External Trips				17	16	33	12	9	21	656

1. Land Use Code (LUC), per ITE TGM, 11th Edition.
2. KSF GFA = 1,000 square feet of gross floor area
3. Pass-by trip rates summarized from ITE TGM Appendices.

5 CONCLUSIONS

The following conclusions are made based on the findings of the Project TIS:

1. The Project is expected to generate approximately 69 AM peak hour, 51 PM peak hour and 722 daily trips based on the ITE Trip Generation Manual, 11th Edition. After adjustments for pass-by trips, the Project is forecast to generate approximately 33 AM peak hour trips, 21 PM peak hour trips and 656 daily trips.
2. The Project is not expected to have a significant impact to the surrounding roadway infrastructure as it is expected to generate under 100 peak hour trips.
3. There are no sight-distance concerns at the existing Project driveways.

6 RECOMMENDATIONS

In summary, the proposed Project is expected to have no significant impact on the adjacent roadway network. The following recommendations were developed based on the findings of the Project TIS:

1. Design and construction of the proposed Project improvements should conform to the Town of Oro Valley design guidelines, as applicable.

Sincerely,
Greenlight Traffic Engineering, LLC


Scott Kelley, PE, PTOE
Principal/Project Manager
scottk@greenlightte.com
(602) 499-1339



Attachments:

- A – Lambert/La Canada Tropical Smoothie Site Plan
- B – Trip Generation Calculations

ATTACHMENTS

GENERAL NOTES

1. BASIS OF BEARINGS IS: "THE EAST LINE OF THE NORTHEAST QUARTER OF SECTION 15, TOWNSHIP 12 SOUTH, RANGE 13 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, PIMA COUNTY, ARIZONA BEARING S00°01'14"E (ASSUMED BEARING)" ACCORDING TO A.L.T.A./N.S.P.S. AND TOPOGRAPHICAL SURVEYS PREPARED BY HARVEY LAND SURVEYING, INC. SEALED AND DATED FEBRUARY 25, 2022 BY COLIN D. HARVEY, RLS 42017 (HARVEY JN 2022-32)
2. BASIS OF ELEVATIONS IS: "A PIMA COUNTY OPUS CONTROL POINT #12S13E..J15, SAID POINT BEING IN SECTION 10, TOWNSHIP 12 SOUTH, RANGE 13 EAST, OF THE GILA AND SALT RIVER BASE AND MERIDIAN, PIMA COUNTY, ARIZONA. A #4 REBAR W/ TAG "RLS 13190" LOCATED APPROX. 64 FT NORTH OF LAMBERT LANE AND 91 FEET WEST OF LAMBERT PARK LANE. ELEVATION = 2604.32' (NAVD 88 DATUM)" PER AFOREMENTIONED SURVEY
3. BASIS OF ELEVATION, BASIS OF BEARINGS, BOUNDARIES, EASEMENTS, TOPOGRAPHIC DATA AND CULTURE SHOWN ARE FROM THE AFOREMENTIONED SURVEY PREPARED BY HARVEY LAND SURVEYING INC.
4. THIS PROJECT IS WITHIN THE CANADA CROSSROADS DEVELOPMENT. REFER TO DEVELOPMENT PLAN OV12-98-12.
5. GROSS AREA OF DEVELOPMENT IS 33,103.50 SF OR 0.76 ACRES, MORE OR LESS.
6. GROSS FLOOR AREA (GFA) IS 1,649 SF.
7. MAX FLOOR AREA RATIO (FAR) IS 0.25 PER OVZCR TABLE 23-2B. FAR PROPOSED IS 1,649/ 33,103.50 = 0.05
8. TOTAL MILES OF NEW PUBLIC STREETS IS 0.
9. TOTAL MILES OF NEW PRIVATE STREETS IS 0.
10. OV10-97-9 IS APPLICABLE TO THE PROJECT AND DOCUMENTS APPROVAL OF A BOARD OF ADJUSTMENT INCREASE IN MAXIMUM BUILDING HEIGHT FROM 18' TO 25'.
11. ASSURANCES FOR WATER SERVICE, SITE STABILIZATION AND LANDSCAPING MUST BE POSTED PRIOR TO ISSUANCE OF GRADING PERMITS
12. SOLID WASTE REFUSE WILL BE STORED IN SHARED EXISTING DUMPSTER ENCLOSURES AT THE SOUTHEAST CORNER OF CANADA CROSSROADS CENTER.

