5100 W. 1ST AVENUE APARTMENTS ADMINISTRATIVE PERMIT APPLICATION

PREPARED FOR

ULYSSES DEVELOPMENT GROUP LLC

PREPARED BY:

CFA, Inc. 1150 CORPORATE BOULEVARD RENO, NV 89502 (775) 856-1150



JULY 8, 2021

PROJECT: 21060.00

Washoe County Development Application

Your entire application is a public record. If you have a concern about releasing personal information, please contact Planning and Building staff at 775.328.6100.

Project Information	S	Staff Assigned Case No.:				
Project Name:						
Project Description:						
Project Address:						
Project Area (acres or square fe	et):					
Project Location (with point of re	eference to major cross	streets AND area locator):				
Assessor's Parcel No.(s):	Parcel Acreage:	Assessor's Parcel No.(s):	Parcel Acreage:			
Indicate any previous Washo Case No.(s).	e County approval	s associated with this applicat	tion:			
Applicant Inf	ormation (attach	additional sheets if necess	sary)			
Property Owner:		Professional Consultant:				
Name:		Name:				
Address:		Address:				
Zip:			Zip:			
Phone: Fax:		Phone: Fax:				
Email:		Email:				
Cell:	Other:	Cell:	Other:			
Contact Person:		Contact Person:				
Applicant/Developer:		Other Persons to be Contacted:				
Name:		Name:				
Address:		Address:				
Zip:		Zip:				
Phone: Fax:		Phone: Fax:				
Email:		Email:				
Cell:	Other:	Cell: Other:				
Contact Person:		Contact Person:				
For Office Use Only						
Date Received:	Initial:	Planning Area:				
County Commission District:		Master Plan Designation(s):				
CAB(s):		Regulatory Zoning(s):				

Property Owner Affidavit

Applicant Name: 5100 W. 1st Avenue Apartments

The receipt of this application at the time of submittal does not guarantee the application complies with all requirements of the Washoe County Development Code, the Washoe County Master Plan or the applicable area plan, the applicable regulatory zoning, or that the application is deemed complete and will be processed.
STATE OF NEVADA)
COUNTY OF WASHOE
Jan Lucas
(please print name)
being duly sworn, depose and say that I am the owner* of the property or properties involved in this application as listed below and that the foregoing statements and answers herein contained and the information herewith submitted are in all respects complete, true, and correct to the best of my knowledge and belief. I understand that no assurance or guarantee can be given by members of Planning and Building.
(A separate Affidavit must be provided by each property owner named in the title report.)
Assessor Parcel Number(s):085-820-31
Printed Name Stau Lucas Signed Stau Lucas
Address 2850 Temple Long Beach CA May 24-2
Subscribed and sworn to before me this
Notary Public in and for said county and state My commission expires:
*Owner refers to the following: (Please mark appropriate box.)
■ Owner
 Corporate Officer/Partner (Provide copy of record document indicating authority to sign.)
□ Power of Attorney (Provide copy of Power of Attorney.)
 Owner Agent (Provide notarized letter from property owner giving legal authority to agent.)
☐ Property Agent (Provide copy of record document indicating authority to sign.)
□ Letter from Government Agency with Stewardship

Administrative Permit Application Supplemental Information (All required information may be separately attached)

1.	What is the type of project or use being requested?				
2.	What section of the Washoe County code requires the Administrative permit required?				
	What documents in the vivalence country code requires the returnmentative permit requires.				
3.	What currently developed portions of the property or existing structures are going to be used with thi permit?				
l.	What improvements (e.g. new structures, roadway improvements, utilities, sanitation, water supply drainage, parking, signs, etc.) will have to be constructed or installed and what is the projected time frame for the completion of each?				
5.	Is there a phasing schedule for the construction and completion of the project?				
S .	What physical characteristics of your location and/or premises are especially suited to deal with the impacts and the intensity of your proposed use?				
7.	What are the anticipated beneficial aspects or effect your project will have on adjacent properties and the community?				
3.	What will you do to minimize the anticipated negative impacts or effect your project will have or adjacent properties?				
).	Please describe any operational parameters and/or voluntary conditions of approval to be imposed of the administrative permit to address community impacts.				
	A pedestrian path shall be provided to connect to sidewalk in McGuffy Road at the NW corner of the site for a safe convenient access to and from Lois Allen Elementary School.				

10.	How many improved parking spaces, both on-site and off-site, are available or will be provided? (Please indicate on site plan.)						
	401 on-site parking spaces will be provided while 400 are required. There will be at least 45 parking spaces along the project frontage of Slope Drive and W. 1st Avenue.						
11.		What types of landscaping (e.g. shrubs, trees, fencing, painting scheme, etc.) are proposed? (Please indicate location on site plan.)					
		Please refer to preliminary landscape plan provided with this application. Trees and shrubs in formal landsape areas will be provided.					
12.	width, construction materials	What type of signs and lighting will be provided? On a separate sheet, show a depiction (height width, construction materials, colors, illumination methods, lighting intensity, base landscaping, etc.) of each sign and the typical lighting standards. (Please indicate location of signs and lights on site plan.)					
	A monument sign will be located a numbers within each building and						
13.	Are there any restrictive cover the area subject to the admin						
	□ Yes			□ No			
14. Utilities:					-		
	a. Sewer Service						
	b. Water Service						
	For most uses, the Washoe Requirements, requires the and quantity of water rights y	dedica	tion of water	rights to Washoe Coun	ty. Please indicate the type		
	c. Permit #			acre-feet per year			
	d. Certificate #			acre-feet per year			
	e. Surface Claim #			acre-feet per year			
	f. Other, #			acre-feet per year			
	Title of those rights (as file Department of Conservation				of Water Resources of the		

TAB A



Table of Contents

Development Application & Tentative Subdivision Map Supplimental Information	Before Tabs
Project Narrative	A
Property Location	1
Project Request	1
Project Background	1
Existing Site Condition Photos	3
Project Summary	6
Density	6
Buildings	6
Parking	7
Access	8
Traffic and Circulation	8
Signage	8
Fencing	8
Lighting	8
Landscaping	8
Amenities	9
Public Facilities and Infrastructure	9
Development Statistics	10
Master Plan and Zoning Conformance	11
Administrative Permit Findings	13
<u>Appendices</u>	
Reduced Preliminary Landscape Plan and Civil Engineering Plan Sheets	B
Building Elevations	C
Lighting Plan – Photometrics Plan	D
Project Exhibits	E
Slope Analysis Map	
Cut and Fill Map	

5100 W 1ST AVENUE APARTMENTS

ADMINISTRATIVE PERMIT PROJECT NARRATIVE

Table of Contents (Continued)

Project Reports	F
Preliminary Drainage Report	
Fraffic Impact Study (Headway Transportation)	
Supporting Information	.G
Proof of Property Tax Payment	
Assessor's Parcel Map	
/esting Deed	
Fitle Report	

Property Location

The subject property is located north of West 1st Avenue and east of McGuffy Road in Sun Valley. The property is adjacent to the Bernard Subdivision to the north, and an uncompleted road to the east – Slope Road. The subject property totals 9.99+/- acres of land in four existing parcels. The Washoe County Assessor's office recognizes the subject property as APN 085-820-31. A vicinity map is provided on page 2 of this project description for reference. The subject property is located within the Sun Valley Suburban Character Management Area, which allows for residential densities of one unit per acre or greater.

Project Request

Ulysses Development Group LLC ("The Applicant") requests the approval of an administrative permit, to allow for the construction of a 200-unit multifamily affordable housing apartment community on the subject property, which is currently zoned as Medium Density Urban (MDU). In addition to the review for the use, The Applicant requests allowance for grading that exceeds the code identified thresholds from Article 438 (Grading) described below.

Specific thresholds associated with the grading ordinance are:

- Grading of an area of more than 4 acres;
- Excavation and import of 5,000 CY of material;
- Grading to construct a permanent earthen structure of greater than 4.5 feet in a front yard setback and 6 feet on the remainder of the site.

Lastly, The Applicant requests a waiver from the Washoe County landscape requirement necessitating that 50% of the site required landscape area be provided as grass. Specifically, The Applicant requests that the required portion of the property's landscape area that is required to be grass is reduced to the functional open space located adjacent to the property clubhouse, illustrated in the project's landscape plan in Appendix B. This request is believed to be more responsive appropriate water conversation. The rationale for this request is provided in the Landscape section of this narrative.

Project Background

The subject parcel was approved for a master plan amendment and zone change in 2015 under Case Nos. MPA15-001 and RZA 15-001. Within the staff report for this previous request/approval, the subject property was identified be a site that is surrounded by development and is considered to be an infill parcel. It "...is about one tenth of a mile from an RTC bus route on Sun Valley Boulevard and is surrounded by existing

water and sewer lines provided and maintained by Sun Valley General Improvement District (SVGID) and is across the street from Lois Allen Elementary School." All of these factors were instrumental in making the determination that the MDU designation was appropriate for the site. Many of the policies associated with the decision of approval to the master plan and regulatory zone amendments were directed toward the need for affordable housing within our community and region. The requested administrative permit is made to bring the previously discussed and envisioned affordable housing project on the subject property to fruition.

Vicinity Map



Existing Site Condition Photos

The 10+/- acre parcels is currently vacant with development on all four sides of the property, making it an infill site. The south, east and west sides of the site contain existing road rights-of-way for W. 1st Avenue, Slope Drive and McGuffy Road, respectively. The site slopes downward from west to east with typical maximum slopes being 10%-13%

Following are photos of the site that show the current vegetation and relatively flat nature of the site.



Panoramic photo at northeastern corner of site. View from Slope Drive to northern property line.



Photo looking west along the southern property line Photo taken from the southeast corner of the site at the W. 1st Avenue/Slope Drive intersection.



Panoramic photo from southwestern corner of site. View from McGuffy Road/W. 1st Avenue intersection.



Panoramic photo from northwestern corner of site. View from northern property line on left side of photo and McGuffy Road on the right side of photo.



Photos of existing Lois Allen Elementary School access/crosswalk on McGuffy Road with stairs up slope on left side of picture.



Photos of illegal dumping that has occurred on the subject property near the northern property line.

Project Summary

The 5100 W 1st Avenue apartment community is proposed to provide a total of 200 affordable apartment units, ranging from one bedroom to four bedrooms in size. The applicant intends to apply for federal low-income housing tax credits under the Section 42 program to finance the development. The Section 42 program provides federal tax credits for housing that (i) commits to provide housing for residents who earn 60% or less of the area median income (AMI) and (ii) that meets the compliance and regulatory requirements of the program.

In order to meet the regulatory requirements of the Section 42 program, the applicant will be required to record a Land Use Restriction Agreement (LURA) against the property. This document will specify that apartment units at the property must be leased to residents who earn 60% or less of area median income (AMI). The LURA will have a minimum extended affordability period of 30 years.

As such, the proposed apartment community will provide a high-quality, affordable housing option for the low-income residents of Washoe County for years to come.

The provision of affordable housing in Washoe County will help to alleviate the cost burden that many local residents are experiencing due to the growing cost of housing in the area. As stated by the EDAWN Housing Demand Forecast and Needs Assessment, "Almost half (49 percent) of renter households in Reno are cost burdened. Cost burden is a significant issue for most households earning less than 80 percent of AMI." Once constructed, the proposed apartment community will help to reduce the number of low-income residents in Washoe County who are currently cost burdened due to their rising cost of living.

Density

The subject property is zoned MDU, which allows for a maximum density of 21 DU/AC. A maximum number of units on the 10 Acre parcel is 210. The project plans proposed 200 units on the property, which conforms with the zoning allowance.

Buildings

There are three basic building footprints that are proposed within the proposed community. All of the buildings have been designed to work creatively with property slopes where grade is taken up between the eastern and western sides of each building. This creates a two-story building with a basement set of units on the eastern side of each building. The proposed buildings classify as two-story buildings, per Washoe County Development Code definition from Article 902. This code definition of a "story" states:

"Story." "Story" is that portion of a building included between the upper surface of any floor and the upper surface of the floor next above, except that the topmost story shall be that portion of a building included between the upper surface of the topmost floor and the ceiling or roof above. If the finished floor level directly above a usable or unused underfloor space is more than six (6) feet above grade as defined herein for more than fifty (50) percent of the total perimeter or is more than twelve (12) feet above grade as defined

herein at any point, such usable or unused under-floor space shall be considered as a story."

More than 50% of the total perimeter of the bottom floor of each building will be below ground, thus allowing for the bottom level to not be considered a "story.' Elevations showing the percentage of coverage around the building and bottom level are provided in Tab C of this application.

North and south elevations are provided below to illustrate the grading associated with each building and the burying of over $\frac{1}{2}$ of the building perimeter of the downhill basement units.



Parking

Article 410 of the Washoe County Development Code (WCDC) identifies the parking requirements for multifamily to be "1.6 for 1-bedroom units, 2.1 for 2-bedroom and larger units; 1 of which must be in an enclosed garage or carport." Following is a table identifying the unit count per bedroom size and the parking requirement associated with each unit size and the total requirement.

Unit Size (Bedrooms)	Number of Units	Req. Parking Ratio	Parking Required
One-Bedroom Units	40	1.6 per unit	64 spaces
Two-Bedroom Units	84	2.1 per unit	176.4 spaces
Three-Bedroom Units	66	2.1 per unit	138.6 spaces
Four Bedroom Units	10	2.1 per unit	21 spaces
Totals	200		400 spaces

The proposed site plan identifies 401 total parking spaces, which meets the code requirement. Table 110.410.15.1 identifies that 400 required parking spaces necessitates that at least 8 accessible parking spaces must be provided. A total of 10 accessible parking spaces are provided. Additionally, one canopy

space is required per unit, per the Code required parking ratio. As such, 200 canopy spaces are required and 204 are provided.

Access

Access to the site will be provided by a driveway on W. 1st Avenue at Sagebrush Drive. A secondary gated/emergency access is proposed on the eastern portion of W. 1st Avenue. Appropriate radii have been provided.

Traffic and Circulation

A Traffic Impact Study is provided in Appendix D of this application.

Signage

A monument sign will be provided at the entry with the property name. The approximate location of the monument sign can be seen on the preliminary site and landscape plans provided in Tab B. The signage will conform to Article 505 of the Washoe County Code and will require a separate signage permit prior to construction.

Fencing

Fencing will be provided only where necessary for property line demarcation at the northern border or in areas where walls exist taller than 3 feet. Fencing along the northern property line is proposed to be a solid screening wall constructed of white vinyl. Fencing adjacent to retaining walls necessary for site grading are proposed to be open fencing such as tubular steel or other similar type. Such areas exist along the east and west property/right-of-way lines (on McGuffy Road and Slope Drive) and in some areas within the site where walls are necessary and exceed the 3-foot height.

Lighting

Community lighting will be provided predominately through wall lights on the exterior of the buildings. Where additional lighting is necessary for site safety and parking and walkway visibility, light standards of 20 feet in height will be proposed. A lighting and photometric plan is provided in Tab D with this application.

Landscaping

A preliminary landscape plan is provided in Tab B with this application. The minimum required landscape area on this 10+/- acre site is 87,050 SF (20% of the site). The total landscape area provided is over 100,000 SF and meets the requirements of Article 412 of the WCDC.

It was noted in the Project Request section of this narrative that The Applicant is requesting a waiver to the Washoe County landscaping requirement (110.412.60(k)(4) to provide at least 50% of the landscaped area as turf for multi-family land uses in the County. This requirement seems to run counter to the need to conserve water in Washoe County's high-desert climate. Additionally, the slopes on the site will present only limited areas where functional and practical turf areas may be provided. The proposal to limit turf areas only to practical and functional areas near the clubhouse and amenity node presents a responsible use of a

water intensive planting type. It should be noted that other land uses are constrained to provide a maximum of 50% turf. We request that the same, resource efficient consideration be provided to this project.

Amenities

The proposed community will have a clubhouse, pool, barbeque area, and a play/tot lot for children who live within the community. The clubhouse will contain a fitness facility, lounge, kitchen, meeting areas and a business center for the residents. The clubhouse will function as the leasing office and community meeting spot and is centrally located in the site plan in the southern central portion of the site, visible from W. 1st Avenue. Building elevations and floorplan for the clubhouse are provided in Tab C with the architectural elevations for the apartment buildings.



Public Facilities and Infrastructure

Schools – The property is located directly adjacent to Lois Allen Elementary School and is appropriately zoned for that school. Middle and high school zoning is for Desert Skies Middle School and Hug High School.

Fire Station– The nearest fire station serving the site is approximately 2 miles from to the north (Truckee Meadows Fire Station #45 located at 110 Quartz Avenue in Sun Valley).

Water Service – Water service will be provided by the Sun Valley General Improvement District (SVGID). A water capacity study has been requested from SVGID and that study should be completed near the time of the formal hearing for this project request.

Sewer Service – Sewer service will be provided by the Sun Valley General Improvement District (SVGID). A sewer capacity study has been requested from SVGID and that study should be completed near the time of the formal hearing for this project request.

Stormwater – A preliminary drainage report has been provided with this application in Tab E.

Development Statistics

Following are development statistics for the proposed 5100 W. 1st Avenue Apartments

Total Project Area:	10+/- AC
Total Project Area:	10+/- AC

Total Proposed Apartment Units (proposed density) 200 Units (20 DU/AC)

Allowed Density 21 DU/AC

Unit Count, Bedrooms and Total Numbers

One Bedroom Units

Two Bedroom Units

Three Bedroom Units

Four Bedroom Units

10 Units

Total

40 Units

84 Units

66 Units

10 Units

Parking Calculations

Required Parking
Accessible Parking Required:
Canopy Covered (1/unit minimum)

Provided Parking
Standard Parking Spaces Provided (uncovered)
Accessible Parking Provided
Canopy Covered Parking

400 Spaces
401 Spaces
401 Spaces
187 Spaces
10 Spaces
204 Spaces

Proposed Setbacks (Following MDU Standards)

Front Yard (McGuffy Road, W. 1st Avenue and Slope Drive)

Side Yard (North Property Line)

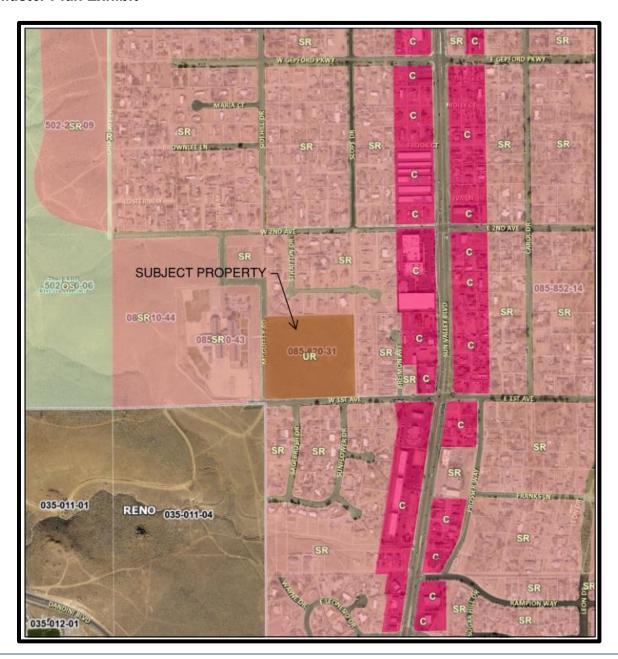
Side Yard (No rear yards exist on this site as there are 3 front yards)

15 feet
20 feet

Master Plan and Zoning Conformance

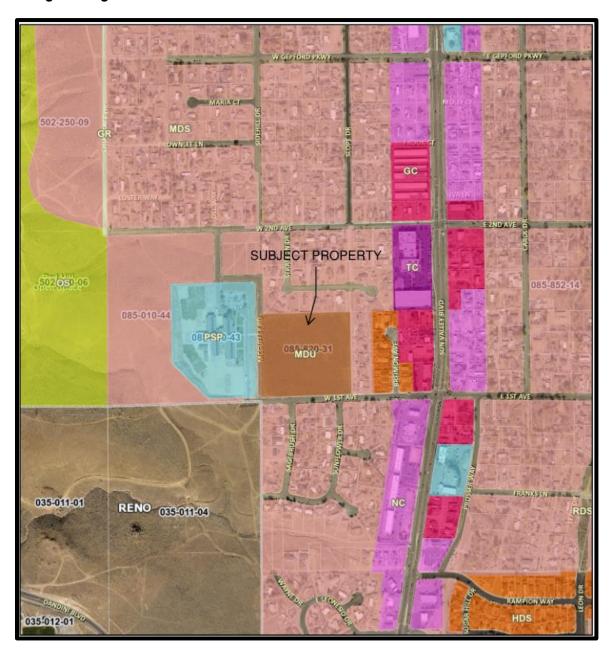
<u>Master Plan</u> -- The subject properties are designated Urban Residential within the Sun Valley Area Plan and is contained within the Sun Valley Suburban Character Management Area and Truckee Meadows Service Area. The proposed development, containing 200 units, is consistent with the Washoe County Master Plan, the Sun Valley Suburban Character Management Area, and the Southwest Truckee Meadows Area Plan. See the Planning/Policy Analysis section of the project description for an identification of the master plan goals and policies that are met with this proposed common open space tentative map request.

Master Plan Exhibit



Zoning - The subject property is zoned MDU (Medium Density Urban) on 10+/- acres. The zoning designation is specifically allowed under Sun Valley Area Plan Policy 1.3. Using the existing zoning density allowance (21 DU/AC), a maximum of 210 units are allowed on the subject property. The proposed affordable housing community contains 200 units, which conforms to the current zoning designation.

Existing Zoning Exhibit



Administrative Permit Findings

Section 110.810.30 -- Findings. Prior to approving an application for an administrative permit, the Board of Adjustment or a hearing examiner shall find that all of the following are true:

a) Consistency. The proposed use is consistent with the action programs, policies, standards and maps of the Master Plan and the applicable area plan;

The proposed administrative permit has been prepared to meet the design requirements set forth under the Washoe County Master Plan and Development Code. The subject property is contained within the Sun Valley Area Plan Suburban Character Management Area. Following are specific policies from the Washoe County Master Plan and Sun Valley Area Plans that are fostered by the proposed development.

In addition, it is important to note that the proposed multifamily affordable housing apartment community will provide a significant benefit and recognized need to the area surrounding the subject property, by providing a high-quality housing option that will be leased at rental rates which are on average 30% below prevailing market rents for comparable apartment units.

- Policy 1.1: Allow for more flexibility in the zoning, building, and land use regulations to enable affordable housing units to be built throughout the community.
- Policy 1.5: Encourage development at higher densities where appropriate.
- Program 1.5: The County will utilize its higher density zoning designations to allow for the most efficient use of land that has infrastructure in place or where the installation of infrastructure is planned. The County will consider installing minimum density requirements in mixed-use and/or high-density areas.
- Policy 2.1: Encourage neighborhood revitalization in existing areas through housing rehabilitation for both renter- and owner-occupied units with special attention on the Sun Valley region.
- Policy 3.4: Promote affordable and workforce housing in secondary transit-oriented development (TOD) corridors.
- Policy 3.5: Promote development of affordable housing near services, transportation routes, schools, jobs, and childcare by establishing mixed-use districts and higher density areas.
- LUT.1.1 Washoe County should define smaller areas where more intense suburban development is permitted (parallel with the Area Plan Suburban Character Management Area, or SCMA), and larger areas outside the suburban areas where development is strictly limited to retain the existing rural character (parallel with the Area Plan Rural Character Management Area, or RCMA).

5100 W 1ST AVENUE APARTMENTS

ADMINISTRATIVE PERMIT
PROJECT NARRATIVE

LUT.1.4 Residential should be within close proximity to retail/commercial land uses within SCMAs to facilitate both walking and cycling as desirable and safe modes of transportation. LUT.3.1 Require timely, orderly, and fiscally responsible growth that is directed to existing suburban character management areas (SCMAs) within the Area Plans as well as to growth areas delineated within the Truckee Meadows Service Area (TMSA). LUT.3.2 In order to provide a sufficient supply of developable land to meet the needs of the population, Area Plans shall establish growth policies that provide for a sufficient supply of developable land throughout the planning horizon of the next 20 years, with considerations to phase future growth and development based on the carrying capacity of the infrastructure and environment. LUT.3.5 Area Plans shall identify adequate land, in locations that support the regional form and pattern, for the residential, commercial, civic and industrial development needs for the next 20 years, taking into account land use potential within the cities and existing incorporated centers, existing vacant lots, and resource and infrastructure constraints. LUT.4.1 Maintain a balanced distribution of land use patterns to: a. Provide opportunities for a variety of land uses, facilities and services that serve present and future population; b. Promote integrated communities with opportunities for employment, housing, schools, park civic facilities, and services essential to the daily life of the residents; and c. Allow housing opportunities for a broad socio-economic population. LUT.4.3 Encourage suburban developments to provide a mix of residential densities and housing types in close proximity to retail/commercial. LUT.5.3 New development shall not reduce the quality of service for existing residents and businesses nor reduce the ability of public agencies to provide quality service. LUT.17.3 A variety of dwelling units such as houses, townhouses, and apartments are all encouraged. LUT.18.5 Promote the development of walkable communities that meet the daily needs of their residents and reduce the need for automobile trips. LUT.23.1 Assess all development individually and cumulatively for potential impact upon the natural resources of the specific area of Washoe County. PSF.3.6 Encourage both the recharge and water quality benefits from the detention and infiltration of urban runoff.

- PSF.3.7 Develop regulations for the amount of runoff discharge, point of runoff discharge, and size and maintenance of drainage structures and facilities.
- PSF.3.8 Control stormwater runoff from new developments to:
 - A. Prevent siltation and pollution of lakes, rivers and streams.
 - B. Prevent erosion, flooding and other surface water damage.
 - C. Prevent increases in downstream peak flows.
 - D. Preserve and enhance the region's water resources.
- SUN.1.3 The following Regulatory Zones are permitted within the Sun Valley Suburban Character Management Area:
 - a. High Density Rural (HDR One unit per 2.5 acres).
 - b. Low Density Suburban (LDS One unit per acre).
 - c. Medium Density Suburban (MDS Three units per acre).
 - d. High Density Suburban (HDS Seven units per acre).
 - e. Medium Density Urban (MDU Twenty-one units per acre).
 - f. Neighborhood Commercial/Office (NC).
 - g. General Commercial (GC).
 - h. Industrial (I).
 - i. Public/Semi-Public Facilities (PSP).
 - j. Parks and Recreation (PR).
 - k. General Rural (GR).
 - I. Open Space (OS).
- SUN.1.10 The Washoe County Capital Improvements Program shall identify needed sidewalk and open drainage structure improvements (location, costs and funding) based on a study conducted by the County and the Sun Valley General Improvement District.
- SUN.10.1 Whenever applicable, all development within the Sun Valley Suburban Character Management Area and the Downtown Character Management Area will connect to a community water service.
- SUN.12.1 Whenever applicable, all development within the Sun Valley Suburban Character Management Area and the Downtown Character Management Area will connect to a community sewer service.
 - b) Improvements. Adequate utilities, roadway improvements, sanitation, water supply, drainage, and other necessary facilities have been or will be provided, the proposed improvements are properly related to existing and proposed roadways, and an adequate public facilities determination has been made in accordance with Division Seven:

The subject property abuts public rights-of-way on three sides and public utilities exist in the adjacent streets. Utility facilities exist adjacent to the project site within these streets. Should upgrades be necessary for any of the utilities to serve the site, as determined by the ongoing SVGID utility capacity analysis, such expense for upgrade will be the responsibility of The Applicant.

 Site Suitability. The site is physically suitable for the type of development and for the intensity of development;

The subject parcel is located adjacent to an existing school site with existing SFR developments on the other three sides. The Bernard subdivision to the north, the Breimon Acres subdivision to the east, and Ross Park Estates to the south. The site presents infill development with utilities adjacent and available to the subject property. The project site is just over 600 feet from Sun Valley Boulevard, and as such residents at the proposed apartment community will live within close proximity of the commercial corridor of Sun Valley, and RTC bus transportation services. Furthermore, residents with children will benefit from their ease of access to Lois Allen Elementary School, which is located immediately to the west of the subject property. All of these proximity positives are identified within the Washoe County Master Plan as requirements for the location of higher density and affordable housing.

 d) Issuance Not Detrimental. Issuance of the permit will not be significantly detrimental to the public health, safety or welfare; injurious to the property or improvements of adjacent properties; or detrimental to the character of the surrounding area; and

Response: The project is located within proximity to an RTC bus route, school and has utilities adjacent and available to the project site.

A Traffic Impact Study prepared by Headway Transportation was submitted with this application in Appendix E, to analyze the expected impact of the proposed apartment community on local traffic. The Traffic Impact Study found that under both existing and future conditions, all intersections in the area including the intersection of Sun Valley Boulevard and W 1st Avenue are expected to operate at an accepted level of service (LOS). The Traffic Impact Study also recommended that a left/thru and right turn lane be provided at the intersection of W. 1st Avenue and Sun Valley Boulevard, in order to maintain good traffic circulation on 1st Avenue, nearby the subject property's main point of access. The Applicant will work with County Staff and the project design team to provide this recommended improvement during construction. Based on the above information, the proposed development is not expected to be significantly detrimental to local traffic levels.

In addition, the proposed development will bring the necessity for construction of sidewalks adjacent to the subject site. The applicant will be an active participant in the provision of these improvements, and it is expected that the sidewalks will provide a safe route to school for not only the children living in the proposed apartment community, but also for children in the general vicinity that walk to Lois Allen Elementary School.

5100 W 1ST AVENUE APARTMENTS

ADMINISTRATIVE PERMIT
PROJECT NARRATIVE

e) Effect on a Military Installation. If a military installation is required to be noticed pursuant to this article, the effect of the issuance of the permit will not be detrimental to the location, purpose and mission of the military installation.

Response: Not applicable as there are no military installations in proximity to the project site.

TAB B

GENERAL NOTES

- ALL PLANTING AND IRRIGATION SHALL BE INSTALLED PER LOCAL
- ALL DECIDUOUS TREES SHALL BE AT LEAST TWO (2) INCH CALIPER PER THE AMERICAN NURSERY STANDARDS AT THE TIME OF PLANTING.
 ALL EVERGREEN TREES SHALL BE AT LEAST 7 FEET IN HEIGHT, AS
- MEASURED FROM FINISH GRADE AT THE TIME OF PLANTING.

 THE COMPOSITION OF TREES SHALL REPRESENT A MIXTURE OF DECIDUOUS AND CONIFEROUS VARIETIES.
- DIVERSITY IN SPECIES OF EVERGREEN AND DECIDUOUS TREES PLANTED IS REQUIRED.
- ON ALL PROJECTS WHICH REQUIRE FOUR (4) OR MORE TREES TO BE PLANTED, A MINIMUM OF FOUR (4) SPECIES WILL BE INCLUDED.
- FINAL PLANT SELECTION AND LAYOUT WILL BE BASED ON SOUND HORTICULTURAL PRACTICES RELATING TO MICRO-CLIMATE, SOIL, AND WATER REGIMES. ALL TREES WILL BE STAKED SO AS TO REMAIN UPRIGHT AND PLUMB FOLLOWING INSTALLATION. PLANT SIZE AND QUALITY AT TIME OF PLANTING WILL BE PER THE AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z60.1-1990)
- ALL SHRUB BEDS WILL RECEIVE 4" DEPTH MULCH WITH WEED CONTROL.
- ALL LANDSCAPING WILL BE AUTOMATICALLY IRRIGATED. CONTAINER ALL LANDSCAPING WILL BE ADTOMINED BASED ON THE SPECIFIC HORTICULTURAL REQUIREMENTS OF EACH SPECIES. A REDUCED-PRESSURE-TYPE BACKFLOW PREVENTOR WILL BE PROVIDED ON THE IRRIGATION SYSTEM AS REQUIRED PER CODE.
- PLAN IS CONCEPTUAL. PLANT QUANTITIES INDICATED ARE PER CITY OF RENO CODE REQUIREMENTS. PLANT LOCATIONS, FINAL SPECIES SELECTION, AND SIZE AT PLANTING SHALL BE DETERMINED DURING DEVELOPMENT OF THE FINAL CONSTRUCTION DOCUMENTS.

LEGEND



NARROW COLUMNAR TREES



ORNAMENTAL FLOWERING TREES



DECIDUOUS SHADE TREES

EVERGREEN TREES



LANDSCAPE AREA

LANDSCAPE DATA

CORPORATE AREA: WASHOE COUNTY SITE AREA = 435,251 SQ FT (9.992 ACRES)

ZONING: MDU (WCTY - MEDIUM DENSITY URBAN)

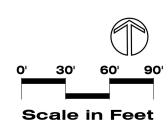
REQUIRED LANDSCAPE AREA = 87,050 SQ FT (20% OF TOTAL SITE AREA)

PROVIDED LANDSCAPE AREA = 87,050 SQ FT MIN.

TREES REQUIRED = 290

ONE TREE PER 300 SQ FT OF REQUIRED LANDSCAPE AREA = 263

SHRUBS REQUIRED = 1,740 MIN. (6 SHRUBS PER PROPOSED TREE)



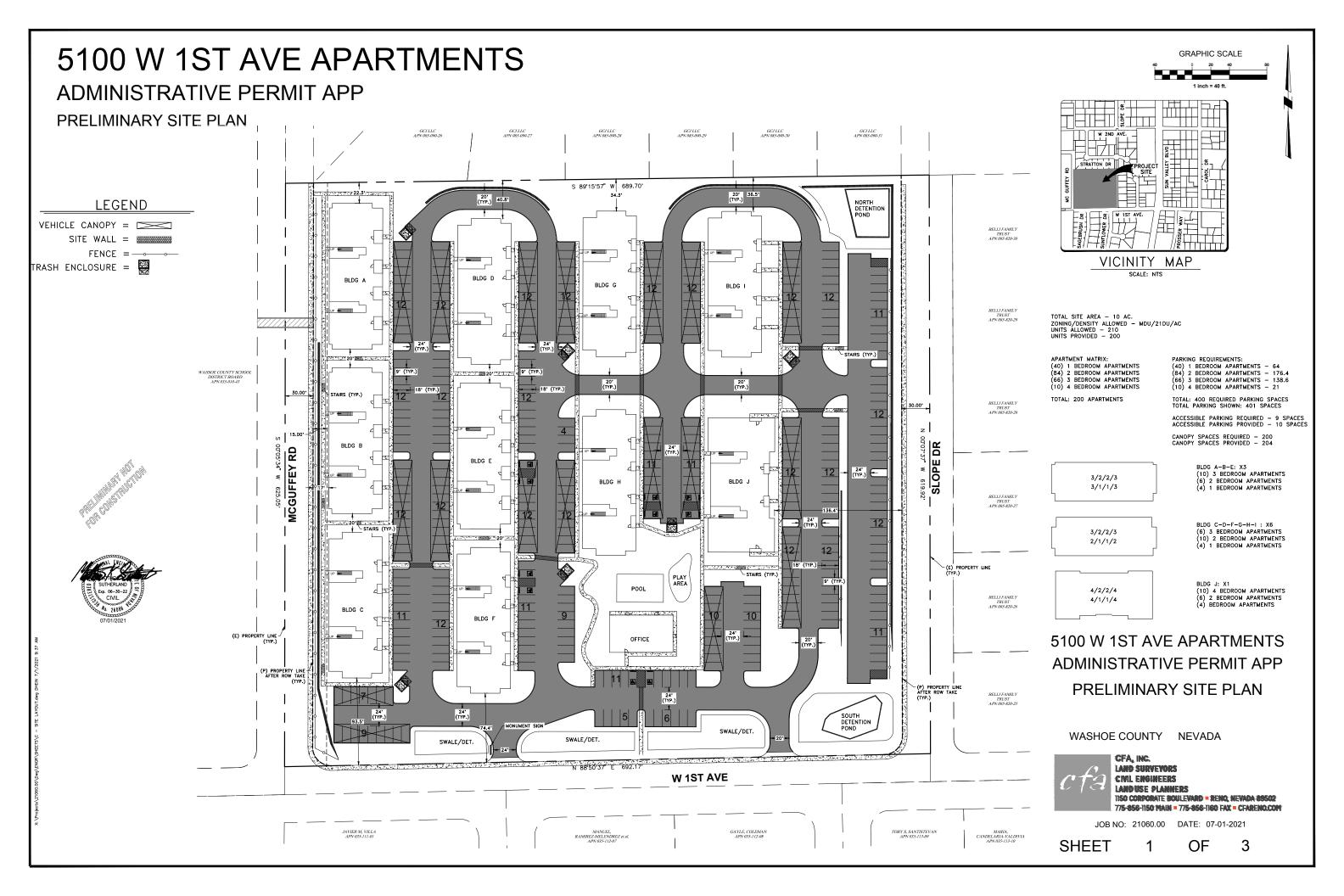


reliminary Landscape Plan
VALLEY MULTI-FAMILY
CFA, INC.

Studio*Nerada*

No. Revision Date

Designed: RNH Drawn: KMK Checked: RWH Date: 6/25/2021

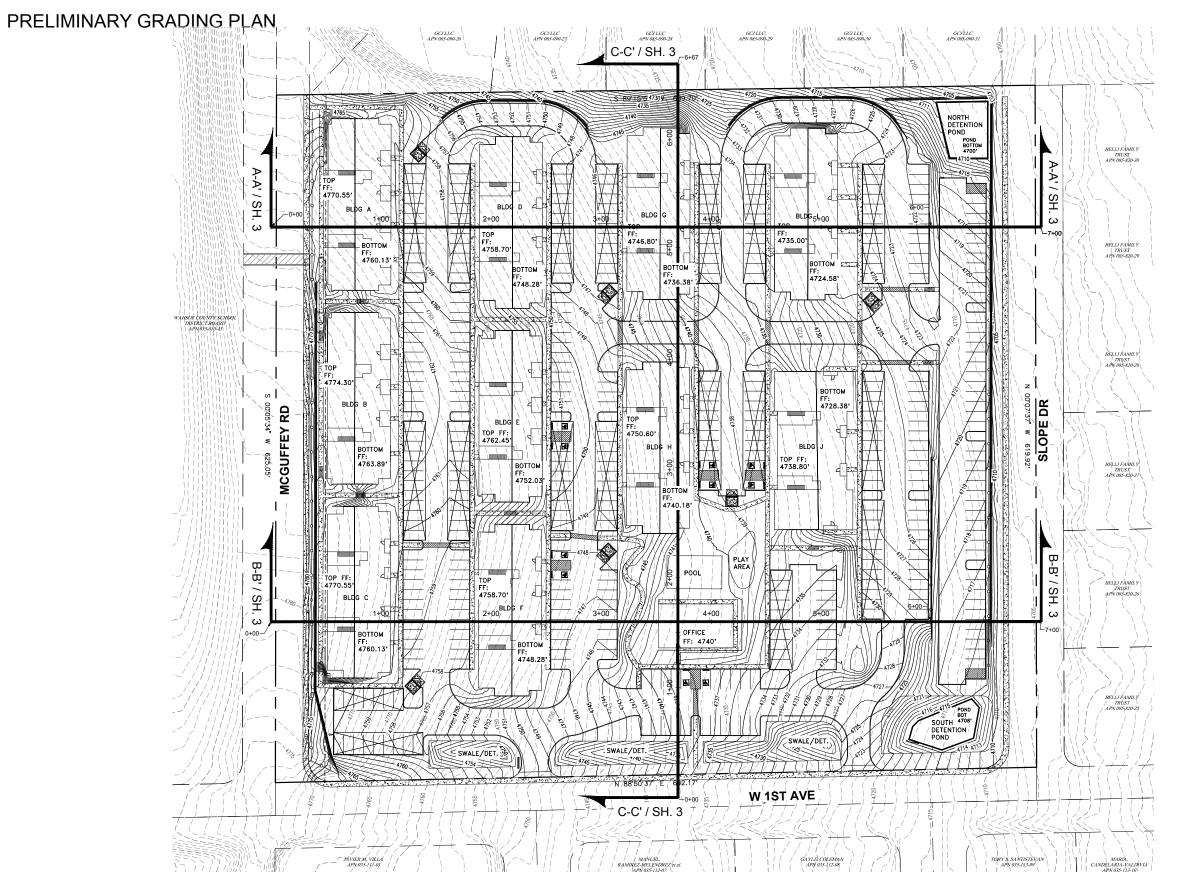


5100 W 1ST AVE APARTMENTS

ADMINISTRATIVE PERMIT APP

Cut/Fill	Summary
----------	---------

J	Name	Cut Factor	Fill Factor	2d Area	Cut	Fill	Net
	FG to EG comparison	1.000	1.000	392736 Sq. Ft.	29768 Cu. Yd.	54363 Cu. Yd.	24596 Cu. Yd. <fill></fill>
	Totals			392736 Sq. Ft.	29768 Cu. Yd.	54363 Cu. Yd.	24596 Cu. Yd. <fill></fill>





LEGEND

EXISTING MINOR CONTOUR = -- 4701 -
EXISTING MAJOR CONTOUR = -- 4700 -
PROPOSED MINOR CONTOUR = -- 4701 -
PROPOSED MAJOR CONTOUR = -- 4700 --

NOTES

1. EXISTING CONTOURS PROVIDED BY WASHOE COUNTY GIS





5100 W 1ST AVE APARTMENTS ADMINISTRATIVE PERMIT APP PRELIMINARY GRADING PLAN

WASHOE COUNTY NEVADA



CFA, INC.
LAMD SURVEYORS
CIVIL ENGINEERS
LAMD USE PLANNERS
1150 CORPORATE BOULEVARD = RENG, NEVADA 89502
775-856-1150 MAIN = 775-856-1160 FAX = CFARENO.COM

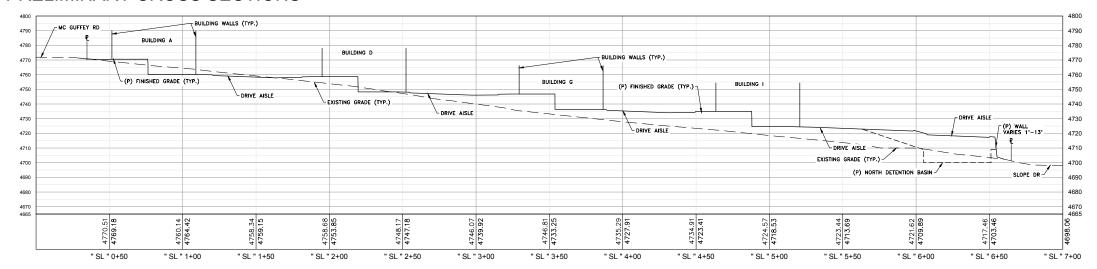
JOB NO: 21060.00 DATE: 07-01-2021

SHEET 2 OF 3

5100 W 1ST AVE APARTMENTS

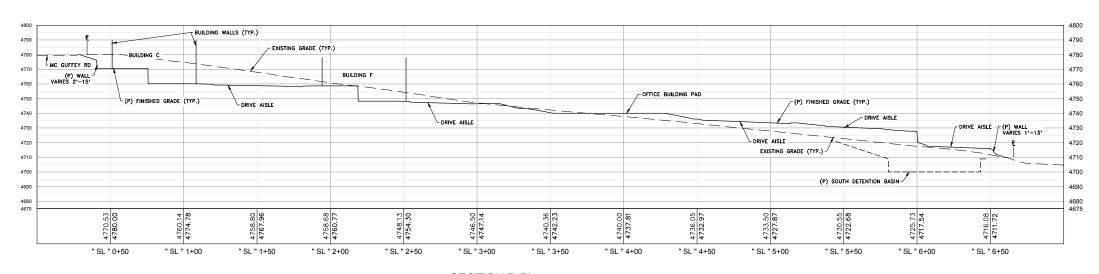
ADMINISTRATIVE PERMIT APP

PRELIMINARY CROSS SECTIONS



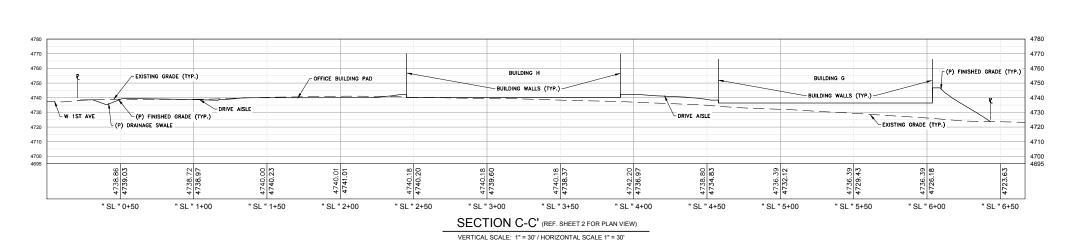
SECTION A-A' (REF. SHEET 2 FOR PLAN VIEW)

VERTICAL SCALE: 1" = 30' / HORIZONTAL SCALE 1" = 30'



SECTION B-B' (REF. SHEET 2 FOR PLAN VIEW)

VERTICAL SCALE: 1" = 30' / HORIZONTAL SCALE 1" = 30'



NOTES

1. EXISTING CONTOURS PROVIDED BY WASHOE COUNTY GIS





5100 W 1ST AVE APARTMENTS ADMINISTRATIVE PERMIT APP PRELIMINARY CROSS SECTIONS

WASHOE COUNTY NEVADA



CFA, INC.
LAND SURVEYORS
CIVIL ENGINEERS
LANDUSE PLANNERS
IISO CORPORATE BOULEVARD = RENO, NEVADA 88502
775-856-1150 MAIN = 775-856-1160 FAX = CFARENO.COM

JOB NO: 21060.00 DATE: 07-01-2021

SHEET 3 OF 3

TAB C



A1.1

ARCHITECTURE, INC

EAST | SCALE: 1/8" = 1'-0" | 1

WEST | SCALE: 1/8" = 1'-0" | 2 AVERAGE HEIGHT OF THE HIGHEST GABLE OF A PITCHED OR HIPPED ROOF 20' - 10" ı,t ,1 , ,1 1 LEVEL 1 NORTH | 1/8" = 1'-0" | 3 SOUTH | 1/8" = 1'-0" | 4

FRAMEARCHITECTURE.COM ELEVATIONS BLDG A

BUILDING A DAYLIGHT LEVEL PERIMETER CALCULATION

BULDING A

BYLGHT EVER PERMETER - 389

BYLGHT EVER PERMETER - 180

BYLGHT EVER PERMETE

ARCHITECTURE, INC

4 Building Sun Valley Apartments -

5100 West 1st Avenue, Washoe County Ulysses Development

A1.2



A2.1

5100 West 1st Avenue, Washoe County Ulysses Development

ARCHITECTURE, INC

BUILDING B DAYLIGHT LEVEL PERIMETER CALCULATION

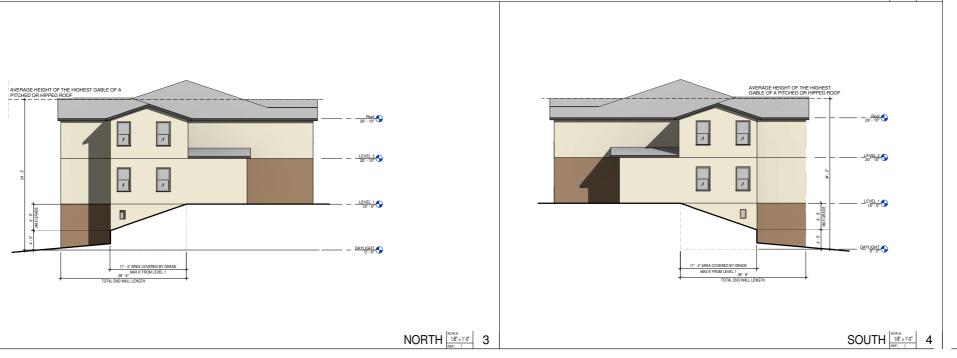
DAYLIGHT LEVEL PERIMETER - 989'
WEST WALL 156' COMPLETELY COVERAGE
EST WALL 156' NO GRADE COVERAGE
SOUTH WALL 265' - GRADING IS WITHIN 6' OF LEVEL 1 FOR A DISTANCE OF 174'
NORTH WALL 265' - GRADING IS WITHIN 6' OF LEVEL 1 FOR A DISTANCE OF 174'

"GENERAL DEFINITIONS:
"STORY" IS THAT PORTION OF A BUILDING INCLUDED BETWEEN THE UPPER SURFACE OF ANY FLOOR AND THE UPPER SURFACE OF THE FLOOR NEXT ABOVE, EXCEPT THAT THE TOPMOST STORY SHALL BE THAT PORTION OF A BUILDING INCLUDED BETWEEN THE UPPER SURFACE OF THE TOPMOST FLOOR AND THE CEILING OR ROOF ABOVE. IF THE PINISHED FLOOR LEVEL DIRECTLY ABOVE A USBACE OR UNIVESED UNDER-FLCOR SPACE IS MORE THAN SIX, (6) FEET ABOVE GRADE AS DEFINED HEREIN FOR MORE THAN FIFTY GRADE AS DEFINED HEREIN AT ANY POINT, SUCH USABLE OR UNUSED UNDER-FLCOR SPACE SHALL BE CONSIDERED AS A STORY.