PLANNING GENERAL NOTES

1. THE USE IS CONVENIENCE USE: DRIVE-THRU RESTAURANT. APPROVAL OF A CONDITIONAL USE PERMIT IN ACCORDANCE WITH OVZCR 22.5 IS REQUIRED PER OVZCR 23.3 TABLE 23-1
2. THIS PROJECT REQUIRES TOWN COUNCIL APPROVAL OF A REDUCTION TO THE REQUIRED 250-FOOT SEPARATION BETWEEN CONVENIENCE USES AND RESIDENTIALLY-USED PROPERTIES, AS REQUIRED BY OVZCR 25.1.B.6.a. THE PROPOSED SEPARATION IS 195 FEET.
3. THE MAXIMUM BUILDING HEIGHT IS 25' PER BOARD OF ADJUSTMENT INCREASE DOCUMENTED IN OV10-97-9. THE PROPOSED BUILDING HEIGHT IS 20'.
4. NO OVERLAY ZONES ARE APPLICABLE.
5. THIS PROJECT IS NOT INCLUDED IN THE GENERAL PLAN SIGNIFICANT RESOURCE AREAS (SRA).
6. THIS PROJECT IS NOT SUBJECT TO THE REQUIREMENTS FOR ENVIRONMENTALLY SENSITIVE LANDS (ESL).
7. MINIMUM OPEN SPACE REQUIREMENT IS 25% OF LOT AREA=8,276 SF PER OVZCR TABLE 23-2B. TOTAL PROVIDED IS 8,279 SF.
8. MINIMUM LANDSCAPED COMMON AREA REQUIRED IS 2% OF LOT AREA=662 SF. TOTAL PROVIDED IS 886 SF.
9. NO LANDSCAPE BUFFER YARDS ALONG INTERIOR BORDERS ARE REQUIRED PER OVZCR TABLE 27.7. A MINIMUM 30' BUFFER YARD 'B' IS REQUIRED ALONG THE STREET FRONTAGE PER OVZCR TABLE 27-9. A STREET BUFFER YARD WITH 20' ONSITE AND 10' IN THE PUBLIC RIGHT-OF-WAY EXISTS PER APPROVED DEVELOPMENT PLAN BK19, PG30.
10. NO SCREENING ALONG INTERIOR BORDERS IS REQUIRED PER OVZCR TABLE 27-12.
11. SETBACKS REQUIRED:
FRONT: 20' (76.7' PROVIDED). ALSO 105' FROM SECTION LINE PER DOCKET 7397 AT PAGE 727 (EQUATES TO 30' FROM FRONT PROPERTY LINE)
PERIMETER SIDE & REAR SETBACKS FOR CANADA CROSSROADS DO NOT IMPACT THE SUBJECT PARCEL.
12. EXISTING ZONING IS C-N
13. ALL SIGNAGE AND LIGHTING TO BE ADDRESSED AS PART OF A SEPARATE REVIEW AND APPROVAL PROCESS
14. ALL PUBLIC ART REQUIREMENTS FOR CANADA CROSSROADS HAVE BEEN MET.

ENGINEERING GENERAL NOTES

1. THE DESIGN VEHICLE IS SU-30 (EXCLUDING DRIVE-THRU). DESIGN SPEED IS 5 MPH
2. ALL NEW PUBLIC ROADS WITHIN AND ADJACENT TO THIS PROJECT WILL BE CONSTRUCTED IN ACCORDANCE WITH APPROVED PLANS. SEPARATE PUBLIC IMPROVEMENT AND CONSTRUCTION PLANS WILL BE SUBMITTED TO THE TOWN ENGINEER'S OFFICE FOR REVIEW AND APPROVAL
3. ANY RELOCATION OR MODIFICATION OF EXISTING UTILITIES AND/OR PUBLIC IMPROVEMENTS NECESSITATED BY THE PROPOSED DEVELOPMENT WILL BE AT NO EXPENSE TO THE PUBLIC
4. THIS PROJECT DOES NOT PROPOSE ANY SUBSTANTIAL CHANGE TO THE DRAINAGE SCHEME OR STORMWATER DETENTION REQUIREMENTS APPROVED FOR THE CANADA CROSSROADS DEVELOPMENT PLAN OV12-98-12. THE PROJECT PROPOSES 73% IMPERVIOUS AREAS COMPARED TO 88% IMPERVIOUS AREAS ON THE APPROVED DEVELOPMENT PLAN OV12-098-12.