EAST | SCALE: 1/8" = 1'-0" 1



WEST | SCALE: | 1/8" = 1'-0" | 2



FRAMEARCHITECTURE.COM ELEVATIONS BLDG B

A2.2

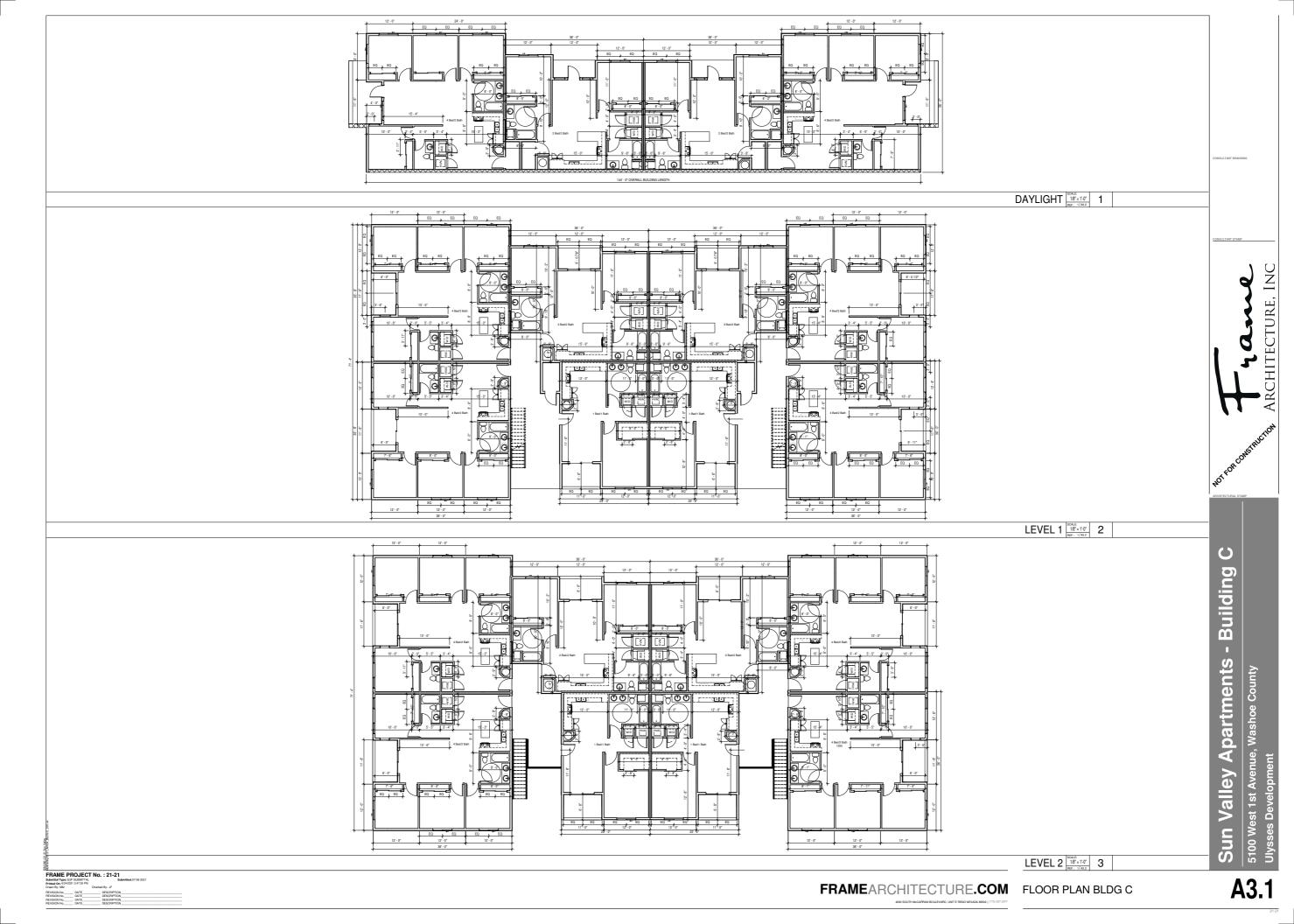
m

Building

Sun Valley Apartments

5100 West 1st Avenue, Washoe County Ulysses Development

ARCHITECTURE, INC



ARCHITECTURE, INC 4

C Building

5100 West 1st Avenue, Washoe County Ulysses Development

Sun Valley Apartments

A3.2





EAST | | SCALE: | 1/8' = 1'-0' | 1







TAB D



	SPECIFIC	CA TIOI	NS
ITEM	DESCRIPTION	ITEM	DESCRIPTION
16.1	STANDARDS AND CODES: ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF THE ANDROMA ELECTRICAL CODE (NEC.) AS WELL AS ALL APPLICABLE STATE AND LOCAL CODES AND ORDINANCES. THIS DOES NOT RELIEVE THE CONTRACTOR FROM FURNISHING AND INSTALLING WORK SHORM OR SPECINFE WHICH MAY EXCEED THE REQUIREMENTS OF SUCH ORDINANCES,	16.16 16.17	TAMER-RROOF. ALL EQUIPMENT AND CIRCUTING ACCESSIBLE BY THE PUBLIC SHALL BE TAMFER- PROOF AND VANDAL RESISTANT. OPENABLE DEVICES AND EQUIPMENT SHALL BE PADLOCKARD. CIRCUTING: ALL WIRING SHALL BE IN CONDUT, MINIMUM 3/4°C, CONCEALED EXCEPT WHERE NOTED. EMT WITH STEEL SET SOREW MISULATED-THROOF FITTINGS MAY BE USED IN DRY, PROTECTED INTERIOR
16.2	LAWS, REGULATIONS AND CODES. COMPLETE INSTALLATION: PROVIDE ALL LABOR, MATERIALS, EQUIPMENT, TOOLS, ACCESSORIES, ETC., NECESSARY TO ACCOMPLETE A COMPLETE ELECTRICAL SYSTEM IN ACCORDANCE WITH THE PLANS TOOGTHER WITH THE SPECTICAL DISC.		LOCATIONS. PVC SCHEDULE 40 SHALL BE USED BELOW GRADE AT MINIMUM -24", WRAPPED RIGID ELBOWS AND RISERS SHALL BE USED FOR ALL THROUGH-GRADE TRANSITIONS AND STUB-UPS. RGS OR IMC CONDUIT WITH THERADED FITTINGS SHALL BE USED IN ALL LOCATIONS WHERE EXPOSED TO THE
16.3	PERMITS OBTAIN AND PAY FOR ALL BUILDING AND WORKING PERMITS AND INSPECTION FEES REQUIRED FOR THIS PROJECT.		ELBINITS OR SUBJECT TO PHYSICAL DAMAGE. METAL-CLAD CABLE (TYPE MC) MIL DE ACCEPTABLE FOR SINGE CIBCUIT BRANCH CHEUTING. FLERIBLE MHERS FROM JUNION BOXES TO LIGHTING FITURES, MITHIN CASEMORY AND ACCESSBLE AREAS ONLY. TYPE MC CABLE MAY NOT BE USED FOR HOMERIUS. ENT IS NOT ALLOME. CONNECT RECESSED AND SUSPENDED LIGHTING FITURES, MOTORIZED AND WIBRATING EQUIMENT MITH SIEL FLEX. ALL COMINT SHALL HAVE PULLOCRO IF OTHERMSE CAPTY.
16.4	DRAMMISS, DATA PRESENTED ON THESE DRAMMISS SHALL BE FIELD VERFIED SINCE ALL DIMENSIONS, LOCATIONS, AND LEVELS ARE COVERIED BY ACTUAL FELD CONDITIONS. REVIEW ALL ARCHITECTURAL, STRUCTURAL, CHILL, MECHANICAL, AND SPECIAL TY SYSTEMS DRAMMISS AND ADJIST ALL MORK TO MEET THE REQUIREMENTS ON CONDITIONS SHOWN THEREON, DO NOT SCALE DECENTICAL PLANS FOR TRIVINE, DEVICE OR APPLIANCE LOCATIONS. USE CONFIGURED DIMENSIONS IF GIVEN OR CHECK ARCHITECTURAL OR MECHANICAL DRAMMISS.	16.18	MERING WERE SHALL BE COPPER UNLESS OTHERWISE INDICATED, MINIMAM WERE SIZE SHALL BE #12 ANG, WHERE ALIMINIAM IS ALLOHED BY WRITTEN AUTHORIZATION BY THE ENGINEER, WIRE SHALL BE TERMINATED IN AN INSULATED COLYAL RATED COMPRESSION TERMINAL FITTING (MAG-ADAPT OR EQUAL). INSULATION SHALL BE THIN, THAN OR THEM.
16.5	COPYRIGHT: THESE PLANS, SPECIFICATIONS AND ALL RELATED ADDENDA AND DOCUMENTS CONSTITUTE COPYRIGHT MATERIALS OF JP ENGINEERING ALL RIGHTS CONFERRED BY THE COPYRIGHT AND SIMILAR	16.19	EUSES: FUSES SHALL BE SIZED PER ACTUAL NAMEPLATE OF EQUIPMENT SERVED. FUSES SHALL BE DUAL—ELEMENT, CHRENT—LIMITING, AND SHALL BE INTERCHANGEABLE BETMEEN FRAME SIZES WITH SYMDARD FACTORY FUSE FOLDUCERS. FUSES SHALL BE AS FOLDIONS INTESS OTHERWISE INDICATED:
	LANS ARE RESERVED TO UP ENGINEERING. THESE MATERIALS SHALL REMAIN THE SOLE PROPERTY OF UP ENGINEERING AND MAY NOT BE REPRODUCED, ISSTREBULED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER WITHOUT THE PRIOR WRITTEN CONSENT OF UP ENGINEERING.		CIRCUITS 601 TO 6000 AMPERES SHALL BE PROTECTED BY CURRENT LIMITING BUSSMANN LOW-PEAK TIME-DELAY FUSES KRP-C - UL CLASS L
16.6	LOCATIONS: INDICATED LOCATIONS OF ALL OUTLETS AND EQUIPMENT ARE SUBJECT TO CHANGE. SHIFT/RELOCATE/RECONFIGURE ANY OUTLET, EQUIPMENT OR CONNECTION POINT UP TO 10' AS DIRECTED BY ENGINEER, AT NO ADDED COST.		CIRCUITS 0 TO 600 AMPERES SHALL BE PROTECTED BY CURRENT LIMITING BUSSMANN LOW-PEAK DUAL-ELEMENT FUSES LPN-RK (250 VOLTS) OR LPS-RK (600 VOLTS) — UL CLASS RK1
16.7	RECORD DRAWINGS: CONTRACTOR SHALL PROVIDE, PRIOR TO FINAL ACCEPTANCE AND OBSERVATION, ONE SET OF REVISED RECORD ELECTRICAL CONSTRUCTION DOCUMENTS ON REPRODUCIBLE MEDIUM INDICATING THE FOLLOWING ADDITIONAL INFORMATION.		ALL MIDIMOUAL MOTOR CIRCUITS RATED 480 AMPÈRES OR LESS SHALL BE PROTECTED BY BUSSMANN LOW-PEAK DUAL-ELEMENT FUSES LPN-RK (250 VOLTS) OR LPS-RK (600 VOLTS)-UL CLASS RK1 OR L
	EXACT ROUTING OF ALL CONDUITS LARGER THAN 1" EXACT LOCATION OF ALL SERVICE GROUNDING/BONDING CONNECTIONS		CROUIT BREAKER PANELS SHALL BE PROTECTED BY BUSSMANN LOW-PEAK DUAL-ELEMENT FUSES LPH-RK (28 OUTS), LPS-RK (600 VOLTS) OR BUSSMANN LOW-PEAK KRP-C TIME-DELAY FUSES – UL CLASS RK1 OR L
	CONTRACTORS NAME, ADDRESS AND TELEPHONE NUMBER RECORD NOTATIONS SHALL BE CLEARLY DRAWN AT A BRAFTING APPEARANCE EQUAL TO THE ORIGINAL BRAWNES, CONTRACTOR SHALL ALSO PROVIDE ALL OPERATING AND MANYEDWANCE MANUALS PROOF TO		ALL DUAL-ELEMENT FUSES SHALL HAVE SEPARATE OVERLOAD AND SHORT-CIRCUIT ELEMENTS. PROVIDE SPARE FUSE CABINET AFTER THE COMPLETION OF THE PROJECT WITH ONE SET OF SPARE FUSES FOR EVERY SIZE USED.
16.8	FINAL FAMENT. FRAMINATION OF SITE AND EXISTING CONDITIONS BEFORE SUBMITTING A PROPOSAL, CONTRACTOR SHALL EXAMINE THE SITE AND FAMILIARIZE MINISTER WITH THE EXISTING CONDITIONS AND LIMITATIONS NO EXTRACT MELA EL ALORGE BECAUGE OF THE CONTRACTOR'S MISINDERSTANDING OF THE AMOUNT OF WORK WINDLED OR HIS LACK OF KNOWLEDGE OF ANY SITE CONDITIONS WHICH HAY AFFECT HIS WORK. ANY APPRIENT VARIANCE OF THE DEBAINS OF SEPCIALITIONS FOR THE EXISTING CONDITIONS AT THE	16.20	LITTLET SERVICES: PROVIDE POWER AND COMMUNICATIONS SYSTEM SERVICES IN ACCORDANCE WITH THE REQUIREMENTS OF THE SERVING UTILITIES. PROVIDE EVACIATION, RECEIVANT, STRUCTURES, GROWINGN, ETC. AS REQUIRED. CONTACT SERVING UTILITIES AND GREAM THEIR PROJECT SPECIFIC REQUIREMENTS PRIOR TO BIOL UTILITY WORK MORACHE HERBIN IS FOR BIODING ASSERVANCE ONLY. THESE PLANS DO NOT PURPORT TO INDICATE ALL WORK REQUIRED. (UTILITY SERVICE CHARGES PAID BY OTHERS).
16.9	SITE SHALL BE CALLED TO THE ATTENTION OF THE ENGINEER BEFORE SUBMITTING A PROPOSAL. TESTING PRIOR TO PLACING IN SERVICE ALL ELECTRICAL SYSTEMS SHALL BE TESTED FOR OPENS	16.21	TEMPORARY CONSTRUCTION POWER: PROVIDE TEMPORARY ELECTRICAL POWER AND LIGHTING FOR ALL TRADES THAT REQUIRE SERVICE DURING ME LOUSE OF THIS PROJECT, PROVIDE TEMPORARY PSERVICE AND DISTRIBUTION AS REQUIRED, COMPLY WITH THE NEC AND OSHA REQUIREMENTS. (ENERGY COSTS BY DIFFIRS).
16.10	GROUNDS, AND PHASE ROTATION. THE MAIN SERVICE GROUND AND ALL LOCAL TRANSFORMER MADE GROUNDS SHALL BE MEGGER-TESTED. PROVIDE GIT TESTING FOR SERVICE SWITCHBOARD. THE GROUNDING GROUND ALL EQUIPMENT AND SYSTEM NEUTRAL IN ACCORDANCE WITH ARTICLE 250 OF THE	16.22	SUBMITIALS: BEFORE ORDERING ANY EQUIPMENT, CONTRACTOR SHALL SUBMIT SIX COPIES OF FACTORY SHOP DRAWNIGS FOR ALL LIGHTING FIXTURES. SWITCHGEAR. PANELS. MOTOR CONTROLLERS. WRING
	NEC. EQUIPMENT GROUNDS HAVE NOT BEEN SHOWN ON DRAWINGS — WHERE GROUND WIRES HAVE BEEN SHOWN THEY INDICATE AN INSULATED GROUND.	16.23	DEVICES, ETC. PROPOSED FOR THIS PROJECT. <u>SUBSTITUTIONS</u> PROPOSED SUBSTITUTIONS SHALL BE EQUAL OR SUPERIOR TO SPECIFIED ITEMS IN ALL RESPECTS. DETERMINATION OF EQUALITY RESTS SOLELY WITH ENGINEER. SUBSTITUTIONS MUST BE
16.11	EQUIPMENT STANDARDS, ALL MATERIALS AND COMPRENT SHALL BE NEW AND OF THE HIGHEST QUALITY AVAILABLE ("SPECIFICATION GRADE"). SERVICE EQUIPMENT SHALL BE FACTORY-ASSEMBLED COMMERCIAL-GRADE, CONFIDERED FER SERVING UTILITY STANDARDS, WRITING DEVICES SHALL BE SPECIFICATION GRADE WITH WYLON PLATES, WHITE UNLESS OTHERWISE NOTED, RAISED STEEL BOX COVERS MAY BE USED IN UTILITY AREA.		SUBBITTED A MINIMUM OF 10 WORKING DAYS PRIOR TO BID FOR CONSIDERATION. PROPOSED SUBSTITUTIONS PROVIDED LATER MILL NOT BE REVIEWED OR ALLOWED, BID SUBSTITUTED MATERIAL MILL ONLY BE ALLOWED IF ACCEPTED IN WRITING BY ENGINEER.
16.12	<u>DISTRIBUTION FOURMENT</u> , DISTRIBUTION EQUIPMENT SHALL BE DEAD-FRONT, PANELBOARD OR SWITCHBOARD TYPE AS INDICATED, UL-LABELED AND BYBLOSED IN A BUMA HOUSING APPROPRIATE TO ITS LOCATION AND APPLICATION WITH HINGER WITE WEREN'S COVERS IN SUSSING, DEVER PRICES FINGERS AND LUGS	16.24	DEXIDICATION: PROVICE ENGRAVED INMERIATES FOR ALL SWITCHBOARDS, PANELS, TRANSFORMERS, DISCONMECTS, MOTOR STARTERS, CONTACTORS TIME SWITCHES AND CABINETS. NAMEPLATES SHALL INCLUDE THE FOLLOWING INFORMATION AS APPLICABLE:
	SHALL BE COPPER UNLESS INDICATED ON DRAMMICS, AIC RATINGS SHOWN OF PLANS ARE WINKLIM RATINGS, RICHT BREAKETS SHALL BE IN EXCESS OF THE AVAILABLE FAULT CURRENT SERES—RATING OF UPSTREAM AND DIMENSTREAM CIRCUIT BREAKERS TO ACHIEVE RECORRED FAULT CURRENT RATINGS IS PROHIBITED UNLESS APPROVED BY ENGINEER IN WHITING.		DESIGNATION (I.e. PANEL A) FUNCTION (I.e. AR HANDLER AH-1) VOLTAGE, PHASE, WREE (I.e. 480 VOLT, 34, 4W.) FEEDER SZE (I.e. 4-4/40 THINN CU IN 2" C.) SOURCE (I.e. SWITGHORAD MOSS)
16.13	PANEIDARDS: PANEIS SHALL HAVE RUSH MONO-RAT TRIM, LOCKING DOOR-IN-DOOR HINGED COVERS AND BOLT-ON CHORUT BREAKER, RUSH-MOUNTED PANES SHALL HAVE EMPTY COMDUTS STUBBED TO ACCESSIBLE ATTIC SPACE: ONE I" COMDUT FOR EACH FOUR SPARE/SPACE CRICUITS, PROVIDE ONE TYPED AND ONE SPARE PANEI SCHEDULE FOR OWNER'S USE. SCHEDULES SHALL BE TIMO COLUMN TYPE		NAMEPLATES SHALL BE WHITE LETTERS ON BLACK FOR NORMAL EQUIPMENT AND WHITE LETTERS ON RED FOR EMERGENCY EQUIPMENT.
16.14	WITH ODD CRICUIT NUMBERS ON THE LEFT AND EVEN MUMBERS ON THE RIGHT. <u>TRANSFORMERS</u> , TRANSFORMERS SHALL BE SELF VENTILATED DRY—TYPE UNLESS INDICATED OTHERWISE AND SHALL BE UL LISTED AS SUITABLE FOR INSTALLATION IN INTERFOR LOCATIONS. INSULATION SHALL	16.25	GUARANTIE: THE COMPLETE ELECTRICAL SYSTEM, AND ALL PORTIONS THEREOF, SHALL BE GUARANTEED TO BE FREE FROM DETECTS IN MERMANISHEM AND MATERIALS FOR A PERIOD OF MIX-PAR FROM DATE OF FINAL ACCEPTANCE. PROMITY REMEDY SICH DEFECTS AND MY SUBSEQUENT DAMAGE CAUSED BY THE DEFECTS OR REPAIR THEREOF AT MO EMPENES TO THE OMNER. LAMPS ARE EXEMPT FROM THIS CHARANTEE, BUT SHALL BE NEW AT TIME OF THALL ACCEPTANCE.
	CELSUS, PROVIDE SX 2 1/2% TOLTAGE ADJUSTING TAPS - TWO ABOVE AND FOUR BELOW RATED PRIMARY VOLTAGE, IMPEDIANCE FOR INTEXT BROVE ISSUES INSING SHALL BE MINIMUM 3% WINDINGS SHALL BE COPPER UNLESS APPROVED BY ENGINEER IN WIRRING, TRANSFORMERS SHALL BE CONNECTED WITH SEALTIGHT FLEXIBLE CONNECTED WITH SEPARATE INTERNAL GROUND WIRE.	16.26	SUPERINED CRUMS SISTEMS ALL LAY-IN FATURES SHALL BE INDEPENDENTLY SUPPORTED BY THO #12 SLACK WIRES ATTACHED TO MICE OPPOSITE CORNERS OF THE FATURE FER USE A NEC REQUIREMENTS. THESE WIRES SHALL BE SECURED THE STRUCTURAL FRAMING SUCH THAT FAILURE OF THE SUSPENDED CRUMS SHALL NOT ALLOW THE FATURE TO DROP.
16.15	CODE COMPLANCE: A. WORKING CLEARANCE: - THE CONTRACTOR SHALL HERIFY THAT ALL ELECTRICAL EQUIPMENT MEETS THE CLEARANCE REQUIREMENTS OF NEC 110.28. DRAWINGS REPRESENT CLEARANCES ARE MET AS DESIGNED, ANY DEVALION SHALL ALSO MEET THIS REQUIREMENT.	16.27	CORRINATION: THE CHIL, ARCHITECTURAL, MECHANICAL, KITCHEN AND INTERIOR DEABNINGS CONTAIN BETAL DESPRIPRIONS, GRECUITING AND CONNECTION REQUIREMENTS WHICH ARE PART OF DIVISION 16 RESPONSBUITIES, ELECTRICAL CONTRACTOR SHOULD NOT SUBMIT BIDS ON THIS PROJECT BEFORE REVENING BLL, PROJECT DIRAMINGS, SECTION, AND ADDEBUIES.
	 ELCTRICAL SWITCHBOANDS RATED 1200 AMPS OR GREATER, IN EXCESS OF 6 FEET IN LENGTH, SHALL REQUIRE TWO (2) EATS FROW THE ELECTRICAL ROOM UNLESS NEC 110.26(C)(2)(6) OR 110.26(C)(2)(6) ARE NET THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE THAN 112.5 KVA SHALL BE PLACED IN ELECTRICAL ROOMS WITH A 1-HOUR RIFE RATING PER NEC 450.21(8) WHERE THEY DO NOT MEET THE TRANSFORMER SECTION. TRANSFORMERS AS SPECIFIED IN THIS SECTION MEET NEC 450.21(8) EXCEPTION §2 AND ARE NOT REQUIRED TO BE PLACED IN A 1-HOUR RETAIL OF 	16.28	EIRE ALARM. PROVIDE NEW FIRE EXTINGUISHING SYSTEM MONITOR WITH CLASS I CIRCUITING AS REQUIRED BY LOCAL FIRE MARSHAL AND IN COMPLIANCE WITH ADA REQUIREDENTS. CONTINUE PAINEL SHALL NICLUDE NITEGORIA SYMBOR'S HATTERS, CHARGER FAND MONITORIN. IE MODULE OR ACCOUNT AND AUTO-DALLER CONNECTED TO THE TELEPHINE SYSTEM (CONNECTION FOR MONITORING CHARGES BY OTHERS). PLANS DO NOT INDICATE ALL DEVICES, CONNECTIONS OR COUNTING FECULIES FOR A COUNTET SYSTEM. SUBMIT PROPOSED DESIGN TO THE FIRE MARSHAL AND RECEIVE APPROVAL PRIOR TO ROUGH-IN.

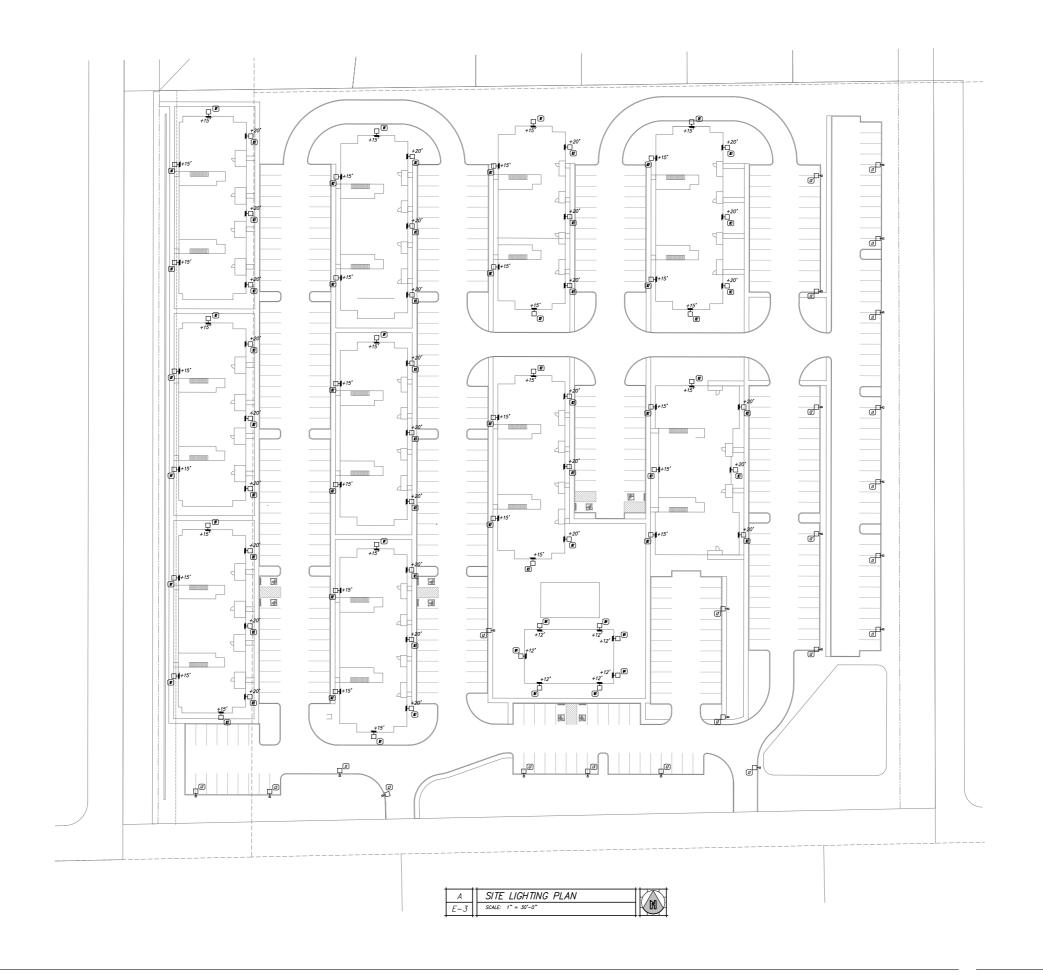
	SIGNAL OUTLETS		RECEPTACLES		ABBREVIATIONS
▼	TELEPHONE: 4S BOX WITH SINGLE GANG MUD RING UON, +18" AFF UON	⇒⇒	DUPLEX: 20A, 125V, NEMA 5-20, +18" AFF	E	CENTERLINE
_	TELEPHONE: 4S BOX WITH SINGLE GANG MUD RING UON,	⇒ →	DOUBLE DUPLEX: 20A, 125V, NEMA 5-20, +18" AFF	AFF	ABOVE FINISHED FLOOR
¥	WALL MOUNT +54" AFF UON	⇒ ⇒	HALF SWITCHED DUPLEX: 20A, 125V, NEMA 5-20, +18" AFF (TOP HALF SWITCHED)	AIC	AMPERES INTERRUPTING CAPACITY
∇	DATA: 4S BOX WITH SINGLE GANG MUD RING UON, +18" AFF UON	⇒	DUPLEX GFCI: 20A, 125V, GFCI, NEMA 5-20 GFR, +18" AFF	AFC	ABOVE FINISH CEILING
v	VOICE/DATA: 4S BOX WITH SINGLE GANG MUD RING UON, +18" AFF UON	=⊚ =�	DUPLEX I.G.: 20A, 125V, ISO. GND., NEMA 5-20 IG +18" AFF (WHITE WITH ORANGE TRIANGLE, UON)	BMS C	BUILDING MANAGEMENT SYSTEM CONDUIT
	TELEVISION: 4S BOX WITH SINGLE GANG MUD RING UON,	=⊚ =&	DOUBLE DUPLEX I.G.: 20A, 125V, ISO. GND., NEMA 5-20 IG	CB	CIRCUIT BREAKER
◈	+18" AFF UON	₩ *	+18" AFF (WHITE WITH ORANGE TRIANGLE, UON) SPECIAL RECEPTACLE - AS INDICATED ON PLANS, +18" AFF	CLG	CEILING
© ⁴	CAMERA: 4S BOX WITH SINGLE GANG MUD RING UON, CEILING MOUNTED UON	NO	TE: DIAMOND SYMBOLS INDICATES DEDICATED CIRCUIT.	CIR	CIRCUIT
®	MICROPHONE: 4S BOX WITH SINGLE GANG MUD RING UON,		EQUIPMENT	DPDT	DOUBLE POLE DOUBLE THROW
	+18" AFF UON	7//2	SWITCHBOARD	DPST	DOUBLE POLE SINGLE THROW
0	VOLUME CONTROL: 4S BOX WITH SINGLE GANG MUD RING UON, +48" TO TOP UON	_	PANELBOARD: SURFACE MOUNTED	(E)	EXISTING TO REMAIN
(3)	SPEAKER: 8" COAXIAL WITH BACK BOX AND GRILLE, CEILING MOUNTED UON	_	PANELBOARD: FLUSH MOUNTED	ELEV	ELEVATOR
٦.	3/4°C (UON) STUB INTO ACCESSIBLE CEILING SPACE	Ⅱ	TRANSFORMER	EMT	ELECTRICAL METALLIC TUBING
→			RELAY (120V COIL , STEP DN XFMR IF REQUIRED, UON)	EP0	EMERGENCY POWER OFF SYSTEM
-	SWITCHES	□ □	CONTACTOR (120V COIL, STEP DN XFMR IF REQUIRED, UON)	FB0	FURNISHED BY OTHERS
S	SINGLE POLE: 20A, 120/277V, +48" TO TOP UON	₩.	COMBINATION MAGNETIC STARTER/FUSED DISCONNECT	FPEN	FUSE PER EQUIPMENT NAMEPLATE
S ₂	TWO POLE: 20A, 120/277V, +48" TO TOP UON	₩.	NON-FUSIBLE DISCONNECT SWITCH	FLUOR	FLUORESCENT
S ₃	THREE WAY: 20A, 120/277V, +48" TO TOP UON	E ¹	FUSIBLE DISCONNECT SWITCH	FU	FUSE: DUAL-ELEMENT, TIME DELAY
S ₄	FOUR WAY: 20A, 120/277V, +48" TO TOP UON		PULLBOX: SIZE AS REQUIRED BY NEC	GFI/GFCI	GROUND FAULT INTERRUPTER
S _x	X INDICATES EMERGENCY CIRCUIT	0	JUNCTION BOX: SIZE AS REQUIRED BY NEC	GND	GROUND
Sp	P INDICATES PILOT LIGHT (LIGHTED WHEN ON)		SURFACE RACEWAY WITH OR WITHOUT DEVICES	HOA	HAND-OFF-AUTOMATIC
SL	L INDICATES PILOT LOCATOR (LIGHTED WHEN OFF)	TP	TELEPOWER POLE	HID	HIGH INTENSITY DISCHARGE
S _K	K INDICATES KEY OPERATED SWITCH		CIRCUITING	IG	ISOLATED GROUND
S _M	MANUAL MOTOR STARTER: 20A, 120/277V, POLES AND HEATERS AS REQUIRED		CONDUIT IN WALL OR ABOVE CEILING CONDUIT IN FLOOR OR BELOW GRADE	INCAND	INCANDESCENT
S _{MC}	MOMENTARY CONTACT: 20A, 120/277V, SPDT CENTER NORMALLY OFF UON, +48" TO TOP UON		METAL CLAD CABLE (MC)	К	kcmil (300K = 300 kcmil)
_		-OH-	OVERHEAD SERVICE	LTG	LIGHTING
D	DIMMER: 600 WATT UON, ELECTRONIC SLIDER, WITH ON/OFF TOGGLE, +48" TO TOP UON (PLANS SHALL INDICATE TYPE: FLUOR, INCAND OR LOW-VOLTAGE)	-p-	PRIMARY	LV	LOW VOLTAGE
		-s-	SECONDARY	МСР	MOTOR CIRCUIT PROTECTOR
±	MOTION/OCCUPANCY SENSOR SWITCH WITH OFF-AUTO SELECTOR - WALL MOUNTED AT +48" TO TOP UON	-1-	TELEPHONE	MC	MULTI-CONDUCTOR CABLE
S = 360	ULTRASONIC MOTION/OCCUPANCY SENSOR SWITCH		TEEE TIONE	(N)	NEW
	CEINIC MOTION OCCUPANCT SENSOR SWITCH	-TV-	TEL EVISION	.,	
= 180	CEILING MOUNTED ARROWS INDICATE DIRECTION AND COVERAGE	- <i>TV</i> -	TELEVISION LOW VOLTAGE AND /OR CONTROL CIRCUITING	NC	NORMALLY CLOSED
= 180 = 90	CEILING MOUNTED ARROWS INDICATE DIRECTION AND COVERAGE PROVIDE WITH POWER PACK PER MANUFACTURERS REQUIREMENTS		LOW VOLTAGE AND/OR CONTROL CIRCUITNG	NC NEUT	NEUTRAL
	CELING MOUNTED ARROWS MICHAEL DIRECTION AND COVERAGE PROVIDE WITH POWER PACK PER MANUFACTURERS REQUIREMENTS PHOTO ELECTRIC SWITCH: 1600VA UON	_**-	LOW VOLTAGE AND/OR CONTROL CIRCUITING EMERGENCY CIRCUIT	NC NEUT NL	NEUTRAL NIGHT LIGHT
= 180 = 90	CEUNG MOUNTED ARROWS MIDICATE DIRECTION AND COVERAGE PROVIDE WITH POWER PACK PER MANUFACTURERS REQUIREMENTS PHOTO ELECTRIC SWITCH: 1600VA UON METHODS		LOW VOLTAGE AND/OR CONTROL CIRCUITING EMERGENCY CIRCUIT STUB OUT: MARK AND CAP (SITE)	NC NEUT NL NO	NEUTRAL NIGHT LIGHT NORMALLY OPEN
= 180 = 90 (R)	CELING MOUNTED ARROWS MICHAEL DIRECTION AND COVERAGE PROVIDE WITH POWER PACK PER MANUFACTURERS REQUIREMENTS PHOTO ELECTRIC SWITCH: 1600VA UON	—**— —**—	LOW VOLTAGE AND/OR CONTROL CIRCUITING EMERGENCY CIRCUIT STUB OUT: MARK AND CAP (SITE) CIRCUITING UP OR DOWN	NC NEUT NL NO NTS	NEUTRAL NIGHT LIGHT NORMALLY OPEN NOT TO SCALE
= 180 = 90 (R)	CELIAN MONTED ARROWS NUID-LE DIRECTION AND COMEMAC PROMOCE WITH POMER PACK PER MANUFACTURERS REQUIREMENTS PHOTO ELECTRIC SWITCH: 1600VA UON METHODS SHADING NICKETS: FUTURE, OUTLET, EQUIPMENT, ETC. ON EMERGENCY X' OR NIGHT LIGHT NL' CIRCUIT DEVICE MOUNTED IN MULTIPLE UNDER COMMON COVER	—**— —**—	LOW VOLTAGE AND/OR CONTROL CIRCUITING EMERGENCY CIRCUIT STUB OUT: MARK AND CAP (SITE)	NC NEUT NL NO NTS PNL	NEUTRAL NIGHT LIGHT NORMALLY OPEN NOT TO SCALE PANEL
= 180 = 90 (R)	CELING MOUNTED ARROWS MIGHTED WRECTION AND COMERAGE RROWS WITH FORSE PACK FOR MANUFACTURERS REQUIREMENTS PHOTO ELECTRIC SHITCH: BROWN JOHN METHODS SHADING NINCARES: FUTURE, QUITLET, EQUIPMENT, ETC. ON EMERGENCY X' OR NIGHT LIGHT NL' ORGUIT DEVICE MOUNTED IN MULTIPLE UNDER COMMON COMER MUSIMUM MEDION ON WALL SHALL BE +48" TO TOR UON	—**— —**—	LOW VOLTAGE AND/OR CONTROL CIRCUITING EMERGENCY CIRCUIT STUB OUT: MARK AND CAP (SITE) CIRCUITING UP OR DOWN THOS = NO. OF JIZ WIRES (UDN) IF MORE THAN THO WITHIN COMDUIT OR MC ISOLATED GROUNDING CONDUCTOR	NC NEUT NL NO NTS PNL PVC	NEUTRAL NIGHT LIGHT NORMALLY OPEN NOT TO SCALE PANEL POLYWNYL CHLORIDE CONDUIT
= 180 = 90 (R)	CELIAN MONTED ARROWS NUID-LE DIRECTION AND COMEMAC PROMOCE WITH POMER PACK PER MANUFACTURERS REQUIREMENTS PHOTO ELECTRIC SWITCH: 1600VA UON METHODS SHADING NICKETS: FUTURE, OUTLET, EQUIPMENT, ETC. ON EMERGENCY X' OR NIGHT LIGHT NL' CIRCUIT DEVICE MOUNTED IN MULTIPLE UNDER COMMON COVER	—**— —**—	LOW VOLTAGE AND/OR CONTROL CIRCUITING EMERGENCY CIRCUIT STUB OUT: MARK AND CAP (SITE) CIRCUITING UP OR DOWN TICS = NO. OF 1/12 WIRES (UON) IF MORE THAN THO WIRTH COMDUIT OR MC —ISOLATED GROUNDING CONDUCTOR —GROUNDING CONDUCTOR —REVIRAL COMPUTER (ONE PER PHASE CONDUCTOR)	NC NEUT NL NO NTS PNL PVC (R)	NEUTRAL NIGHT LIGHT NORMALLY OPEN NOT TO SCALE PANEL POLYWNYL CHLORIDE CONDUIT EXISTING TO BE RELOCATED
= 180 = 90 (R) (R) (R) (R) (R) (R) (R) (R)	CELIAN MONITED ARROWS MIGHTE DIRECTION AND COMERAGE PROMORE WITH PORES PACK FOR MANUFACTURES REQUIREMENTS PHOTO ELECTRIC SWITCH: 1600VA UON METHODS SHADING INDICATES: FIXTURE, OUTLET, EQUIPMENT, ETC. ON MERGENCY X' OR NIGHT LIGHT NL' CRICUIT DEVICE MOUNTED IN MULTIPLE UNDER COMMON COMER MAXIMUM HEIGHT ON WALL SHALL BE +48" TO TOP UON DEVICES MOUNTED IN OR ABOVE COUNTRY/BACKSPIASH:	—**— —**—	LOW VOLTAGE AND/OR CONTROL CIRCUITING EMERGENCY CIRCUIT STUB OUT: MARK AND CAP (SITE) CIRCUITING UP OR DOWN THO WITHIN CONDUIT OR MC ISOLATED GROUNDING CONDUCTOR GROUNDING CONDUCTOR THE VIRTUE CONDUCTOR (ONE PER PHASE CONDUCTOR) PHASE CONDUCTOR(S)	NC NEUT NL NO NTS PNL PVC	NEUTRAL NIGHT LIGHT NORMALLY OPEN NOT TO SCALE PANEL POLYWIYL CHLORIDE CONDUIT EXISTING TO BE RELOCATED RIGID ALUMINUM CONDUIT
= 180 = 90 (R) (R) (R) (R) (R) (R) (R) (R)	CELING MOUNTED ARROWS MIGHT EDRECTION AND COMERAGE PROMORE WITH PORES PACK FOR MANUFACTURERS REQUIREMENTS PHOTO ELECTRIC SWITCH: 1600VA UON METHODS SHADING INDICATES: FIXTURE, OUTLET, EQUIPMENT, ETC. ON MERICANCY X' OR NIGHT LIGHT NI, CORCUIT DEVICE MOUNTED IN MULTIPLE UNDER COMMON COMER MAXIMUM HEIGHT ON WALL SHALL BE +48" TO TOP UON DEVICES MOUNTED IN OR ABOVE COUNTER/BACKSPA-SH- MAXIMUM HEIGHT ON WALLS SHALL BE +46" TO TOP UON ETCHES HOUNTED WITH SHALL BE +46" TO TOP UON REVISH FLOOR MOUNTED WITHING DEVICES IN SINGLE MULTI-	—**— —**—	LOW VOLTAGE AND/OR CONTROL CIRCUITING EMERGENCY CIRCUIT STUB DUT: MARK AND CAP (SITE) CIRCUITING UP OR DOWN THO WITHIN CONDUCTOR OR CONDUCTOR GROUNDING CONDUCTOR (ONE PER PHASE CONDUCTOR) PHASE CONDUCTOR(ONE PER PHASE CONDUCTOR) HOMERLIN. DESIGNATION	NC NEUT NL NO NTS PNL PVC (R) RAC	NEUTRAL NIGHT LIGHT NORMALLY OPEN NOT TO SCALE PANEL POLYVINYL CHLORIDE CONDUIT EXISTING TO BE RELOCATED
- 180 - 180 - 90 - 9	CELING MOUNTED ARROWS MOUNTED WEETTON AND COMERAGE PROBLE WITH POBLE PLACE FOR MANUFACTURERS REQUIREMENTS PHOTO ELECTRIC SHITCH: BROOM JON METHODS SHADING NINCAESS: FUTURE, QUITET, EQUIPMENT, ETC. ON EMERGENCY X' OR NIGHT LIGHT NL' ORCUIT DEVICE MOUNTED IN JULITIPE LUNDER COMMON COMER MAXIMUM HEIGHT ON WALLS SHALL BE +48" TO TOP JON DEVICES MOUNTED IN OR ABOVE CONTREP/BACKSPLASH: MAXIMUM HEIGHT ON WALLS SHALL BE +49" TO TOP JON PLUSH FLOOR MOUNTED WRING DEVICES	-**-	LOW VOLTAGE AND/OR CONTROL CIRCUITING EMERGENCY CIRCUIT STUB DUT: MARK AND CAP (SITE) ORCUITING UP OR DOWN TICS = NO. OF #12 WIRES (JUNI) IF MORE THAN TWO WITHIN CONDUCT OR MC —ISOLATED GROUNDING CODUCTOR —REJURAL CONDUCTOR (ONE PER PHASE CONDUCTOR) —PHASE CONDUCTOR (ONE PER PHASE CONDUCTOR) —PHASE CONDUCTOR(S) HOMERUN DESIGNATION —PHASE CONDUCTOR(S) —GROUNDING COMBUCTOR	NC NEUT NL NO NTS PNL PVC (R) RAC RSC	NEUTRAL NIGHT LIGHT NORMALLY OPEN NOT TO SCALE PANEL POLYMMYL CHLORIDE CONDUIT EXISTING TO BE RELOCATED RIGID ALUMINUM CONDUIT RIGID STEEL CONDUIT
- 180 - 90 - 90	CELING MOUNTED ARROWS MOLATE DIRECTION AND COMERAGE PROVISE WITH PORISE PACK FER MANUFACTURERS REQUIREMENTS PHOTO ELECTRIC SWITCH: 1600VA UON METHODS SHADING NIDICATES: FITURE, OUTLET, EQUIPMENT, ETC. ON BARROWN Y' OR NIGHT LIGHT NL' CIRCUIT DEVICE MOUNTED IN MILITIPLE UNDER COMMON COVER MAXIMUM HEIGHT ON WALL SHALL BE +48" TO TOP UON DEVICES MOUNTED IN OR ABOVE COUNTER/BACKSPLASH MAXIMUM HEIGHT ON WALLS SHALL BE +48" TO TOP UON FLUSH FLOOR MOUNTED WINNIO DEVICES FLUSH FLOOR MOUNTED WINNIO DEVICES IN SINGLE MULTI— COMPARTMENT BOX.	—**— —**—	LOW VOLTAGE AND/OR CONTROL CIRCUITING EMERGENCY CIRCUIT STUB OUT: MARK AND CAP (STE) ORCUITING UP OR DOWN TICS = NO. OF #12 WIRES (UON) IF MORE THAN THO WINTHIN CONDUCTOR ORCUITION CONDUCTOR — NEUTRAL CONDUCTOR (ONE PER PHASE CONDUCTOR) PHASE CONDUCTOR(S) PHASE CONDUCTOR(S) — REUTRAL CONDUCTOR PHASE CONDUCTOR(S) — GROUNDING CONDUCTOR ORCUITION CONDUCTOR PHASE CONDUCTOR(S) — GROUNDING CONDUCTOR NEUTRAL CONDUCTOR PHASE CONDUCTOR(S)	NC NEUT NL NO NTS PNL PVC (R) RAC RSC SLD	NEUTRAL NIGHT LIGHT NORMALLY OPEN NOT TO SCALE PANEL PANEL PAINT EXISTING TO BE RELOCATED RIGID ALUMINUM CONDUIT RIGID STEEL CONDUIT SINGLE LINE DIAGRAM
	CELIES MOUNTED ARROWS MOUNTED WEETON AND COMERACE PROMEE WITH POMER PACK PER MANUFACTURERS REQUIREMENTS PHOTO ELECTRIC SHITCH: BOOVA JON METHODS SHADING NINCASES. FUTURE, QUITLET, EQUIPMENT, ETC. ON EMERGENCY X' OR NIGHT LIGHT NL' ORCUIT DEVICE MOUNTED IN JULITIES LUNDER COMMON COMER MAXIMAM HEIGHT ON WALL SHALL BE +48" TO TOP JUN DEVICES MOUNTED IN OR ABOVE COUNTER/BACKSEN,ASH- MAXIMAM HEIGHT ON WALLS SHALL BE +49" TO TOP JUN PLUSH FLOOR MOUNTED WRING DEVICES FLUSH FLOOR MOUNTED WRING DEVICES IN SINGLE MULTI- COMERATMENT BOX RECEPTAGLE MOUNTED IN CELING OR CASEWORK	-**-	LOW VOLTAGE AND/OR CONTROL CIRCUITING EMERGENCY CIRCUIT STUB DUT: MARK AND CAP (SITE) ORCUITING UP OR DOWN TICS = NO. OF #12 WIRES (JUNI) IF MORE THAN TWO WITHIN CONDUCT OR MC —ISOLATED GROUNDING CODUCTOR —REJURAL CONDUCTOR (ONE PER PHASE CONDUCTOR) —PHASE CONDUCTOR (ONE PER PHASE CONDUCTOR) —PHASE CONDUCTOR(S) HOMERUN DESIGNATION —PHASE CONDUCTOR(S) —GROUNDING COMBUCTOR	NC NEUT NL NO NTS PNL PVC (R) RAC RSC SLD SO	NEUTRAL NIGHT LIGHT NORMALLY OPEN NOT TO SCALE PANEL POLYVINYL CHLORIDE CONDUIT EXISTING TO BE RELOCATED RIGID ALUMINUM CONDUIT RIGID STEEL CONDUIT SINGLE LINE DIAGRAM SEAL OFF
	CRUMS MOUNTED ARROWS MIGHT DIRECTION AND COVERAGE PROVIDE WITH PORRE PACK PER MANUFACHIRERS REQUIREMENTS PHOTOLE WITH PORRE PACK PER MANUFACHIRERS REQUIREMENTS PHOTOLECTRIC SWITCH: 1600VA UON METHODS SHADING INDICATES: FIXTURE, QUILET, EQUIPMENT, ETC. ON EMERGENCY 'X' OR NIGHT LIGHT TAL CRICUIT ETC. ON EMERGENCY Y' OR NIGHT LIGHT TAL CRICUIT DEVICE MOUNTED IN MULTIPLE HAVE ROOMED COVER MAXIMUM HEIGHT ON WALL SHALL BE: 448" TO TOP UON DEVICES MOUNTED IN OR ABOVE COUNTER/BACKSPLASH- MAXIMUM HEIGHT ON WALLS SHALL BE: 448" TO TOP UON RUSH FLOOR MOUNTED WITHING DEVICES IN SINGLE MULTI- COMPARTMENT BOX RECEPTACLE MOUNTED IN CELING OR CASENORK FINE DASHING INDICATES EMISTING EQUIPMENT AND DEVICES	-**-	LOW VOLTAGE AND/OR CONTROL CIRCUITING EMERGENCY CIRCUIT STUB OUT: MARK AND CAP (SITE) CIRCUITING UP OR DOWN TIOS = NO. OF 1/12 WINES (JUDN) IF MORE THAN THO WITHIN CONDUIT OR MC	NC NEUT NL NO NTS PNL PVC (R) RAC RSC SLD SO SPDT	NEUTRAL NIGHT LIGHT NORMALLY OPEN NOT TO SCALE PANEL POLYWNYL CHLORIDE CONDUIT EXISTING TO BE RELOCATED RIGID ALUMINUM CONDUIT RIGID STEEL CONDUIT SINGLE LINE DIAGRAM SEAL OFF SINGLE POLE DOUBLE THROW
	CELING MOUNTED ARROWS MIGHT DIRECTION AND COVERAGE PROVICE WITH PORES PACK PER MANUFACTURERS REQUIREMENTS PHOTOLE WITH PORES PACK PER MANUFACTURERS REQUIREMENTS PHOTOLECTRIC SWITCH: 1600VA UON METHODS SHADING INDICATES: FIXTURE, OUTLET, EQUIPMENT, ETC. ON EMERGENCY 'X' OR NIGHT LIGHT TAL CRICUIT ETC. ON EMERGENCY Y' OR NIGHT LIGHT TAL CRICUIT DEVICE MOUNTED IN MULTIPLE HALL BE: 448" TO TOP UON DEVICES MOUNTED IN OR ABOVE COUNTER/BACKSPLASH: MAXIMUM HEIGHT ON WALLS SHALL BE: 448" TO TOP UON TUSH FLOOR MOUNTED WITHING DEVICES RUSH FLOOR MOUNTED WITHING DEVICES IN SINGLE MULTI- COMPARTMENT BOX RECEPTACLE MOUNTED IN CELING OR CASEWORK FINE DASHING MICHAEL SENSTING EQUIPMENT AND DEVICES TO BE REMOVED.	-**	LOW VOLTAGE AND/OR CONTROL CIRCUITING EMERGENCY CIRCUIT STUB OUT: MARK AND CAP (SITE) CIRCUITING UP OR DOINN TICS = NO. OF #12 WIRES (UON) IF MORE THAN THO WITHIN CONDUIT OR MC —ISOLATED GROUNDING CONDUCTOR —GROUNDING CONDUCTOR (ONE PER PHASE CONDUCTOR) —PHASE CONDUCTORIS) FRANCISCO CONDUCTORIS PHASE CONDUCTORIS ENGINE GROUNDING CONDUCTOR AREJITAL CONDUCTOR (ONE PER PHASE CONDUCTOR) —PHASE GROUNDING CONDUCTOR AREJITAL CONDUCTOR (ONE PER PHASE CONDUCTOR) —PARE DESIGNATION MISCELLANEOUS THERMOSTAT: AT +48" TO TOP UON (OR PER MECH PLANS)	NC NEUT NL NO NTS PNL PVC (R) RAC RSC SLD SO SPDT SPEN	NEUTRAL NIGHT LIGHT NORMALLY OPEN NOT TO SCALE PANEL POLYVINYL CHLORIDE CONDUIT EXISTING TO BE RELOCATED RIGID ALUMINUM CONDUIT RIGID STEEL CONDUIT SINGLE LINE DIAGRAM SEAL OFF SINGLE POLE DOUBLE THROW SIZE PER EQUIPMENT NAMEPLATE
	CELING MOUNTED ARROWS MIGHT DIRECTION AND COMERAGE PROMORE WITH PORIES PACK FOR MANUFACTURES REQUIREMENTS PHOTOLE WITH PORIES PACK FOR MANUFACTURES REQUIREMENTS PHOTOLECTRIC SWITCH: FROUVA UON METHODS SHADING MICCAESS: FIXTURE, CUTLET, EQUIPMENT, ETC. ON EMERGENCY X' OR NIGHT LIDHT NIL' CRICUIT ETC. ON EMERGENCY X' OR NIGHT LIDHT NIL' CRICUIT DEVICE MOUNTED IN MILL TIPLE UNDER COMMON COVER MANIMAM HEIGHT ON WALLS SHALL BE: 448" TO TOP UON PLIVES MOUNTED IN OR ABOVE COUNTER/BACKSPILASH- MANIMAM HEIGHT ON WALLS SHALL BE: 448" TO TOP UON FLUSH FLOOR MOUNTED WRING DEVICES RUSH FLOOR MOUNTED WRING DEVICES IN SINGLE MULTI- COMPARTMENT BOX RECEPTACLE MOUNTED IN CEILING OR CASEWORK FINE DASHING MOICAES EXISTING EQUIPMENT AND DEVICES TO BE REMOTED DESIGNATIONS UGHT FIXTURE: FI = TYPE (SEE FIXTURE SCHEDULE)	-**	LOW VOLTAGE AND/OR CONTROL CIRCUITING EMERGENCY CIRCUIT STUB OUT: MARK AND CAP (SITE) CIRCUITING UP OR DOWN TICS = NO. OF \$112 WIRES (UON) IF MORE THAN THO WITHIN CONDUIT OR MC -ISOLATED GROUNDING CONDUCTOR GROUNDING CONDUCTOR (OR PER PHASE CONDUCTOR) -PHASE CONDUCTOR(S)	NC NEUT NL NO NTS PNL PVC (R) RAC SLD SO SPDT SPEN	NEUTRAL NIGHT LIGHT NORMALLY OPEN NOT TO SCALE PANEL POLYMIN'S CHLORIDE CONDUIT EXISTING TO BE RELOCATED RIGID ALUMINUM CONDUIT SINGLE LINE DIAGRAM SEEL OFF SINGLE FOLE DOUBLE THROW SIZE POLE DOUBLE THROW SIZE POLE SINGLE THROW
	CELIES MOUNTED ARROWS MOUNTED MECTION AND COMERACE PROVINE WITH POMER PACK FER MANUFACTURERS REQUIREMENTS PHOTO ELECTRIC SHITCH: BOOKING LIGHT METHODS SHADING NIDICATES: FITURE, OUTLET, EQUIPMENT, ETC. ON BARROWN Y'S OR NIGHT LIGHT NL' CIRCUIT DEVICE MOUNTED IN MULTIPLE UNDER COMMON COMER MAXIMAM HEGHT ON WALL SHALL BE +48" TO TOP UON DEVICES MOUNTED IN OR ABOVE COUNTER/BACKSPLASH MAXIMAM HEGHT ON WALL SHALL BE +48" TO TOP UON PLUSH FLOOR MOUNTED WIRNIO EVICES IN SINGLE MULTIPLE COMPARTMENT BOX RECEPTACLE MOUNTED IN CELLING OR CASEWORK PRE DASHING BOOK TES XISTING EQUIPMENT AND DEVICES TO BE REMOVED DESIGNATIONS	-**	LOW VOLTAGE AND/OR CONTROL CIRCUITING EMERGENCY CIRCUIT STUB DUT: MARK AND CAP (STE) PROCUITING UP OR DOWN TICS = NO. OF #12 WIRES (UON) IF MORE THAN TWO WITHIN CONDUCTOR CONDUCTOR GROUNDING CONDUCTOR (ONE PER PHASE CONDUCTOR) PHASE CONDUCTOR(S) HOMERLIN DESIGNATION PHASE CONDUCTOR(S) GROUNDING CONDUCTOR PHASE CONDUCTOR(S) GROUNDING CONDUCTOR MEDITAL CONDUCTOR (ONE PER PHASE CONDUCTOR) PHASE CONDUCTOR(S) GROUNDING CONDUCTOR MEDITAL CONDUCTOR (ONE PER PHASE CONDUCTOR) MISCELLIANEOUS THERMOSTAT. AT +48" TO TOP UON (OR PER MECH PLANS) EHAUST FAN: FRACTIONAL HORSEPOWER MOTOR: NUMBER = HORSEPOWER	NC NEUT NL NO NTS PNL PVC (R) RAC RSC SLD SO SPDT SPEN SPST TEL	NEUTRAL NIGHT LIGHT NORMALLY OPEN NOT TO SCALE PANEL POLYWMY. CHLORIDE CONDUIT EXISTING TO BE RELOCATED RIGID ALUMINUM CONDUIT RIGID STEEL CONDUIT SINGLE LINE DIAGRAM SEAL OFF SINGLE POLE DOUBLE THROW SIZE PER EQUIPMENT NAMEPLATE SINGLE POLE SINGLE THROW TELECOM
- 180 - 90 - 90	CELING MOUNTED ARROWS MIGHT DIRECTION AND COMERAGE PROMORE WITH PORIES PACK FOR MANUFACTURES REQUIREMENTS PHOTOLE WITH PORIES PACK FOR MANUFACTURES REQUIREMENTS PHOTOLECTRIC SWITCH: FROUVA UON METHODS SHADING MICCAESS: FIXTURE, CUTLET, EQUIPMENT, ETC. ON EMERGENCY X' OR NIGHT LIDHT NIL' CRICUIT ETC. ON EMERGENCY X' OR NIGHT LIDHT NIL' CRICUIT DEVICE MOUNTED IN MILL TIPLE UNDER COMMON COVER MANIMAM HEIGHT ON WALLS SHALL BE: 448" TO TOP UON PLIVES MOUNTED IN OR ABOVE COUNTER/BACKSPILASH- MANIMAM HEIGHT ON WALLS SHALL BE: 448" TO TOP UON FLUSH FLOOR MOUNTED WRING DEVICES RUSH FLOOR MOUNTED WRING DEVICES IN SINGLE MULTI- COMPARTMENT BOX RECEPTACLE MOUNTED IN CEILING OR CASEWORK FINE DASHING MOICAES EXISTING EQUIPMENT AND DEVICES TO BE REMOTED DESIGNATIONS UGHT FIXTURE: FI = TYPE (SEE FIXTURE SCHEDULE)	-**	LOW VOLTAGE AND/OR CONTROL CIRCUITING EMERGENCY CIRCUIT STUB DUT: MARK AND CAP (STE) CIRCUITING UP OR DOWN TISC = NO. OF #12 WIRES (UON) IF MORE THAN TWO WITHIN CONDUCTOR OR OR PER PHASE CONDUCTOR() HOMERAL CONDUCTOR (ONE PER PHASE CONDUCTOR() PHASE CONDUCTOR(S) GROUNDING CONDUCTOR HOMERAL CONDUCTOR(S) GROUNDING CONDUCTOR MEJTRAL CONDUCTOR(S) GROUNDING CONDUCTOR(S) MISCELLANIEOUS MISCELLANIEOUS HOMERAL CONDUCTOR(S) FAREL ESGISIAN TO MISCELLANIEOUS HOMERAL CONDUCTOR(S) EMPHASE TANE FRACTIONAL HORSEPOWER MOTOR: NUMBER = HORSEPOWER	NC NEUT NL NO NTS PNL PVC (R) RAC RSC SLD SO SPDT SPEN SPST TEL TYP	NEUTRAL NIGHT LIGHT NORMALLY OPEN NOT TO SCALE PANEL PANEL PANEL PAINT EXISTING TO BE RELOCATED RIGID ALUMINUM CONDUIT RIGID STEEL CONDUIT SINGLE LINE DIAGRAM SEAL OFF SINGLE POLE DOUBLE THROW SIZE PER EQUIPMENT NAMEPLATE SINGLE FOLE SINGLE THROW TELECOM TYPICAL
- 180 - 180	CELIES MONTED ARROWS MODATE DIRECTION AND CONERAGE PROBLE WITH PORIE PLACE PER MANDIACTHERS REQUIREMENTS PHOTO ELECTRIC SHITCH: BOOVA JON METHODS SHADING NIDCATES: FITURE, QUITET, EQUIPMENT, ETC. ON EMERGENCY X' OR NIGHT LIGHT NL' ORGUIT DEVICES MOUNTED IN JULITIEL UNDER COMMON COMER MAXIMUM HEIGHT ON WALL SHALL BE +48" TO TOP JUN DEVICES MOUNTED IN OR ABOVE CONTREPARCYSPASSE MAXIMUM HEIGHT ON WALLS SHALL BE +48" TO TOP JUN PLEVES MOUNTED IN OR ABOVE CONTREPARCYSPASSE RUSH FLOOR MOUNTED HIRING DEVICES IN SINGLE MULTI- COMPATIBLET BOX RECEPTAGLE MOUNTED IN RING DEVICES IN SINGLE MULTI- COMPATIBLET BOX DESIGNATIONS LIGHT FIXTURE: FI = TYPE (SEE FIXTURE SCHEDULE) SHEET NOTE REVISION DELTA: NUMBER REPRESENTS REVISION		LOW VOLTAGE AND/OR CONTROL CIRCUITING EMERGENCY CIRCUIT STUB OUT: MARK AND CAP (STE) CRCUITING UP OR DOWN TICS = NO. OF \$12 WIRES (UON) IF MORE THAN THO WITHIN CONDUCTOR GROUNDING CONDUCTOR MEUTRAL CONDUCTOR (ONE PER PHASE CONDUCTOR) PHASE CONDUCTOR(S) GROUNDING CONDUCTOR HEMBRUIN DESIGNATION PHASE CONDUCTOR(S) GROUNDING CONDUCTOR NIGHT—ISOLATED GROUNDING CONDUCTOR NIGHT—ISOLATED GROUNDING CONDUCTOR MISCELLANEOUS THERMOSTAT: AT +48" TO TOP UON (OR PER MECH PLANS) EPHAUS TESSICATION HOTOR: NUMBER = HORSEPOWER SIGNAGE CONNECTION SHUNT TRIP STATION: +7"-6" AFF, 12" RED TRIANGLE, UON SHUNT TRIP STATION: +7"-6" AFF, 12" RED TRIANGLE, UON	NC NEUT NL NO NITS PNL PVC (R) RAC RSC SLD SO SPDT TEL TYP UNSW	NEUTRAL NIGHT LIGHT NORMALLY OPEN NOT TO SCALE PANEL POLYVINYL CHLORIDE CONDUIT EXISTING TO BE RELOCATED RIGID ALUMINUM CONDUIT RIGID STEEL CONDUIT SINGLE LINE DIAGRAM SEAL OFF SINGLE POLE DOUBLE THROW SIZE PER EQUIPMENT NAMEPLATE SINGLE POLE SINGLE THROW TELECOM TYPICAL UNSWITCHED
- 180 - 180	CELIES MONTED ARROWS MODIATE DIRECTION AND CONERAGE PROBLE WITH PORIE PLACE PER MANDIACTHERS REQUIREMENTS PHOTO ELECTRIC SHITCH: BOOVA JON METHODS SHADING NIDCATES: FUTURE, QUITET, EQUIPMENT, ETC. ON EMERGENCY X' OR NIGHT LIGHT NL' ORCUIT DEVICES MOUNTED IN JULITIEL LINDER COMMON COME MAXIMUM HEIGHT ON WALL SHALL BE +48" TO TOP JUN DEVICES MOUNTED IN OR ABOVE CONVIRTE/BACKSPLASE MAXIMUM HEIGHT ON WALL SHALL BE +48" TO TOP JUN PLEVES MOUNTED IN RING DEVICES FLUSH FLOOR MOUNTED HIRING DEVICES IN SINGLE MULTI- COMPATIBLENT BOX RECEPTAGLE MOUNTED IN CELING OR CASEWORK FINE DASHING NDICATES EXISTING EQUIPMENT AND DEVICES DESIGNATIONS LIGHT FIXTURE: FI = TYPE (SEE FIXTURE SCHEDULE) SHEET NOTE REVISION DELTA: NUMBER REPRESENTS REVISION MECHANICAL AND PLUMBING EQUIPMENT	-**	LOW VOLTAGE AND/OR CONTROL CIRCUITING EMERGENCY CIRCUIT STUB OUT: MARK AND CAP (SITE) CIRCUITING UP OR DOINN TICS = NO. OF #12 WIRES (UON) IF MORE THAN THO WITHIN CONDUIT OR MC —ISOLATED GROUNDING CONDUCTOR —GROUNDING CONDUCTOR (OR PER PHASE CONDUCTOR) —PHASE CONDUCTORIS) —PHASE CONDUCTORIS) —REVIREAL CONDUCTORIS ENGLIED GROUNDING CONDUCTOR MISCELLANEOUS MISCELLANEOUS MISCELLANEOUS THERMOSTAT: AT +48" TO TOP UON (OR PER MECH PLANS) ENHAUST FANE FRACTIONAL PROSEPOWER MOTOR: NUMBER = HORSEPOWER MOTOR: NUMBER = HORSEPOWER SIGNAGE CONNECTION SHANT TRIP STATION: AT +46" TO TOP UON CONTROL STATION: AT +46" TO TOP UON CONT	NC NEUT NL NO NTS PNL PVC (R) RAC RSC SD SPDT SPEN SPST TEL TYP UNSW	NEUTRAL NIGHT LIGHT NORMALLY OPEN NOT TO SCALE PANEL POLYWNYL CHLORIDE CONDUIT EXISTING TO BE RELOCATED RIGID ALUMINUM CONDUIT RIGID STEEL CONDUIT SINGLE LINE DIAGRAM SEAL OFF SINGLE POLE DOUBLE THROW SIZE PER EQUIPMENT NAMEPLATE SINGLE POLE SINGLE THROW TELECOM TYPICAL UNSWITCHED UNLESS OTHERWISE NOTED
- 180 - 180	CELIES MONTED ARROWS MODATE DIRECTION AND CONERAGE PROBLE WITH PORIE PLACE PER MANDIACTHERS REQUIREMENTS PHOTO ELECTRIC SHITCH: BOOVA JON METHODS SHADING NIDCATES: FITURE, QUITET, EQUIPMENT, ETC. ON EMERGENCY X' OR NIGHT LIGHT NL' ORGUIT DEVICES MOUNTED IN JULITIEL UNDER COMMON COMER MAXIMUM HEIGHT ON WALL SHALL BE +48" TO TOP JUN DEVICES MOUNTED IN OR ABOVE CONTREPARCYSPASSE MAXIMUM HEIGHT ON WALLS SHALL BE +48" TO TOP JUN PLEVES MOUNTED IN OR ABOVE CONTREPARCYSPASSE RUSH FLOOR MOUNTED HIRING DEVICES IN SINGLE MULTI- COMPATIBLET BOX RECEPTAGLE MOUNTED IN RING DEVICES IN SINGLE MULTI- COMPATIBLET BOX DESIGNATIONS LIGHT FIXTURE: FI = TYPE (SEE FIXTURE SCHEDULE) SHEET NOTE REVISION DELTA: NUMBER REPRESENTS REVISION		LOW VOLTAGE AND/OR CONTROL CIRCUITING EMERGENCY CIRCUIT STUB OUT: MARK AND CAP (STE) CRCUITING UP OR DOWN TICS = NO. OF \$12 WIRES (UON) IF MORE THAN THO WITHIN CONDUCTOR GROUNDING CONDUCTOR MEUTRAL CONDUCTOR (ONE PER PHASE CONDUCTOR) PHASE CONDUCTOR(S) GROUNDING CONDUCTOR HEMBRUIN DESIGNATION PHASE CONDUCTOR(S) GROUNDING CONDUCTOR NIGHT—ISOLATED GROUNDING CONDUCTOR NIGHT—ISOLATED GROUNDING CONDUCTOR MISCELLANEOUS THERMOSTAT: AT +48" TO TOP UON (OR PER MECH PLANS) EPHAUS TESSICATION HOTOR: NUMBER = HORSEPOWER SIGNAGE CONNECTION SHUNT TRIP STATION: +7"-6" AFF, 12" RED TRIANGLE, UON SHUNT TRIP STATION: +7"-6" AFF, 12" RED TRIANGLE, UON	NC NEUT NL NO NTS PNL PVC (R) RAC RSC SLD SPDT SPEN SPST TEL TYP UNSW UON WP	NEUTRAL NIGHT LIGHT NORMALLY OPEN NOT TO SCALE PANEL POLYWINL CHLORIDE CONDUIT EXISTING TO BE RELOCATED RIGID ALUMINUM CONDUIT SINGLE LINE DIAGRAM SEAL OFF SINGLE POLE DOUBLE THROW SIZE PER EQUIPMENT NAMEPLATE SINGLE FOLE SINGLE THROW TELECOM TYPICAL UNSWITCHED UNLESS OTHERWISE NOTED WEATHERPROOF (NEMA 3R)