ORO VALLEY WATER UTILITY GENERAL NOTES

1. THIS DEVELOPMENT MUST COMPLY WITH THE ORO VALLEY WATER UTILITY SPECIFICATIONS MANUAL DURING ALL PHASES OF CONSTRUCTION
2. THIS PROJECT WILL BE SERVED BY ORO VALLEY WATER UTILITY WHICH HAS BEEN DESIGNATED AS HAVING AN ASSURED 100 YEAR WATER SUPPLY BY THE DIRECTOR OF WATER RESOURCES. ANY AND ALL WELLS MUST BE ABANDONED PER ADWR REGULATIONS
3. A LINE EXTENSION AGREEMENT MUST BE IN PLACE PRIOR TO ANY WORK ON THE WATER INFRASTRUCTURE FOR THIS PROJECT BEGINS.
4. ALL METERS SHALL HAVE A BACKFLOW PROTECTION DEVICE INSTALLED ON THE CUSTOMER SIDE OF THE METER
5. ALL FIRE SERVICES SHALL HAVE A BACKFLOW PROTECTION DEVICE INSTALLED ON THEM
6. ORO VALLEY WATER UTILITY WILL BE THE WATER SERVICE PROVIDER.

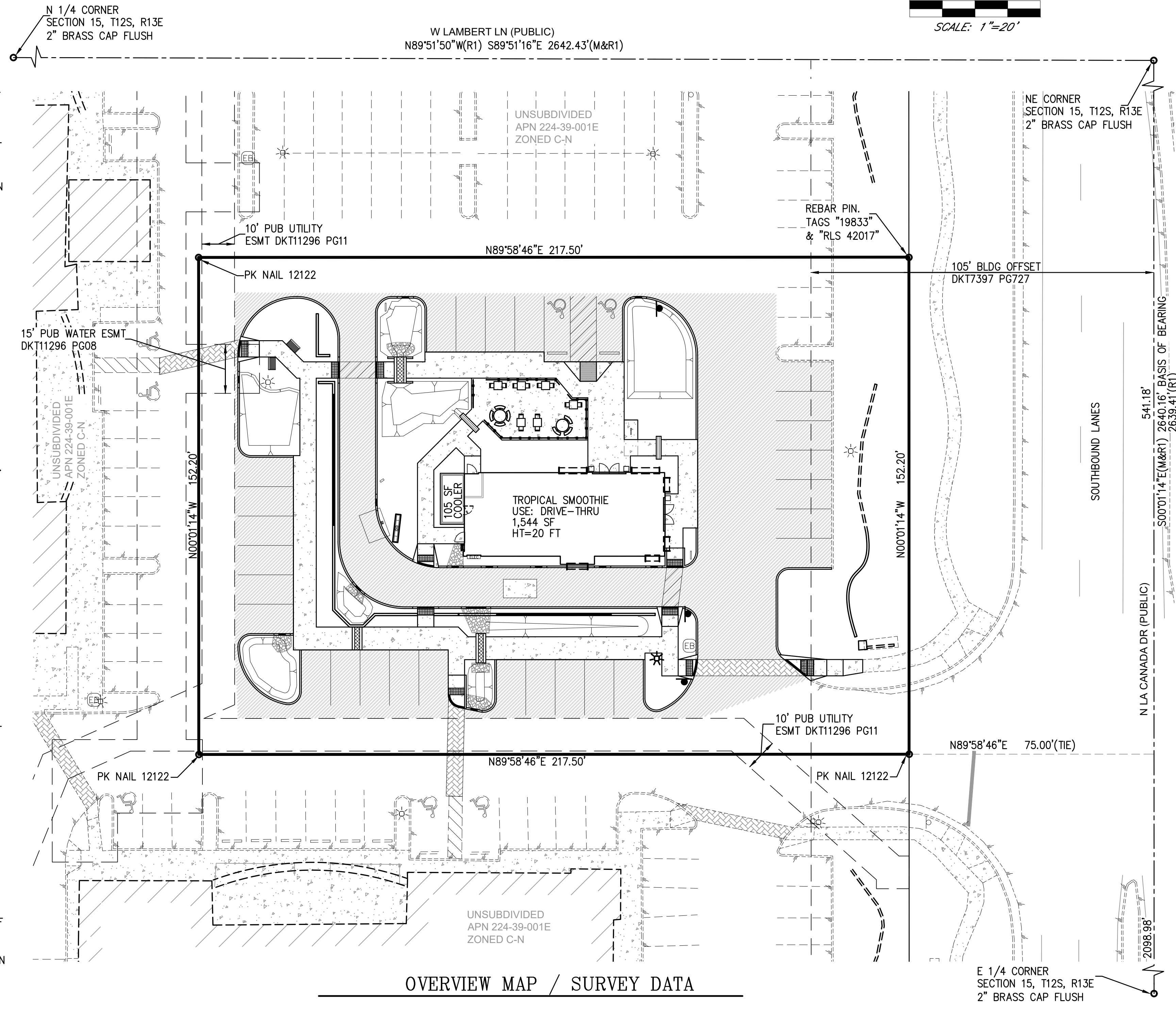
GOLDER RANCH FIRE GENERAL NOTES