MASTER SYMBOL LIST

GENERAL NOTES

	l
1.	VALUE ENGINEERING OF ANY KIND WILL NOT BE CONSIDERED BEFORE OR AT TIME OF BID. THIS
	PROJECT SHALL BE BID PER PLANS AND SPECIFICATIONS. THE ENGINEER OF RECORD WILL NOT
	CONSIDER ANY VALUE ENGINEERING OPTIONS UNLESS SPECIFICALLY REQUESTED BY THE OWNER
	AFTER BID AND AWARD OF CONTRACT. ANY VALUE ENGINEERING OPTIONS THAT ARE NOT APPROVED
	IN WRITING BY THE ENGINEER OF RECORD WILL BE REJECTED. THE ENGINEER OF RECORD WILL NOT
	BE RESPONSIBLE OR LIABLE FOR ANY VALUE ENGINEERING OF THIS PROJECT.
2.	IF THE CONTRACTOR SHALL TAKE IT UPON THEIRSELF TO VALUE ENGINEER THIS PROJECT WITHOUT





مو مو مو مو مو مو مو مو بو جو جر مر جر مر در الم مو دو حر الم دو مر الم دو حر الم الم دو حر الم الم دو حر الم الم حر الم الم حر الم الم حر الم الم حر الم ح

مو مو امو مو مو مو مو مو مو مو مو مو هو هو هو هو مو الحراجة وه و عو مو خو جو هو تو تو تو هو تو تو وهو وي وي وي وي وي وي وي وي وي وي

34 22 14 11 12 27 53 55

0.0 ,30 2.0 1.1 0.1 2.1 0.2 0.5, 0.0

در حر هر ادر هم در جر حد وجر حوا حجو در در در ادر دم مم مم

0.0 0.1 0.2 0.7 28 3.7



ARCHITECTURE,

partments

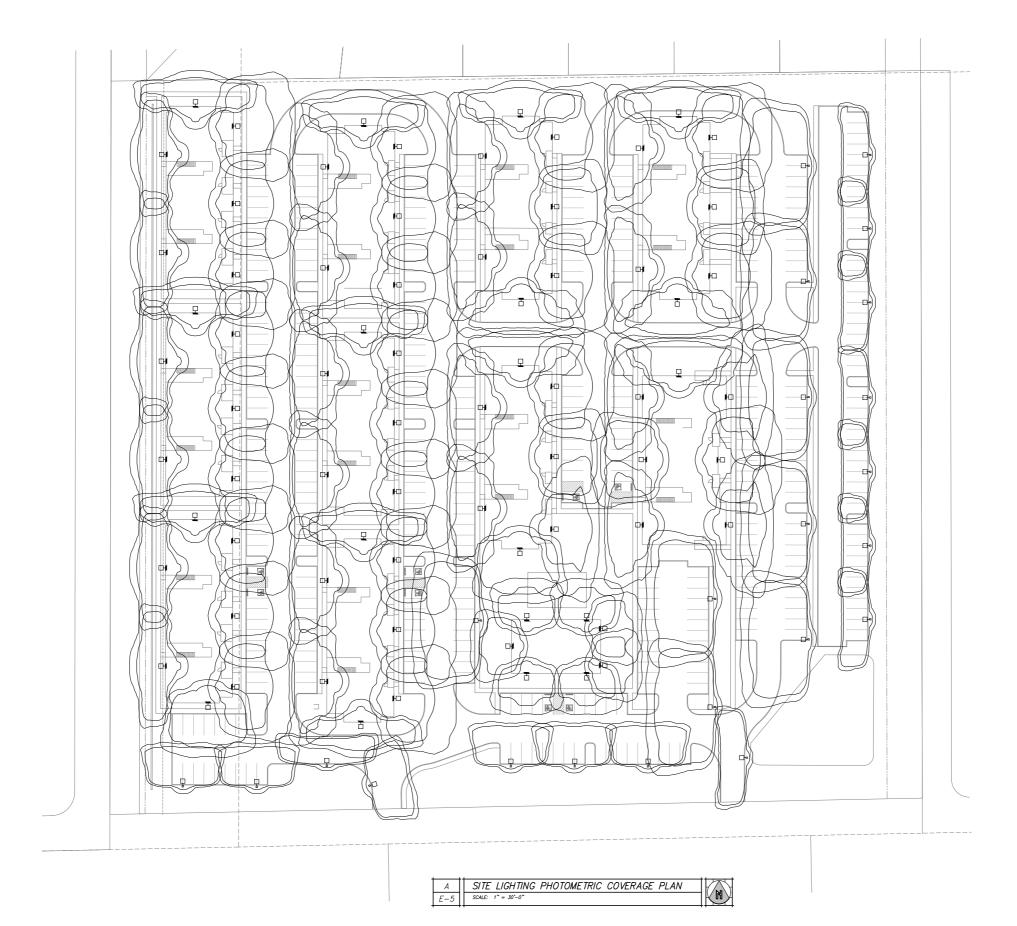
Sun

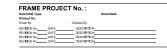


PRELIMINARY

NOT FOR CONSTRUCTION
17 June 2021

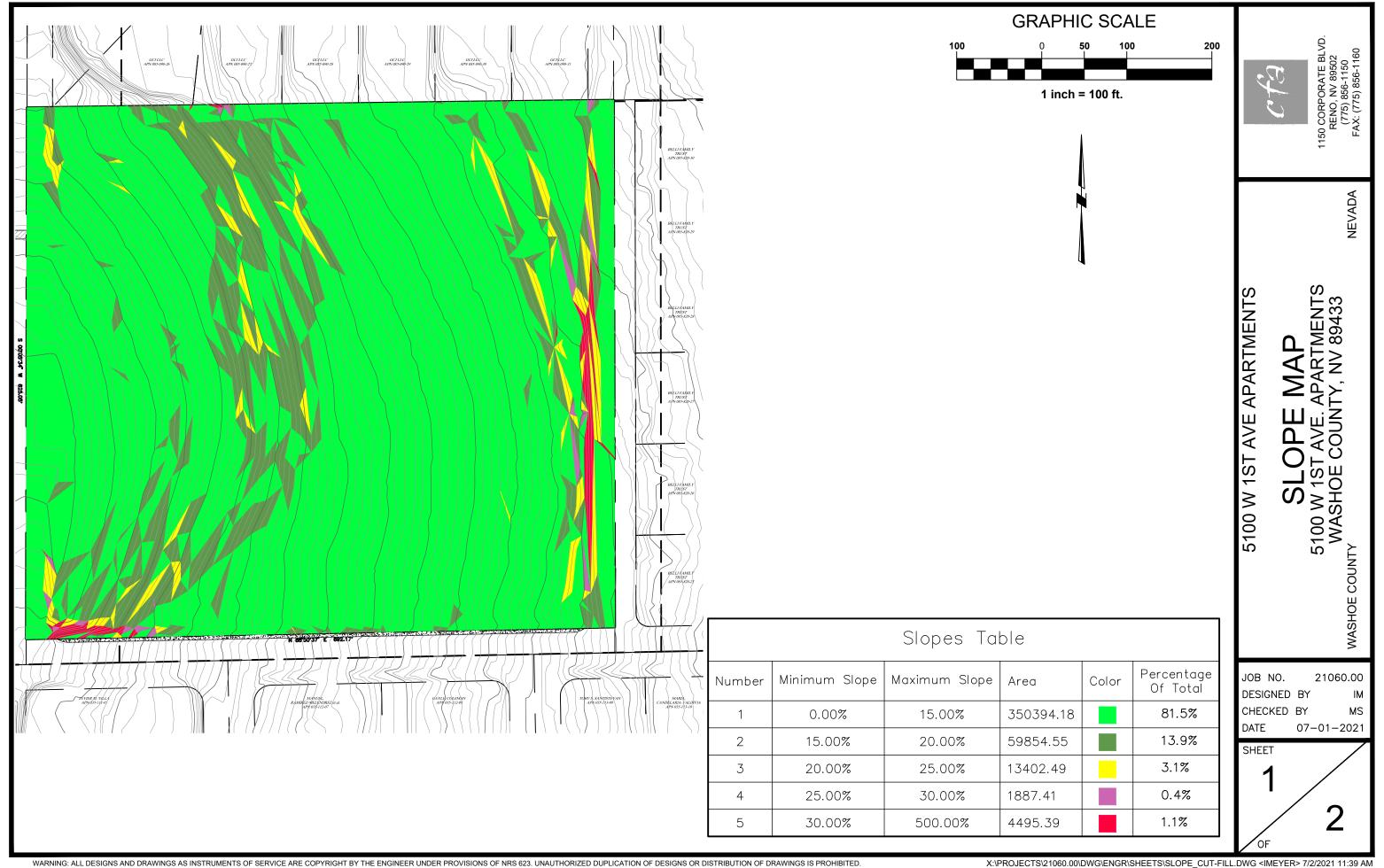


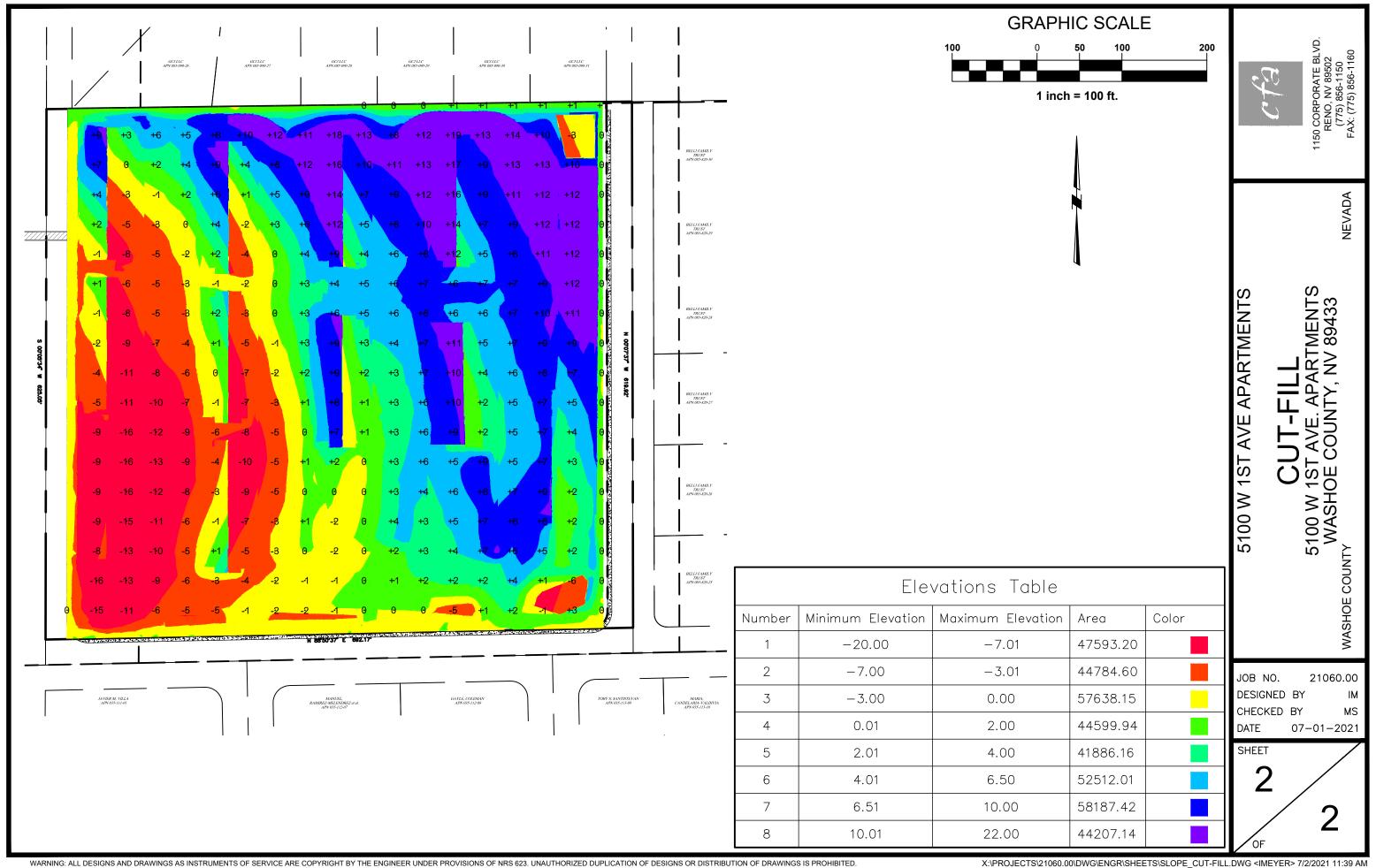




TAB E







TAB F



PRELIMINARY HYDROLOGY REPORT

5100 W 1ST AVE APARTMENTS ADMINISTRATIVE PERMIT

Sun Valley Washoe County, NV

JULY 2021



CFA, INC. 1150 CORPORATE BLVD. RENO, NV 89502

TABLE OF CONTENTS

INTRODUCTION	2
EXISTING SITE DESCRIPTION AND DRAINAGE	2
FLOOD ZONE	2
PROJECT DESCRIPTION AND DRAINAGE	3
RATIONAL METHOD	3
CONCLUSION	
REFERENCES	6

APPENDICIES

APPENDIX A VICINITY MAP APPENDIX B FIRM MAP AND IDF TABLES

21060.00

INTRODUCTION

This report presents the preliminary hydrologic analysis for a proposed apartment complex located at 5100

W 1st Ave. in Sun Valley, Nevada. A vicinity map showing the location of the site is included with appendix

A.

The purpose of this study is to prove that the proposed detention ponds can detain excess runoff

associated with the 5 and 100-year storm event in accordance with the Washoe County Development Code

and the Truckee Meadows Regional Drainage manual (TMRDM).

EXISTING SITE DESCRIPTION AND DRAINAGE

The proposed site is currently undeveloped land consisting of dirt walking paths and brush. The north of the

property is bordered by residential housing. The remaining three sides are bordered by roadways with

McGuffey Ln on the West, W 1st Ave to the south, and Slope Dr on the east. The proposed project site is

located on Parcel APN: 082-320-31 (See Appendix A, Vicinity Map).

Currently, the site sheet flows from the west to the east with approximately two-thirds flowing to the north-

east (Basin 1) and the remaining third flowing to the southeast (Basin 2) at an average slope of

approximately 10% based on the Washoe County GIS topographic data. Based on preliminary site

investigation Basin 1 appears to flow toward a storm inlet located on the northeast corner of the site across

Slope Drive. Basin 2 discharges toward W 1st Ave and eventually makes its way to a roadside swale on

the south side of the street. Since the land is undeveloped a C value of 0.2 and 0.5 for the 5yr and 100yr

storm event was assumed based on Table 701 from the Truckee Meadows Regional Drainage Manual

(2009).

FLOOD ZONE

According to FIRM Index Map #32031C3033G, dated March 16th, 2009, the site is located within the

following flood zone area:

Zone X, Unshaded; flood zone areas determined to be outside the 0.2% annual chance floodplain

5100 W 1st Ave. Sun Valley Apartments Preliminary Hydrology Report

2

21060.00

A copy of the FIRM Map is located in Appendix B.

PROJECT DESCRIPTION AND PROPOSED DRAINAGE

The proposed site consists of ten apartment buildings, an office, a pool, a playground, underground utilities,

parking areas, drive aisles and sidewalks. Retaining walls will be required on the west and east sides of the

site. Detention ponds will be constructed in the north and south corners of the eastern side if the site. There

will be parking on the east and west sides of most buildings with access drives connecting either side of

each building. Additional parking will be provided on the eastern side of the site Landscaping will be

constructed throughout the site.

The proposed drainage will continue to flow to the northeastern and southeastern corners of the site.

Proposed Basin 1 will collect run off from the northeastern quarter of the site while Proposed Basin 2 will

collect the remainder of the runoff.

Runoff will sheet flow from the apartment buildings to gutters prior to connecting to a proposed onsite storm

drain system, eventually discharging to one of two detention basins. A C value of 0.82 and 0.85 for the 5yr

and 100yr storm event was assumed based on Table 701 from the Truckee Meadows Regional Drainage

Manual (2009).

RATIONAL METHOD

The Rational Method is used to estimate the peak runoff resulting from a storm of given intensity and

frequency falling on a specific watershed. The peak flow is expressed as:

Q = CiA

where

Q = Peak rate of runoff, cubic feet per second

C = Runoff coefficient

i = Average rainfall intensity, inches per hour

A = Watershed area, acres

5100 W 1st Ave. Sun Valley Apartments Preliminary Hydrology Report

3

Washoe County allows the use of the Rational Method for urban and small watersheds 500 acres or less. Runoff computations are made using criteria provided by the Truckee Meadows Regional Drainage Manual. Runoff coefficients were determined from Table 701. Rainfall intensities are determined from the rainfall intensity-duration-frequency (IDF) curves for the Washoe County area and are provided in Appendix B. The initial time of concentration, $T_{c(1)}$, is calculated by the formula:

$$T_{c(1)} = 10 \text{ or}$$

where $T_{c(1)}$ = Initial time of concentration, minutes

L = Length from uppermost point of watershed to design point, feet

V = Channel or overland velocity, feet per second

The initial time of concentration models build-up and sheet flow conditions in the uppermost part of the watershed. Except for very small impervious watersheds, the minimum build-up time of 10 minutes is assumed. Therefore, for the first design point, the time of concentration is determined by adding travel time to the build-up time as follows:

$$T_{c(1)} = 10 + \frac{L}{60 \times V}$$

The time of concentration at successive points downstream is calculated by adding total travel time to the initial build-up time:

$$T_{c(n)}$$
 = 10 + $\sum \frac{L}{60 \times V}$

where $T_{c(n)}$ = Time of concentration at design point, minutes

 $\sum \frac{L}{60 \times V}$ = Total travel time to design point, minutes

L = Length of flow path between design points, feet

V = Velocity, feet per second

Velocities used are 2 - 3 fps for surface flow and 3 - 5 fps for channel and conduit flow.

Rational Method calculations are performed using Hydraflow, an extension for Autodesk. Hydraflow utilizes the IDF curve data and routing parameters to accurately represent the site drainage conditions. The peak flow for each drainage area is determined based on the runoff coefficient, initial time of concentration, and area.

CONCLUSION

The table below compares the 5yr and 100yr events for both the proposed and existing conditions. adequate stormwater detention will be provided to detain flows from the proposed site to the predevelopment conditions. Due to the preliminary nature of this report the outlet structures for the ponds have not been sized. The proposed detention capacity exceeds the required detention capacity, a complete design and hydrology report is necessary to properly size the required detention basins and outlet structures. These items will be provided upon final design of the site.

Table 1

This table shows the values used and the resulting peak flows and total volumes.

	Storm				Total
	Detention			Peak Flow	Volume
	(YR)	Area (Ac.)	C-Value	(cfs)	(cu ft)
Existing Basin 1	5	6.86	0.2	1.97	1,180
EXISTING DOSIN 1	100	0.00	0.5	4.92	2,951
Existing Basin 2	5	3.01	0.2	0.87	519
EXISTING DASIN 2	100	3.01	0.5	2.16	1,298
Proposed Basin 1	5	3.45	0.82	4.06	2,435
Proposed Basili 1	100	3.43	0.85	4.21	2,524
Proposed Basin 2	5	6.42	0.82	7.55	4,531
Froposeu basiii 2	100	0.42	0.85	7.83	4,697

^{*} Tc = 10 min for all Basins

REFERENCES

City of Reno, Washoe County, City of Sparks, Truckee Meadows Regional Drainage Manual, April, 2009

NOAA National Weather Service, *NOAA Atlas 14, Volume 1, Version 5, Reno, Nevada, US, Latitude:* 39.5841°, *Longitude: -119.8252°, Elevation 5032.9 ft.,* (NOAA Atlas 14 Point Precipitation Frequency Estimates: NV, 2013)

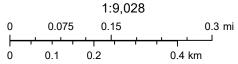
APPENDIX A VICINITY MAP

Vicinity Map



June 1, 2021

APN



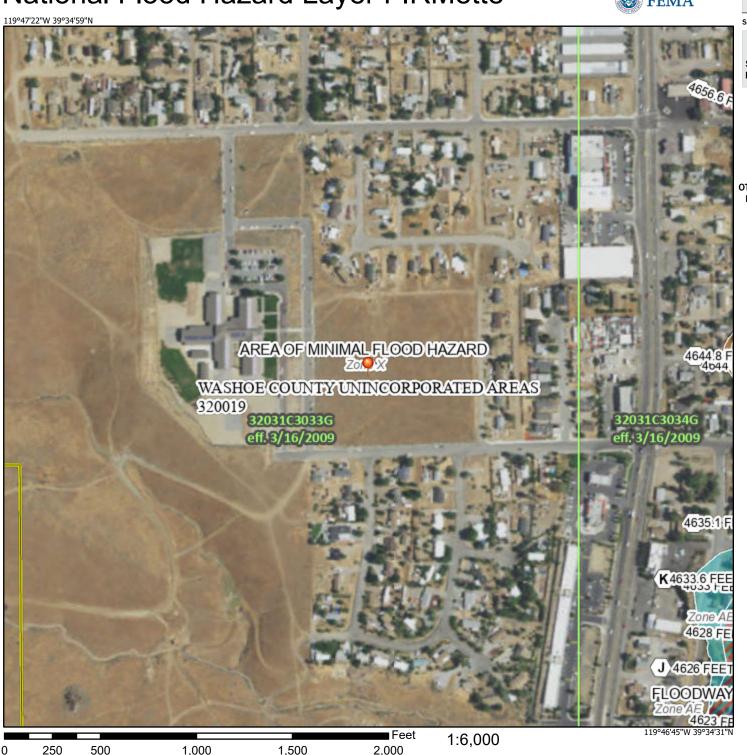
Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community Washoe County GIS

APPENDIX B FIRM MAP AND IDF TABLES

National Flood Hazard Layer FIRMette



Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

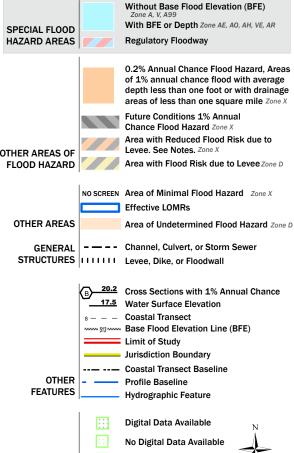


Legend

MAP PANELS

accuracy standards

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT



This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap

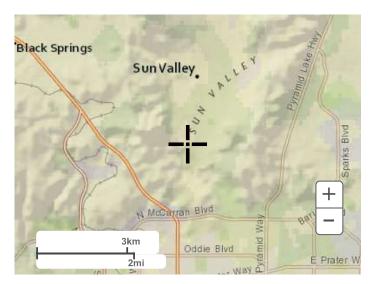
Unmapped

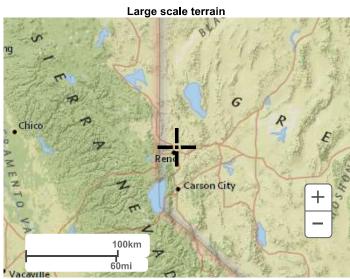
an authoritative property location.

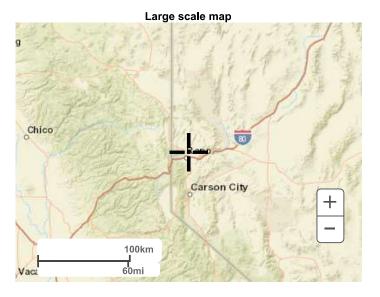
The pin displayed on the map is an approximate point selected by the user and does not represent

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 7/6/2021 at 3:36 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

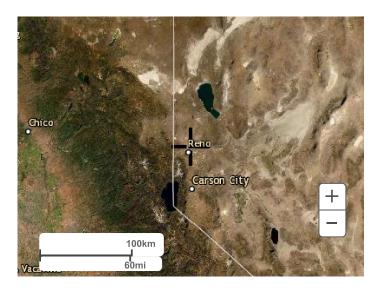
This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.







Large scale aerial



Back to Top

US Department of Commerce
National Oceanic and Atmospheric Administration
National Weather Service
National Water Center
1325 East West Highway
Silver Spring, MD 20910
Questions?: HDSC.Questions@noaa.gov

<u>Disclaimer</u>



NOAA Atlas 14, Volume 1, Version 5 Location name: Sun Valley, Nevada, USA* Latitude: 39.5793°, Longitude: -119.7839° Elevation: 4747.14 ft**

* source: ESRI Maps ** source: USGS



POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sarah Dietz, Sarah Heim, Lillian Hiner, Kazungu Maitaria, Deborah Martin, Sandra Pavlovic, Ishani Roy, Carl Trypaluk, Dale Unruh, Fenglin Yan, Michael Yekta, Tan Zhao, Geoffrey Bonnin, Daniel Brewer, Li-Chuan Chen, Tye Parzybok, John Yarchoan

NOAA, National Weather Service, Silver Spring, Maryland

PF tabular | PF graphical | Maps & aerials

PF tabular

PD	PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches) ¹										
Duration	Average recurrence interval (years)										
Duration	1	2	5	10	25	50	100	200	500	1000	
5-min	0.093 (0.079-0.107)	0.115 (0.098-0.135)	0.154 (0.131-0.182)	0.192 (0.163-0.228)	0.256 (0.212-0.308)	0.317 (0.254-0.385)	0.389 (0.302-0.480)	0.477 (0.355-0.602)	0.621 (0.435-0.810)	0.754 (0.504-1.00)	
10-min	0.141 (0.120-0.162)	0.175 (0.149-0.205)	0.235 (0.200-0.277)	0.293 (0.248-0.347)	0.391 (0.323-0.469)	0.483 (0.386-0.586)	0.593 (0.459-0.731)	0.727 (0.540-0.916)	0.946 (0.662-1.23)	1.15 (0.768-1.53)	
15-min	0.175 (0.148-0.201)	0.217 (0.184-0.254)	0.292 (0.248-0.343)	0.363 (0.307-0.430)	0.485 (0.400-0.581)	0.598 (0.479-0.727)	0.734 (0.569-0.906)	0.901 (0.670-1.14)	1.17 (0.820-1.53)	1.42 (0.952-1.89)	
30-min	0.235 (0.200-0.271)	0.292 (0.248-0.342)	0.393 (0.334-0.463)	0.489 (0.414-0.580)	0.652 (0.539-0.783)	0.805 (0.645-0.979)	0.989 (0.766-1.22)	1.21 (0.902-1.53)	1.58 (1.11-2.06)	1.92 (1.28-2.55)	
60-min	0.291 (0.247-0.335)	0.362 (0.307-0.423)	0.486 (0.413-0.573)	0.605 (0.512-0.717)	0.808 (0.667-0.969)	0.997 (0.798-1.21)	1.22 (0.948-1.51)	1.50 (1.12-1.89)	1.95 (1.37-2.55)	2.37 (1.59-3.16)	
2-hr	0.388 (0.343-0.446)	0.481 (0.428-0.555)	0.618 (0.542-0.712)	0.736 (0.638-0.849)	0.922 (0.776-1.07)	1.09 (0.893-1.29)	1.28 (1.02-1.54)	1.54 (1.18-1.91)	2.02 (1.46-2.57)	2.46 (1.72-3.19)	
3-hr	0.466 (0.418-0.527)	0.579 (0.523-0.659)	0.726 (0.651-0.823)	0.844 (0.749-0.961)	1.01 (0.884-1.16)	1.16 (0.994-1.35)	1.34 (1.13-1.58)	1.59 (1.30-1.93)	2.03 (1.61-2.60)	2.48 (1.88-3.22)	
6-hr	0.659 (0.594-0.738)	0.824 (0.742-0.927)	1.02 (0.915-1.15)	1.17 (1.04-1.32)	1.37 (1.20-1.55)	1.51 (1.31-1.72)	1.66 (1.42-1.92)	1.84 (1.55-2.15)	2.18 (1.79-2.62)	2.55 (2.05-3.25)	
12-hr	0.870 (0.785-0.970)	1.09 (0.982-1.22)	1.37 (1.23-1.53)	1.59 (1.42-1.78)	1.88 (1.65-2.12)	2.10 (1.82-2.38)	2.32 (1.99-2.67)	2.54 (2.14-2.97)	2.84 (2.32-3.39)	3.10 (2.48-3.75)	
24-hr	1.10 (0.994-1.23)	1.38 (1.25-1.54)	1.76 (1.58-1.95)	2.06 (1.85-2.29)	2.48 (2.21-2.76)	2.81 (2.49-3.14)	3.16 (2.77-3.55)	3.53 (3.06-3.99)	4.03 (3.44-4.60)	4.43 (3.73-5.11)	
2-day	1.32 (1.18-1.48)	1.66 (1.49-1.87)	2.13 (1.90-2.39)	2.50 (2.23-2.81)	3.04 (2.68-3.42)	3.46 (3.04-3.92)	3.91 (3.39-4.46)	4.39 (3.75-5.04)	5.06 (4.23-5.89)	5.59 (4.60-6.61)	
3-day	1.43 (1.28-1.61)	1.81 (1.62-2.04)	2.33 (2.08-2.62)	2.76 (2.46-3.11)	3.37 (2.97-3.80)	3.86 (3.38-4.38)	4.39 (3.79-5.01)	4.95 (4.22-5.68)	5.74 (4.79-6.69)	6.38 (5.23-7.53)	
4-day	1.54 (1.38-1.74)	1.95 (1.74-2.21)	2.53 (2.26-2.86)	3.01 (2.68-3.40)	3.70 (3.26-4.19)	4.26 (3.72-4.84)	4.86 (4.19-5.55)	5.51 (4.68-6.32)	6.43 (5.34-7.49)	7.18 (5.87-8.46)	
7-day	1.81 (1.60-2.07)	2.31 (2.03-2.64)	3.02 (2.65-3.46)	3.60 (3.16-4.13)	4.42 (3.84-5.08)	5.08 (4.38-5.86)	5.79 (4.94-6.72)	6.54 (5.51-7.64)	7.59 (6.28-8.99)	8.45 (6.88-10.1)	
10-day	2.02 (1.78-2.32)	2.59 (2.28-2.96)	3.41 (3.00-3.90)	4.05 (3.56-4.64)	4.95 (4.31-5.68)	5.67 (4.89-6.51)	6.42 (5.49-7.42)	7.20 (6.09-8.38)	8.28 (6.88-9.75)	9.14 (7.50-10.9)	
20-day	2.50 (2.21-2.85)	3.20 (2.83-3.65)	4.19 (3.70-4.78)	4.96 (4.36-5.65)	6.00 (5.24-6.85)	6.81 (5.91-7.80)	7.64 (6.58-8.81)	8.49 (7.24-9.85)	9.65 (8.09-11.3)	10.5 (8.74-12.5)	
30-day	2.90 (2.57-3.32)	3.72 (3.29-4.25)	4.86 (4.29-5.55)	5.74 (5.05-6.54)	6.93 (6.06-7.91)	7.84 (6.82-8.99)	8.79 (7.58-10.1)	9.75 (8.33-11.3)	11.0 (9.31-12.9)	12.1 (10.0-14.2)	
45-day	3.49 (3.09-3.92)	4.47 (3.96-5.02)	5.83 (5.16-6.54)	6.85 (6.04-7.68)	8.19 (7.20-9.21)	9.21 (8.05-10.4)	10.2 (8.87-11.6)	11.2 (9.68-12.8)	12.5 (10.7-14.4)	13.5 (11.4-15.7)	
60-day	3.99 (3.52-4.49)	5.12 (4.52-5.77)	6.69 (5.89-7.52)	7.80 (6.87-8.77)	9.23 (8.10-10.4)	10.3 (8.96-11.6)	11.3 (9.79-12.8)	12.2 (10.6-13.9)	13.5 (11.5-15.4)	14.3 (12.2-16.5)	