1. FIRE HYDRANTS CONNECTED TO AN APPROVED WATER SUPPLY OF 1500 GPM FOR FIRE PROTECTION MUST BE INSTALLED AND IN SERVICE PRIOR TO COMBUSTIBLE MATERIAL DELIVERY TO THE SITE. TEMPORARY CONSTRUCTION OFFICE TRAILERS ARE CONSIDERED COMBUSTIBLE MATERIAL
2. APPROVED FIRE APPARATUS ACCESS ROADS MUST BE INSTALLED AND IN SERVICE PRIOR TO COMBUSTIBLE MATERIAL DELIVERY TO THE SITE
3. AUTOMATIC FIRE SPRINKLER SYSTEMS ARE REQUIRED IN ALL NEWLY CONSTRUCTED COMMERCIAL BUILDINGS
4. TEMPORARY STREET SIGNS MUST BE INSTALLED AT EACH STREET INTERSECTION WHEN CONSTRUCTION OF NEW ROADWAYS ALLOWS PASSAGE OF VEHICLES. ALL STRUCTURES UNDER CONSTRUCTION MUST BE CLEARLY IDENTIFIED WITH AN APPROVED ADDRESS
5. THE INSTALLATION OF TRAFFIC CONTROL SIGNALING DEVICES AND/OR ELECTRICALLY OPERATED GATES ON FIRE APPARATUS ACCESS ROADS SHALL INCLUDE PREEMPTIVE CONTROL EQUIPMENT COMPATIBLE WITH THE FIRE DEPARTMENT'S EXISTING SYSTEM

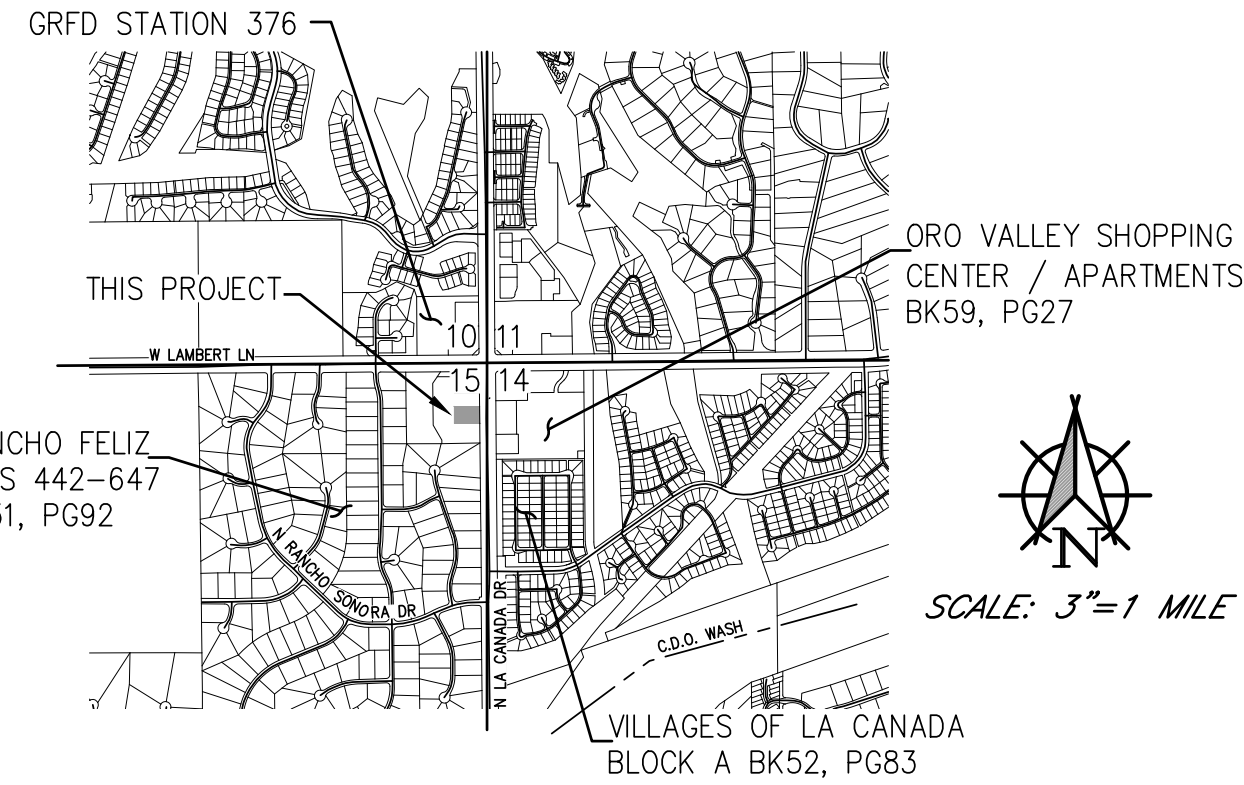
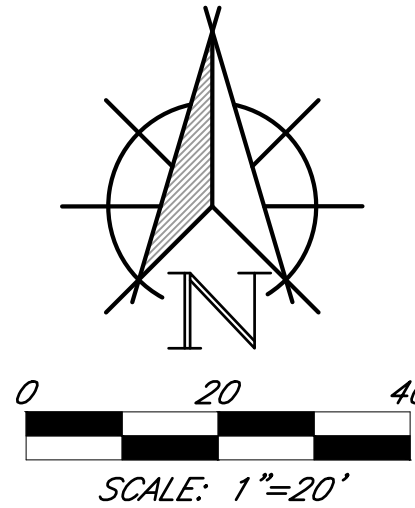
BUILDING CODES