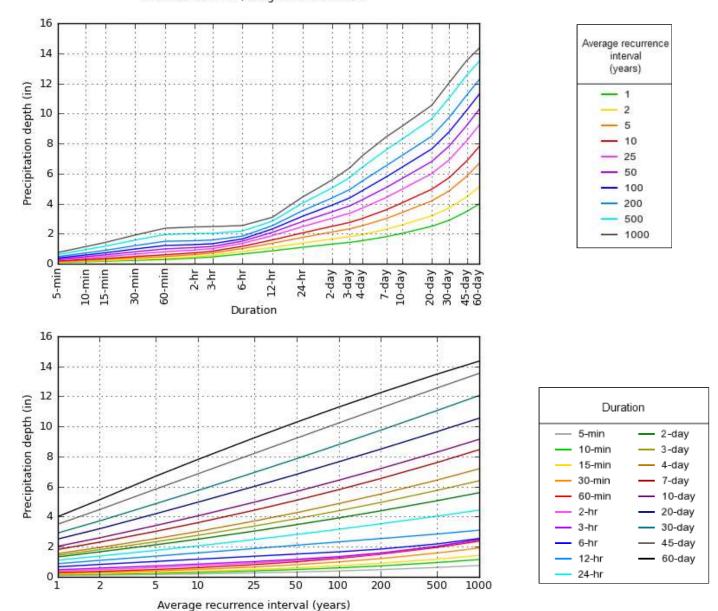
¹ Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

Back to Top

PDS-based depth-duration-frequency (DDF) curves Latitude: 39.5793°, Longitude: -119.7839°



NOAA Atlas 14, Volume 1, Version 5

Created (GMT): Mon Jun 28 16:46:49 2021

Back to Top

Maps & aerials

Small scale terrain



NOAA Atlas 14, Volume 1, Version 5 Location name: Sun Valley, Nevada, USA* Latitude: 39.5793°, Longitude: -119.7839° Elevation: 4747.14 ft**

* source: ESRI Maps ** source: USGS



POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sarah Dietz, Sarah Heim, Lillian Hiner, Kazungu Maitaria, Deborah Martin, Sandra Pavlovic, Ishani Roy, Carl Trypaluk, Dale Unruh, Fenglin Yan, Michael Yekta, Tan Zhao, Geoffrey Bonnin, Daniel Brewer, Li-Chuan Chen, Tye Parzybok, John Yarchoan

NOAA, National Weather Service, Silver Spring, Maryland

PF tabular | PF graphical | Maps & aerials

PF tabular

PDS-	PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches/hour) ¹									
Duration				Avera	ge recurren	ce interval (y	years)			
Duration	1	2	5	10	25	50	100	200	500	1000
5-min	1.12 (0.948-1.28)	1.38 (1.18-1.62)	1.85 (1.57-2.18)	2.30 (1.96-2.74)	3.07 (2.54-3.70)	3.80 (3.05-4.62)	4.67 (3.62-5.76)	5.72 (4.26-7.22)	7.45 (5.22-9.72)	9.05 (6.05-12.0)
10-min	0.846 (0.720-0.972)	1.05 (0.894-1.23)	1.41 (1.20-1.66)	1.76 (1.49-2.08)	2.35 (1.94-2.81)	2.90 (2.32-3.52)	3.56 (2.75-4.39)	4.36 (3.24-5.50)	5.68 (3.97-7.39)	6.88 (4.61-9.17)
15-min	0.700 (0.592-0.804)	0.868 (0.736-1.02)	1.17 (0.992-1.37)	1.45 (1.23-1.72)	1.94 (1.60-2.32)	2.39 (1.92-2.91)	2.94 (2.28-3.62)	3.60 (2.68-4.54)	4.69 (3.28-6.11)	5.69 (3.81-7.58)
30-min	0.470 (0.400-0.542)	0.584 (0.496-0.684)	0.786 (0.668-0.926)	0.978 (0.828-1.16)	1.30 (1.08-1.57)	1.61 (1.29-1.96)	1.98 (1.53-2.44)	2.43 (1.80-3.06)	3.16 (2.21-4.12)	3.83 (2.56-5.10)
60-min	0.291 (0.247-0.335)	0.362 (0.307-0.423)	0.486 (0.413-0.573)	0.605 (0.512-0.717)	0.808 (0.667-0.969)	0.997 (0.798-1.21)	1.22 (0.948-1.51)	1.50 (1.12-1.89)	1.95 (1.37-2.55)	2.37 (1.59-3.16)
2-hr	0.194 (0.172-0.223)	0.240 (0.214-0.278)	0.309 (0.271-0.356)	0.368 (0.319-0.424)	0.461 (0.388-0.536)	0.544 (0.446-0.642)	0.642 (0.512-0.768)	0.769 (0.590-0.956)	1.01 (0.732-1.29)	1.23 (0.858-1.59)
3-hr	0.155 (0.139-0.175)	0.193 (0.174-0.219)	0.242 (0.217-0.274)	0.281 (0.249-0.320)	0.338 (0.294-0.386)	0.387 (0.331-0.448)	0.447 (0.375-0.525)	0.529 (0.433-0.643)	0.676 (0.535-0.865)	0.826 (0.626-1.07)
6-hr	0.110 (0.099-0.123)	0.138 (0.124-0.155)	0.170 (0.153-0.191)	0.195 (0.174-0.220)	0.228 (0.201-0.258)	0.252 (0.219-0.288)	0.277 (0.237-0.320)	0.308 (0.258-0.360)	0.365 (0.299-0.438)	0.426 (0.343-0.543)
12-hr	0.072 (0.065-0.081)	0.091 (0.082-0.101)	0.114 (0.102-0.127)	0.132 (0.118-0.147)	0.156 (0.137-0.176)	0.174 (0.151-0.198)	0.193 (0.165-0.222)	0.211 (0.177-0.246)	0.236 (0.193-0.281)	0.257 (0.206-0.311)
24-hr	0.046 (0.041-0.051)	0.058 (0.052-0.064)	0.073 (0.066-0.081)	0.086 (0.077-0.095)	0.103 (0.092-0.115)	0.117 (0.104-0.131)	0.132 (0.116-0.148)	0.147 (0.127-0.166)	0.168 (0.143-0.192)	0.185 (0.155-0.213)
2-day	0.027 (0.025-0.031)	0.035 (0.031-0.039)	0.044 (0.040-0.050)	0.052 (0.046-0.058)	0.063 (0.056-0.071)	0.072 (0.063-0.082)	0.081 (0.071-0.093)	0.091 (0.078-0.105)	0.105 (0.088-0.123)	0.116 (0.096-0.138)
3-day	0.020 (0.018-0.022)	0.025 (0.022-0.028)	0.032 (0.029-0.036)	0.038 (0.034-0.043)	0.047 (0.041-0.053)	0.054 (0.047-0.061)	0.061 (0.053-0.070)	0.069 (0.059-0.079)	0.080 (0.067-0.093)	0.089 (0.073-0.105)
4-day	0.016 (0.014-0.018)	0.020 (0.018-0.023)	0.026 (0.024-0.030)	0.031 (0.028-0.035)	0.039 (0.034-0.044)	0.044 (0.039-0.050)	0.051 (0.044-0.058)	0.057 (0.049-0.066)	0.067 (0.056-0.078)	0.075 (0.061-0.088)
7-day	0.011 (0.010-0.012)	0.014 (0.012-0.016)	0.018 (0.016-0.021)	0.021 (0.019-0.025)	0.026 (0.023-0.030)	0.030 (0.026-0.035)	0.034 (0.029-0.040)	0.039 (0.033-0.045)	0.045 (0.037-0.054)	0.050 (0.041-0.060)
10-day	0.008 (0.007-0.010)	0.011 (0.010-0.012)	0.014 (0.012-0.016)	0.017 (0.015-0.019)	0.021 (0.018-0.024)	0.024 (0.020-0.027)	0.027 (0.023-0.031)	0.030 (0.025-0.035)	0.035 (0.029-0.041)	0.038 (0.031-0.045)
20-day	0.005 (0.005-0.006)	0.007 (0.006-0.008)	0.009 (0.008-0.010)	0.010 (0.009-0.012)	0.013 (0.011-0.014)	0.014 (0.012-0.016)	0.016 (0.014-0.018)	0.018 (0.015-0.021)	0.020 (0.017-0.024)	0.022 (0.018-0.026)
30-day	0.004 (0.004-0.005)	0.005 (0.005-0.006)	0.007 (0.006-0.008)	0.008 (0.007-0.009)	0.010 (0.008-0.011)	0.011 (0.009-0.012)	0.012 (0.011-0.014)	0.014 (0.012-0.016)	0.015 (0.013-0.018)	0.017 (0.014-0.020)
45-day	0.003 (0.003-0.004)	0.004 (0.004-0.005)	0.005 (0.005-0.006)	0.006 (0.006-0.007)	0.008 (0.007-0.009)	0.009 (0.007-0.010)	0.009 (0.008-0.011)	0.010 (0.009-0.012)	0.012 (0.010-0.013)	0.013 (0.011-0.015)
60-day	0.003 (0.002-0.003)	0.004 (0.003-0.004)	0.005 (0.004-0.005)	0.005 (0.005-0.006)	0.006 (0.006-0.007)	0.007 (0.006-0.008)	0.008 (0.007-0.009)	0.009 (0.007-0.010)	0.009 (0.008-0.011)	0.010 (0.008-0.011)

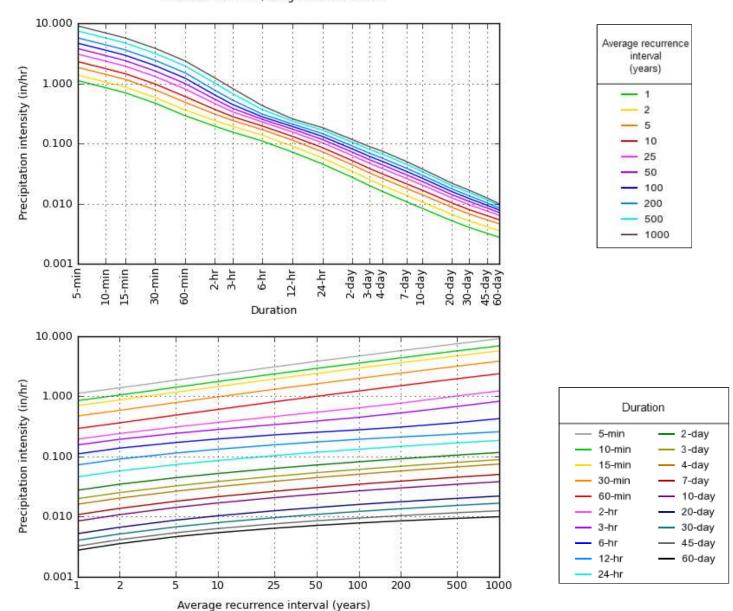
¹ Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Please refer to NOAA Atlas 14 document for more information.

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Back to Top

PDS-based intensity-duration-frequency (IDF) curves Latitude: 39.5793°, Longitude: -119.7839°



NOAA Atlas 14, Volume 1, Version 5

Created (GMT): Mon Jun 28 16:56:19 2021

Back to Top

Maps & aerials

Small scale terrain

TRAFFIC IMPACT STUDY

FOR Sun Valley Multifamily

June 22, 2021

PREPARED FOR:
Ulysses Development Group, LLC

PREPARED BY:





YOUR QUESTIONS ANSWERED QUICKLY

Why did you perform this study?

This Traffic Impact Study evaluates the potential traffic impacts associated with the proposed Sun Valley Multifamily Project in Reno, Nevada. This study of potential transportation impacts was undertaken for planning purposes and to assist in determining what traffic controls or mitigations may be needed to reduce potential impacts, if any are found.

What does the project consist of?

The project consists of up to 200 multifamily units. The site is generally located west of Sun Valley Boulevard and north of 1st Avenue between McGuffey Road and Slope Drive. One project access is proposed on 1st Avenue adjacent to Sagebrush Drive with side-street STOP control allowing for all turning movements. A secondary emergency access is also provided on 1st Avenue.

How much traffic will the project generate?

The project is anticipated to generate approximately 1,464 Daily, 92 AM peak hour, and 112 PM peak hour trips to the external roadway network.

Does this project cause any traffic impacts?

Under the Existing Plus Project Scenario, all study intersections are anticipated to operate at acceptable conditions. Under the Future Year Plus Project Scenario (20 year horizon), all study intersections are anticipated to operate at acceptable conditions with future improvements at the Sun Valley Boulevard / 1st Avenue intersection as recommended in the *Traffic Operations Analysis – Sun Valley Boulevard Transportation Improvement Project* (Headway Transportation, 2019).

Are any improvements recommended?

It is recommended that the project construct sidewalk along the property frontages according to Washoe County standards. A right turn lane is not justified at the project driveway due to low speeds and through volumes on 1st Avenue. It is recommended that the project install center line and turn pocket striping (left-through and separate right) for approximately 60 feet on the eastbound approach at the Sun Valley Boulevard / 1st Avenue intersection. Widening of 1st Avenue is not necessary with this striping improvement. The project will pay standard Regional Road Impact Fees (RRIF) based on the final multifamily unit count as mitigation for its minor impacts on the regional roadway network.



LIST OF FIGURES

- 1. Project Location
- 2. Site Plan
- 3. Existing Traffic Volumes, Lane Configurations, and Controls
- 4. Future Year Traffic Volumes, Lane Configurations, and Controls
- 5. Project Trip Distribution and Assignment
- 6. Existing Plus Project Traffic Volumes, Lane Configurations, and Controls
- 7. Future Year Plus Project Traffic Volumes, Lane Configurations, and Controls

LIST OF APPENDICES

- A. NDOT Crash Data
- B. Existing LOS Calculations
- C. Future Year LOS Calculations
- D. Existing Plus Project LOS Calculations
- E. Future Year Plus Project LOS Calculations



INTRODUCTION

This report presents the findings of a Traffic Impact Study completed to assess the potential traffic impacts on local intersections associated with the Sun Valley Multifamily project in Sun Valley, Nevada. This traffic impact study has been prepared to document existing traffic conditions, quantify traffic volumes generated by the proposed project, identify potential impacts, document findings, and make recommendations to mitigate impacts, if any are found.

Study Area and Evaluated Scenarios

The project consists of up to 200 multifamily units. The project is generally located north of 1st Avenue between McGuffey Road and Slope Drive, as shown on **Figure 1**. The preliminary site plan is shown on **Figure 2**.

Study Intersections

The following intersections are evaluated in this report:

- Sun Valley Boulevard / 1st Avenue
- ▶ 1st Avenue / Project Access

This study includes analysis of both the weekday AM and PM peak hours as these are the periods of time in which peak traffic (background plus site traffic combined) is anticipated to occur. The evaluated development scenarios are:

- Existing Conditions
- Existing Plus Project Conditions
- Future Year Conditions
- Future Year Plus Project Conditions

ANALYSIS METHODOLOGY

Level of service (LOS) is a term commonly used by transportation practitioners to measure and describe the operational characteristics of intersections, roadway segments, and other facilities. This term equates seconds of delay per vehicle at intersections to letter grades "A" through "F" with "A" representing optimum conditions and "F" representing breakdown or over capacity flows.

Intersections

The complete methodology for intersection level of service analysis is established in the *Highway Capacity Manual (HCM) 2010*, published by the Transportation Research Board (TRB). **Table 1** presents the delay thresholds for each level of service grade at signalized and unsignalized intersections.



Table 1: Level of Service Definition for Intersections

Level of	Duiof Decembring	Average Delay (seconds per vehicle)			
Service	Brief Description	Signalized Intersections	Unsignalized Intersections		
Α	Free flow conditions.	< 10	< 10		
В	Stable conditions with some affect from other vehicles.	10 to 20	10 to 15		
С	Stable conditions with significant affect from other vehicles.	20 to 35	15 to 25		
D	High density traffic conditions still with stable flow.	35 to 55	25 to 35		
E	At or near capacity flows.	55 to 80	35 to 50		
F	Over capacity conditions.	> 80	> 50		

Source: Highway Capacity Manual, 6th Edition

Level of service calculations were performed using the Synchro / SimTraffic 11 software package with analysis and results reported in accordance with the current *HCM 2010 Edition* methodology.

Level of Service Policy

The Nevada Department of Transportation (NDOT) Traffic Impact Study Requirements publication states:

Level of service "C" will be the design objective for capacity and under no circumstances will less than level of service "D" be accepted for site and non-site traffic.

The Sun Valley Area Plan states "Level of Service "C" or above is the desired level for all regional roads in the Sun Valley planning area" and that "this may be waived by the Department of Public Works for projects that are determined to have minimal impacts."

Sun Valley Boulevard within the project area is under NDOT jurisdiction. Therefore, Level of Service (LOS) "D" was used as the threshold criteria for the Sun Valley Boulevard / 1st Avenue intersection. Level of Service (LOS) "C" was used as the threshold criteria for the project access on 1st Avenue. Where intersections are already experiencing level of service beyond the thresholds above, conditions should not be exacerbated.

EXISTING CONDITIONS

Roadway Facilities

Sun Valley Boulevard is a north-south roadway with five lanes (two lanes in each direction and a two-way left-turn lane) in the project vicinity. It has a posted speed limit of 35 mph in the study area and is classified as a Moderate Access Control (MAC) Arterial in the 2050 Regional Transportation Plan and a minor arterial by NDOT.



1st Avenue within the study area is a two-lane east-west local street. Within the study area, it has no existing roadway striping and has a posted speed limit of 25 mph. It is not classified in the 2050 Regional Transportation Plan.

Transit Facilities

The Regional Transportation Commission (RTC) currently operates one fixed route transit service (Route 5) within the study area, as shown on **Exhibit 1**. Route 5 mainly operates on Sutro Street, Clear Acre Lane, and Sun Valley Boulevard. Two bus stops are provided within the project vicinity. The bus stop for northbound travel is located on the east side of Sun Valley Boulevard approximately 75 feet north of the Sun Valley Boulevard / 1st Avenue intersection. The bus stop for southbound travel is located on the west side of Sun Valley Boulevard approximately 500 feet south of the Sun Valley Boulevard/1st Avenue intersection.

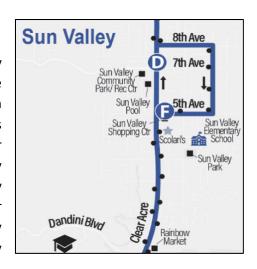


Exhibit 1. RTC Route 5

Bicycle & Pedestrian Facilities

There are some existing bicycle and pedestrian facilities in the project area. Sidewalks are present on the north side of the 1st Avenue east of Slope Drive, discontinuously on the south side of 1st Avenue, and discontinuously on the west side of Sun Valley Boulevard. There are no sidewalks on the east side of Sun Valley Boulevard. Dedicated bike lanes are provided on Sun Valley Boulevard.

Crash History

Vehicle crash data was obtained for the Sun Valley Boulevard / 1st Avenue and 1st Avenue / Sagebrush Drive intersection for the latest three year period (January 2017 – January 2020). No crashes were reported within 500 feet of the 1st Avenue / Sagebrush Drive intersection near the project site. Approximately 36 total crashes were reported within the three year period at the Sun Valley Boulevard / 1st Avenue intersection. The majority of the crashes were reported as Rear-End (19) and Angle (14) type crashes. Complete NDOT crash data is provided in **Appendix A**. It is not anticipated that this project would cause a significant impact on the safety of the local roadway network.

Traffic Volumes

Existing AM and PM peak hour intersection turning movement volumes were collected on May 11, 2021. The collected turning movement data was compared to historical (2018) turning movement data from the *Traffic Operations Analysis – Sun Valley Boulevard Transportation Improvement Project* (Headway Transportation, 2019) and it was found that the collected counts were slightly lower than the prior 2018 counts. Additionally, NDOT data shows that traffic volumes decreased on Sun Valley Boulevard from 2018



to 2019. To be conservative, the higher (2018) turning movement counts were used in this study. **Figure 3** shows the existing peak hour traffic volumes and lane configurations at the study intersections.

Intersection Level of Service Analysis

Existing AM and PM peak hour intersection level of service analysis was performed for the study intersection using SimTraffic micro-simulation software. **Table 2** shows the existing conditions level of service results and the technical calculations are provided in **Appendix B**.

Table 2: Existing Intersection Level of Service

ID	Intercection	Intersection Intersection		AM Peak		PM Peak	
יוו	intersection	Control	Movement	LOS	Delay ¹	LOS	Delay ¹
			Eastbound Approach	Α	0.1	Α	0.1
1	1 st Ave / Sagebrush Dr	Side-Street STOP	Westbound Approach	Α	0.1	Α	1.4
			Northbound Approach	Α	3.6	Α	2.7
2	Sun Valley Blvd / 1st Ave	Signal	Overall	С	22.5	С	23.3

Notes: 1. Delay is reported in seconds per vehicle

As shown in the table, the study intersections currently operate within policy level of service thresholds (LOS "D" or better) during the AM and PM peak hours.

FUTURE YEAR CONDITIONS

Traffic Volume Forecasts

Future Year traffic volumes were developed to assess potential impacts on the future transportation system. 2040 projected volumes from the RTC's 2050 regional travel demand model show slightly reduced traffic volumes on Sun Valley Boulevard. This is likely due to future planned roadways such as the Pyramid Highway/395 Connector and the West Sun Valley Arterial connecting Pyramid Way and Sun Valley Boulevard. To be conservative, forecasts were developed representing the highest traffic volumes (2025) expected on Sun Valley Boulevard. **Table 3** shows the RTC model volume outputs on Sun Valley Boulevard.

Table 3: RTC Model Growth Rates

Scenario	Sun Valley Blvd ADT (North of 1 st Ave)	Sun Valley Blvd ADT (South of 1 st Ave)
2020	26,220	31,661
2025	29,020	36,986
2050	22,646	29,285
Growth Factor (2020 – 2050)	0.86	0.92
Growth Factor (2020 – Max)	1.11	1.17

As shown in the table, the maximum growth factor on Sun Valley Boulevard is projected to be 1.17. Therefore, the existing turning movement volumes were factored up by a growth factor of 1.17 to obtain



future traffic volumes. The future year lane configurations, intersection controls, and future year peak hour intersection traffic volumes are shown in **Figure 4**, attached.

Intersection Level of Service

Future Year AM and PM peak hour intersection level of service analysis was performed for the study intersection using SimTraffic micro-simulation software. It is important to note that the future year analysis contains optimized coordination and signal timing for the entire Sun Valley Boulevard corridor. **Table 3** shows the Future Year conditions level of service results and the technical calculations are provided in **Appendix C**.

Table 3: Future Year Intersection Level of Service

ID	Intersection	Intersection	Movement	AN	l Peak	PM Peak		
שו	intersection	Control	Movement	LOS	Delay ¹	LOS	Delay ¹	
			Eastbound Approach	Α	0.1	Α	0.1	
1	1 st Ave / Sagebrush Dr	Side-Street STOP	Westbound Approach	Α	2.0	Α	1.7	
			Northbound Approach	Α	2.2	Α	2.2	
2	Sun Valley Blvd / 1st Ave	Signal	Overall	С	33.9	С	28.2	

Notes: 1. Delay is reported in seconds per vehicle

As shown in the table, the study intersections are projected to operate within policy level of service thresholds (LOS "D" or better) during the AM and PM peak hours under Future Year Conditions.

PROJECT CONDITIONS

Project Description

The project consists of up to 200 multifamily units. The site is generally located west of Sun Valley Boulevard and north of 1st Avenue between McGuffey Road and Slope Drive. The project site plan is shown in **Figure 2**, attached. One project access is proposed on 1st Avenue adjacent to Sagebrush Drive with sidestreet STOP control allowing for all turning movements. A right turn lane is not justified at the project driveway due to low speeds and through volumes on 1st Avenue. A secondary emergency access is also provided on 1st Avenue.

Trip Generation

Vehicular trip generation rates for the proposed project were obtained from the *Trip Generation Manual, 10th Edition,* published by the Institute of Transportation Engineers (ITE). **Table 4** provides the Daily, AM Peak Hour, and PM Peak Hour trip generation calculations for the proposed project.



Table 4: Trip Generation Estimates

/ITF #\ Lond I loo	Ougatitus	Daily	Al	M Pea	k	PN	/I Peal	<
(ITE #) Land Use	Quantity	Daily	Total	In	Out	Total	In	Out
Multifamily Housing (220)	200 dwelling units	1,464	92	21	71	112	71	41

As shown in the table, the project is expected to generate 1,464 Daily, 92 AM peak hour, and 112 PM peak hour trips.

Trip Distribution

Project trips were distributed to the adjacent roadway network based on existing traffic volumes, the locations of complimentary land uses, and anticipated travel patterns. Project trips were distributed based on the following:

- > 75% to/from the south via Sun Valley Boulevard
- 20% to/from the north via Sun Valley Boulevard (25% in the PM peak hour)
- 5% to/from Lois Allen Elementary School in the AM peak hour

Figure 5 shows the project trip distribution and assignment.

EXISTING PLUS PROJECT CONDITIONS

Traffic Volumes

Project trips (**Figure 5**) were added to the existing traffic volumes (**Figure 3**) to develop the Existing Plus Project conditions traffic volumes, shown on **Figure 6**.

Intersection Level of Service

Existing Plus Project AM and PM peak hour intersection level of service analysis was performed for the study intersections using SimTraffic micro-simulation software. **Table 5** shows the Existing Plus Project intersection level of service results for the AM and PM peak hours. The technical calculations are provided in **Appendix D**.