1. THE FOLLOWING CODES AND STANDARDS SHALL BE APPLICABLE TO THIS DEVELOPMENT:
INTERNATIONAL CODES WITH LOCAL AMENDMENTS
NATIONAL ELECTRICAL CODE
ADA STANDARDS FOR ACCESSIBLE DESIGN
GOLDER RANCH FIRE DISTRICT STANDARDS AND FORMS
TOWN OF ORO VALLEY POOL CODE
PAG STANDARD SPECIFICATIONS & DETAILS FOR PUBLIC IMPROVEMENTS
TOWN OF ORO VALLEY DRAINAGE CRITERIA MANUAL
TOWN OF ORO VALLEY SUBDIVISION STREET STANDARDS AND POLICIES MANUAL
TOWN OF ORO VALLEY ZONING CODE, CURRENT REVISED
ORO VALLEY TOWN CODE, CURRENT REVISED

CONCEPTUAL SITE PLAN
TROPICAL SMOOTHIE - LA CANADA DR
2202232



OVERVIEW MAP / SURVEY DATA



LOCATION MAP

LOCATED IN THE N.E. 1/4 OF SEC 15, T12S, R13E, G&SRM, TOWN OF ORO VALLEY, PIMA COUNTY, ARIZONA

LEGEND

- SUBJECT PARCEL BOUNDARY
- ADJACENT PROPERTY/ROW LINE
- EASEMENT LINE
- CENTERLINE
- EXISTING CURB AND EDGE OF ASPHALT PAVEMENT
- EXISTING 5' CONTOUR LINE
- EXISTING 1' CONTOUR LINE
- EXISTING WATERLINE, VALVE, REDUCER & METER
- EXISTING UNDERGROUND ELECTRIC
- EXISTING GAS LINE
- EXISTING SEWER, FLOW DIRECTION & MANHOLE
- PROPOSED FIRE SERVICE LINE, REDUCER, HORIZONTAL BEND
- PROPOSED BUILDING CONNECTION SEWER & CLEANOUT
- PAVEMENT SAWCUT LINE
- EXIST LIGHT POLE
- SURVEY MONUMENT OR PIN AS NOTED
- FINAL GRADE (ADD 2500') W/ ABBREVIATED DESCRIPTION
- APPROXIMATE EXIST GRADE / MATCH-IN GRADE
- TOP OF CURB/SOWK, GUTTER, GRADE-BREAK, HIGH POINT, LOW POINT, INVERT, FINISHED FLOOR ELEVATION
- FLOW DIRECTION ARROW
- 100-YR ONSITE RUNOFF RATE
- ASPHALT PAVING
- CONCRETE/SIDEWALK
- BRICK-PATTERN STAMPED CONC. CROSSWALK
- PROPOSED FENCE

CIVIL ENGINEER

DYNAMIC CIVIL DESIGNS LLC
ATTN: JAMES MCMURTRE
4690 N MELPOMENE WAY
TUCSON, AZ 85749
PH (520) 461-8016
EMAIL JAMES.MCM@LIVE.COM

ARCHITECT

NEPTUNE DESIGN GROUP
ATTN: CHRIS NEAL
6501 E GREENWAY PKWY #103-707
SCOTTSDALE, AZ 85254
PH (480) 297-5577
EMAIL cneal@neptunedg.com

OWNER/DEVELOPER

ONETEN REI GUADALUPE LLC
ATTN: NICO FRICCHIONE
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TEMPE, AZ 85281
PH (570) 947-7372
EMAIL nico@onetenrei.com

LANDSCAPE ARCHITECT

NOVAK ENVIRONMENTAL
ATTN: KAREN CESARE
4574 N 1ST AVE STE 100
TUCSON, AZ 85718
PH (520) 206-0591
FX (520) 882-3006
EMAIL karen@novakenvironmental.com

SITE ADDRESS

10335 N LA CANADA DR
ORO VALLEY, AZ 85737

REF. NO: OV12-98-12
OV10-97-9
OV9-96-7
PRE-APP 2102451
CUP 2202252

PRELIMINARY
NOT FOR CONSTRUCTION

Dynamic Civil Designs LLC
4690 N MELPOMENE WAY TUCSON ARIZONA 85749
PH (520) 461-8016 EMAIL: james.mcm@live.com

CONCEPTUAL SITE PLAN
TROPICAL SMOOTHIE-LA CANADA DR

LOCATED IN THE N.E. 1/4 OF SEC 15, T12S, R13E, G&SRM, TOWN OF ORO VALLEY, PIMA COUNTY, ARIZONA

CASE NO: 2202232
JOB NO. D21017 SCALE HORIZ: 1"=20'
DATE: JANUARY, 2023 CONTOUR INTERVAL=N/A SHEET 1 OF 4

LOT	PROPOSED USE	SQUARE FOOTAGE	PARKING RATIO	TOTAL PARKING		TOTAL HANDICAP PARKING		LOADING ZONE RATIO	TOTAL LOADING ZONES		BIKE PARKING CLASS I		BIKE PARKING CLASS II	
				REQUIRED	PROVIDED	REQUIRED	PROVIDED		REQUIRED	PROVIDED	REQUIRED	PROVIDED	REQUIRED	PROVIDED
PAD 2	CONVENIENCE USE: DRIVE-THRU	1,649 SF RESTAURANT	9/1000	15	32(26 EXIST)	2	2	NONE REQ'd	0	0	0	0	2	2
OV12-98-12 REFERENCE INFO		5,950 SF RETAIL	5.5/1000 (CALCULATED)	33					1	1				
TOTALS				15	32	2	2		0	0	0	0	2	2

Contact Arizona 911 at least two full working days before you begin excavation
ARIZONA
Call 911 or click Arizona911.com

Trip Generation Analysis

Project: 221043 ONET SR 92 Tropcial Smoothie
Originator: Maria Jimenez
Checked: Collette Frohlich, PE
Date: 3/30/2022
Data Source: Dynamic Civil Designs Site Plan
Reference Manual: ITE Trip Generation Manual, 11th Edition

Size: 1.54
Independent Variable: GFA
Time Period: Weekday (Monday - Friday), Peak Hour Adjacent Street Traffic
Setting/Location: General Urban/Suburban

Land Use	LUC	Units	Size	AM Calc			PM Calc			ADT Calc	AM			PM			ADT	
				In	Out	Total	In	Out	Total	Total	In	Out	Total	In	Out	Total		
TRIP ENDS																		
Fast-Food Restaurant with Drive-Through Window	934	1000 SF GFA	1.54	51%	49%	44.61	52%	48%	33.03	467.48	35	34	69	27	24	51	722	
Subtotal Trip Ends											35	34	69	27	24	51	722	
PASS BY TRIPS																		
Fast-Food Restaurant with Drive-Through Window ¹	938					50%			55%		18	18	36	15	15	30	362	
Subtotal Pass-By											18	18	36	15	15	30	362	
External Trip Ends											17	16	33	12	9	21	360	

1. Pass-by rates were taken from the ITE Trip Gen Manual, 11th Ed Pass-by Tables.