Table 5: Existing Plus Project Intersection Level of Service

ID	Intersection	Intersection	Movement	AN	1 Peak	PIV	l Peak
טו	intersection	Control	wovement	LOS	Delay ¹	LOS	Delay ¹
			Eastbound Approach	Α	0.1	Α	1.4
1	1st Ave / Drainet Assess	Side-Street	Westbound Approach	Α	1.4	Α	1.7
1	1 st Ave / Project Access	STOP	Northbound Approach	Α	2.4	Α	3.8
			Southbound Approach	Α	4.0	Α	4.6
2	Sun Valley Blvd / 1st Ave	Signal	Overall	С	23.7	С	23.8

Notes: 1. Delay is reported in seconds per vehicle



As shown in the table, the study intersections are expected to operate within level of service policy during the AM and PM peak hours.

FUTURE YEAR PLUS PROJECT CONDITIONS

Traffic Volumes

It is unclear to what extent this project site was included in the worst case scenario in the 2050 regional model. To be conservative, project trips (**Figure 5**) were added to the Future Year traffic volumes (**Figure 4**) to develop the Future Year Plus Project conditions traffic volumes, shown on **Figure 7**.

Intersection Level of Service

Future Year Plus Project AM and PM peak hour intersection level of service analysis was performed for the study intersections using SimTraffic micro-simulation software. **Table 6** shows the level of service results and the technical calculations are provided in **Appendix E**.

Table 6: Future Year Plus Project Intersection Level of Service

ID	Intersection	Intersection	Movement	AN	1 Peak	PM	l Peak
ID	intersection	Control	Wovernent	LOS	Delay ¹	LOS	Delay ¹
			Eastbound Approach	Α	1.6	Α	0.1
1	1 st Ave / Project Access	Side-Street	Westbound Approach	Α	1.3	Α	2.5
1	1" Ave / Project Access	STOP	Northbound Approach	Α	2.5	Α	4.3
			Southbound Approach	Α	5.1	Α	4.8
2	Sun Valley Blvd / 1st Ave	Signal	Overall	D	41.1	D	40.1

Notes: 1. Delay is reported in seconds per vehicle

As shown in the table, the study intersections are anticipated to operate within policy level of service thresholds (LOS "D" or better) during the AM and PM peak hours under Future Year Plus Project Conditions.

CONCLUSIONS

The following is a list of our key findings and recommendations:

- The proposed project includes up to 200 multifamily units.
- The project is anticipated to generate approximately 1,464 Daily, 92 AM peak hour, and 112 PM peak hour trips.
- One project access is proposed on 1st Avenue with side-street STOP control allowing for all turning movements. A right turn lane is not justified at the project driveway due to low speeds and low through volumes on 1st Avenue. Secondary access will also be provided on 1st Avenue.



- Under Existing Plus Project conditions, the study intersections are expected to operate within policy level of service thresholds.
- Under Future Year conditions, the study intersections are expected to operate within policy level of service thresholds (LOS "D" or better).
- It is recommended that the project construct sidewalk along the property frontages according to Washoe County Standards.
- It is recommended that the project install center line and turn pocket striping (left-through and separate right) for approximately 60 feet on the eastbound approach at the Sun Valley Boulevard / 1st Avenue intersection. Widening of 1st Avenue is not necessary with this striping improvement.
- The project will pay standard Regional Road Impact Fees (RRIF) based on the final multifamily unit count as mitigation for its minor impacts on the regional roadway network.

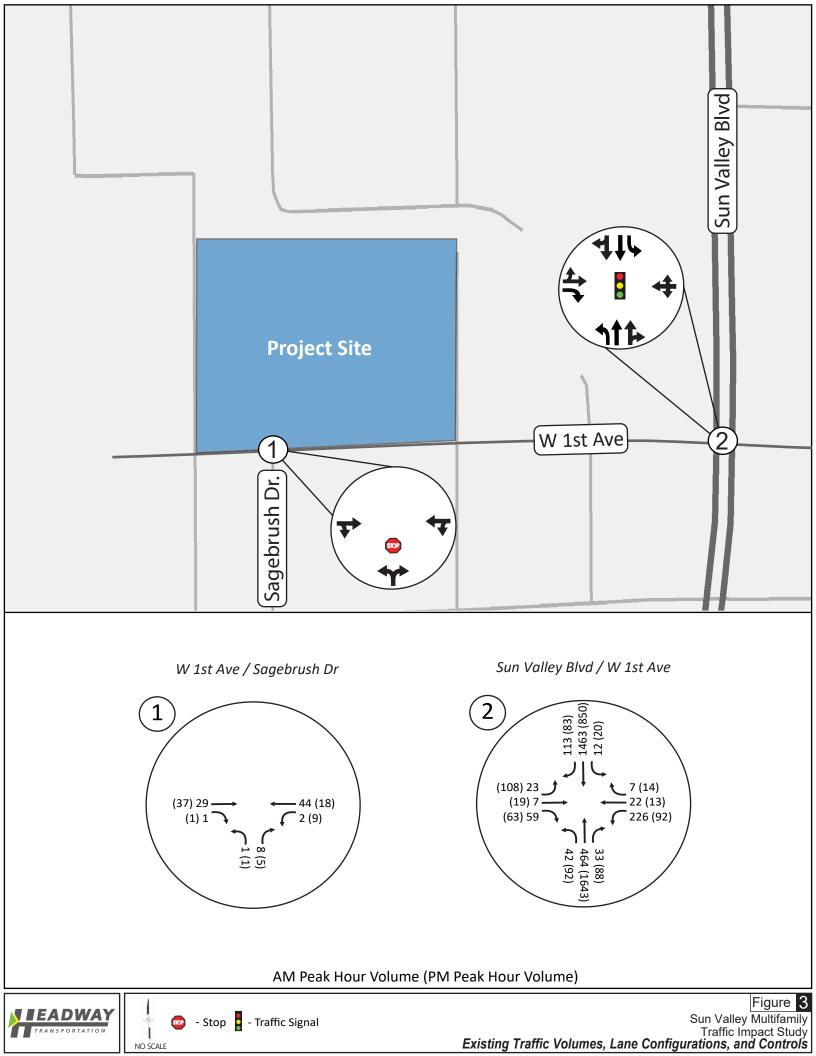


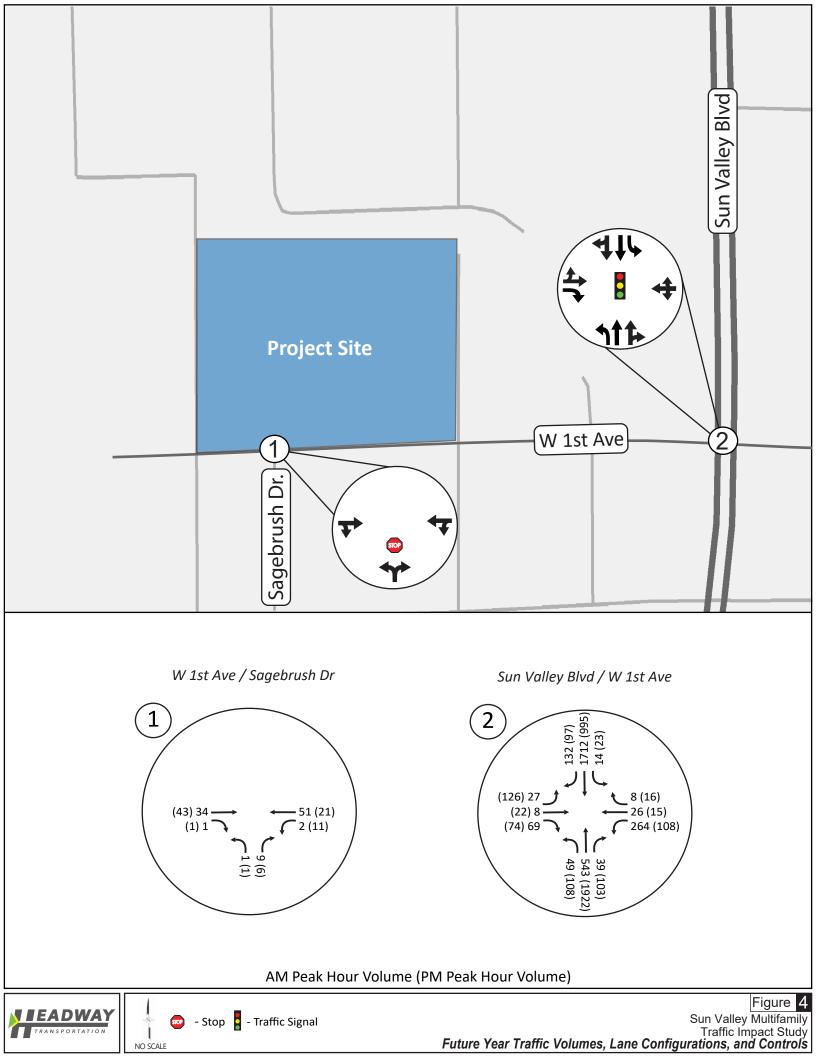


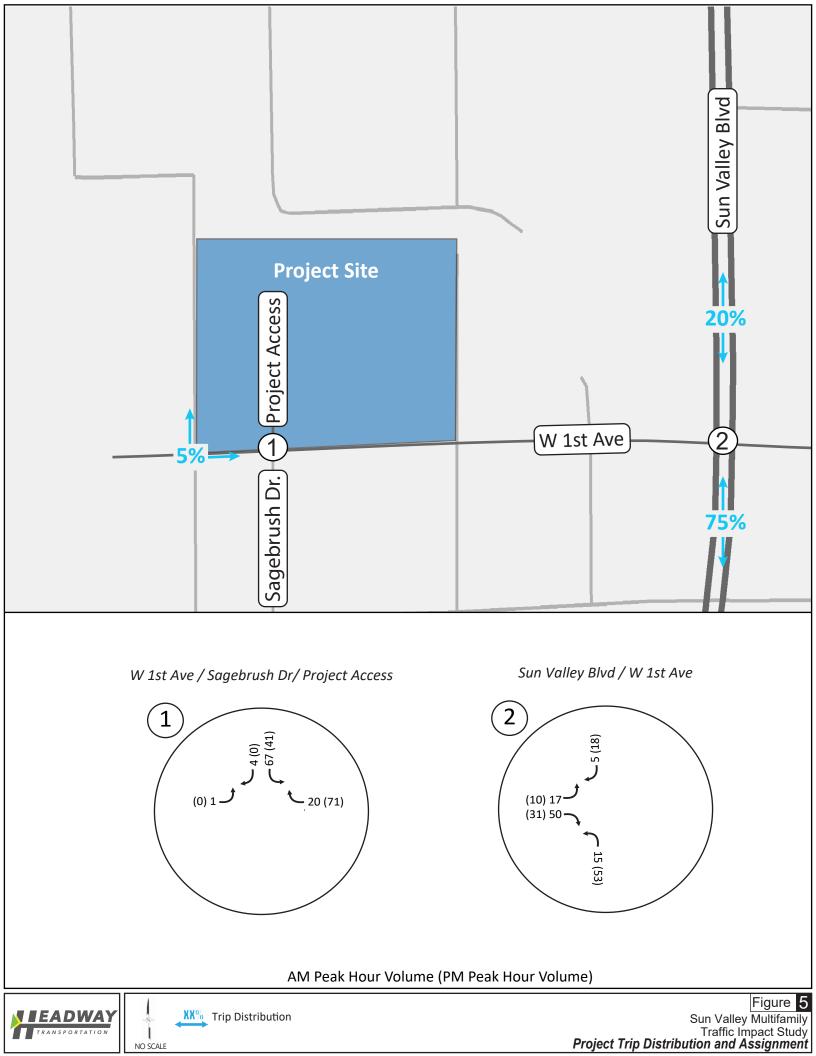


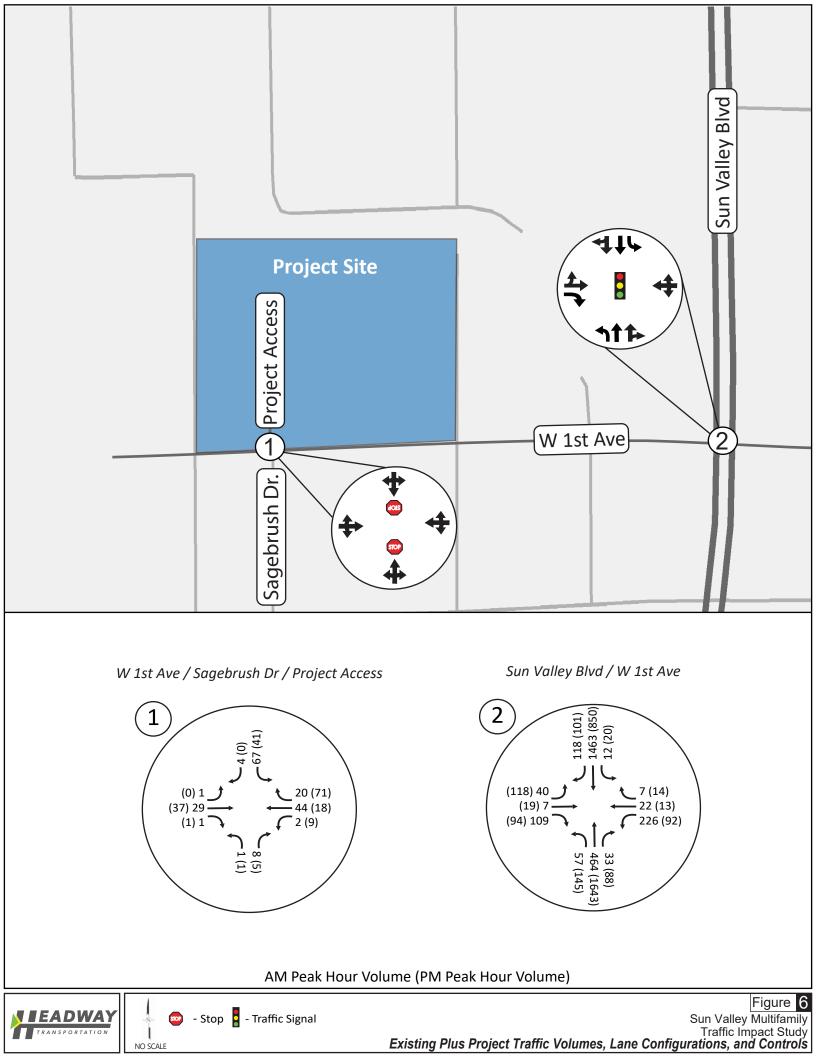


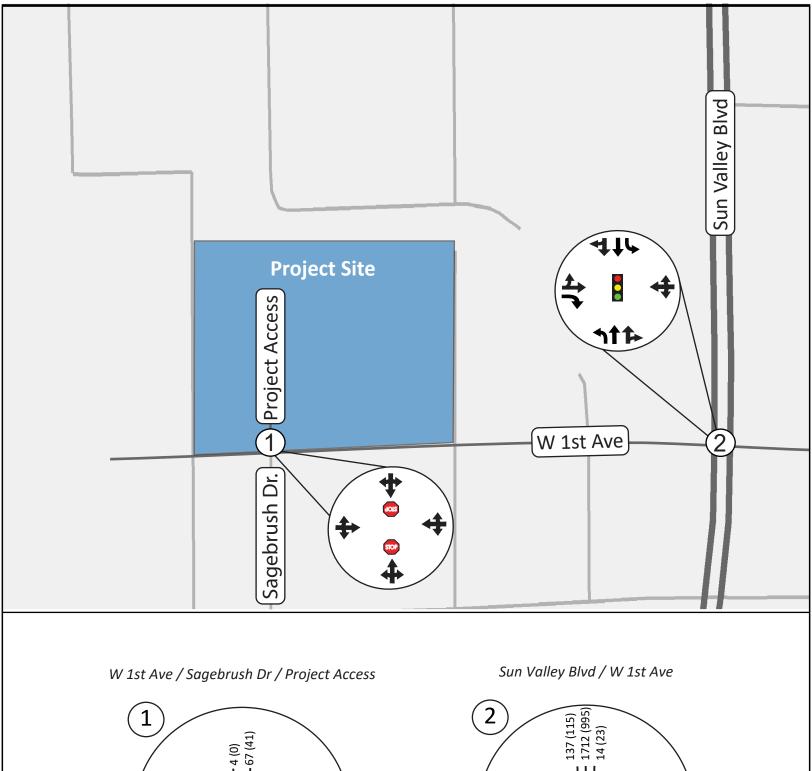


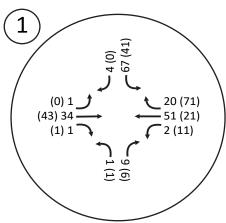


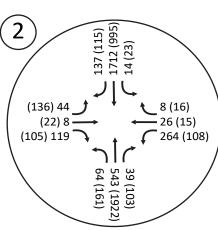












AM Peak Hour Volume (PM Peak Hour Volume)





Appendix A Existing LOS Calculations



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.3	0.3	4.0	0.3	0.3	0.2	0.1	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	44.9	36.5	17.2	36.0	33.8	25.8	30.1	8.7	7.5	25.2	24.4	22.9
Vehicles Entered	20	7	61	226	20	8	41	457	35	12	1467	109
Vehicles Exited	20	7	61	227	20	8	42	458	36	12	1468	109
Hourly Exit Rate	20	7	61	227	20	8	42	458	36	12	1468	109
Input Volume	23	7	59	226	22	7	42	468	33	12	1463	113
% of Volume	88	97	103	100	92	110	99	98	109	98	100	97

8: Sun Valley Blvd & 1st Ave Performance by movement

Movement	All
Denied Del/Veh (s)	0.1
Total Del/Veh (s)	22.5
Vehicles Entered	2463
Vehicles Exited	2468
Hourly Exit Rate	2468
Input Volume	2476
% of Volume	100

35: Sagebrush Dr & 1st Ave Performance by movement

Movement	EBT	EBR	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.1	0.1	0.1	0.1	0.1	0.1
Total Del/Veh (s)	0.0	0.0	0.1	3.6	2.5	0.3

Movement	EB	EB	WB	NB	NB	NB	SB	SB	SB
Directions Served	LT	R	LTR	L	Т	TR	L	Т	TR
Maximum Queue (ft)	112	65	295	84	82	112	96	601	623
Average Queue (ft)	38	42	162	26	23	32	11	274	281
95th Queue (ft)	95	66	266	61	59	80	51	513	528
Link Distance (ft)	700		900		2830	2830		1212	1212
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)		30		160			100		
Storage Blk Time (%)	24	20						26	
Queuing Penalty (veh)	14	6						3	

Intersection: 35: Sagebrush Dr & 1st Ave

Movement	NB	
Directions Served	LR	
Maximum Queue (ft)	32	
Average Queue (ft)	7	
95th Queue (ft)	28	
Link Distance (ft)	331	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement	LDL	LDI	LDIX	WDL	WDI	WDIX	NDL	NDI	NDIX	ODL	301	SDIX
Denied Del/Veh (s)	0.4	0.3	3.8	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	54.0	54.2	27.4	38.7	39.9	30.5	28.7	25.4	28.0	28.8	11.9	9.7
Vehicles Entered	110	21	60	88	14	16	90	1757	85	20	856	86
Vehicles Exited	111	21	60	88	14	16	90	1760	86	21	855	86
Hourly Exit Rate	111	21	60	88	14	16	90	1760	86	21	855	86
Input Volume	108	19	63	92	13	14	92	1777	88	20	850	83
% of Volume	103	109	96	96	108	114	98	99	98	104	101	104

8: Sun Valley Blvd & 1st Ave Performance by movement

Movement	All
Denied Del/Veh (s)	0.1
Total Del/Veh (s)	23.3
Vehicles Entered	3203
Vehicles Exited	3208
Hourly Exit Rate	3208
Input Volume	3219
% of Volume	100

35: Sagebrush Dr & 1st Ave Performance by movement

Movement	EBT	EBR	WBL	WBT	NBR	All
Denied Del/Veh (s)	0.1	0.1	0.1	0.1	0.1	0.1
Total Del/Veh (s)	0.0	0.0	1.4	0.3	2.7	0.6

Movement	EB	EB	WB	NB	NB	NB	SB	SB	SB	
Directions Served	LT	R	LTR	L	T	TR	L	T	TR	
Maximum Queue (ft)	269	62	170	184	407	434	98	265	269	
Average Queue (ft)	129	41	84	55	236	253	22	105	113	
95th Queue (ft)	238	73	144	139	384	391	63	206	212	
Link Distance (ft)	700		900		2830	2830		1212	1212	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)		30		160			100			
Storage Blk Time (%)	66	7		0	16		0	8		
Queuing Penalty (veh)	42	9		0	14		0	2		

Intersection: 35: Sagebrush Dr & 1st Ave

Movement	NB
Directions Served	LR
Maximum Queue (ft)	32
Average Queue (ft)	7
95th Queue (ft)	28
Link Distance (ft)	338
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Appendix B Future Year LOS Calculations



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.3	0.1	3.9	0.3	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	59.2	61.7	27.7	55.0	53.8	23.0	35.6	9.6	6.8	41.3	39.0	41.5
Vehicles Entered	31	6	55	271	30	3	56	700	48	14	1980	127
Vehicles Exited	31	6	56	259	30	3	54	696	48	14	1974	124
Hourly Exit Rate	31	6	56	259	30	3	54	696	48	14	1974	124
Input Volume	27	8	69	264	26	8	49	697	39	14	1973	132
% of Volume	116	73	81	98	117	36	110	100	123	98	100	94

8: Sun Valley Blvd & 1st Ave Performance by movement

Movement	All	
Denied Del/Veh (s)	0.1	
Total Del/Veh (s)	33.9	
Vehicles Entered	3321	
Vehicles Exited	3295	
Hourly Exit Rate	3295	
Input Volume	3306	
% of Volume	100	

36: Sagebrush Dr & 1st Ave Performance by movement

Movement	EBT	EBR	WBL	WBT	NBR	All
Denied Del/Veh (s)	0.1	0.1	0.1	0.2	0.1	0.1
Total Del/Veh (s)	0.0	0.0	2.0	0.0	2.2	0.3
Vehicles Entered	33	1	1	57	10	102
Vehicles Exited	33	1	1	58	10	103
Hourly Exit Rate	33	1	1	58	10	103
Input Volume	34	1	2	51	9	98
% of Volume	97	100	50	113	108	105

Movement	EB	EB	WB	NB	NB	NB	SB	SB	SB	
Directions Served	LT	R	LTR	L	T	TR	L	Т	TR	
Maximum Queue (ft)	113	118	439	73	216	231	33	841	827	
Average Queue (ft)	38	37	226	36	64	91	6	468	468	
95th Queue (ft)	88	80	383	69	141	183	26	676	689	
Link Distance (ft)	706		1814		2001	2001		1205	1205	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)		125		160			100			
Storage Blk Time (%)	0	1			1			35		
Queuing Penalty (veh)	0	0			0			5		

Intersection: 36: Sagebrush Dr & 1st Ave

Movement	NB
Directions Served	LR
Maximum Queue (ft)	33
Average Queue (ft)	11
95th Queue (ft)	36
Link Distance (ft)	268
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.3	0.3	4.0	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	67.0	49.2	13.5	40.8	39.2	29.4	36.3	27.6	31.7	50.2	22.8	21.8
Vehicles Entered	117	24	68	116	16	16	105	2021	97	24	1008	94
Vehicles Exited	118	23	68	114	17	17	106	2011	98	25	1012	95
Hourly Exit Rate	118	23	68	114	17	17	106	2011	98	25	1012	95
Input Volume	126	22	74	108	15	16	108	2042	103	23	1007	97
% of Volume	93	103	92	106	113	106	98	98	95	108	100	98

8: Sun Valley Blvd & 1st Ave Performance by movement

Movement	All
Denied Del/Veh (s)	0.1
Total Del/Veh (s)	28.2
Vehicles Entered	3706
Vehicles Exited	3704
Hourly Exit Rate	3704
Input Volume	3742
% of Volume	99

36: Sagebrush Dr & 1st Ave Performance by movement

Movement	EBT	EBR	WBL	WBT	NBR	All
Denied Del/Veh (s)	0.1	0.1	0.1	0.1	0.1	0.1
Total Del/Veh (s)	0.1	0.0	1.7	0.0	2.2	0.3
Vehicles Entered	49	4	8	21	4	86
Vehicles Exited	48	4	8	21	4	85
Hourly Exit Rate	48	4	8	21	4	85
Input Volume	43	1	11	21	6	84
% of Volume	111	400	71	101	64	102

Movement	EB	EB	WB	NB	NB	NB	B33	B33	SB	SB	SB	
Directions Served	LT	R	LTR	L	T	TR	Т	T	L	T	TR	
Maximum Queue (ft)	212	150	183	185	739	768	757	710	124	402	429	
Average Queue (ft)	128	70	104	81	391	406	193	139	29	246	266	
95th Queue (ft)	213	168	154	186	634	671	699	583	84	441	466	
Link Distance (ft)	706		906		2010	2010	765	765		1205	1205	
Upstream Blk Time (%)							0					
Queuing Penalty (veh)							0					
Storage Bay Dist (ft)		125		160					100			
Storage Blk Time (%)	20	0			24					22		
Queuing Penalty (veh)	15	0			26					5		

Intersection: 36: Sagebrush Dr & 1st Ave

Movement	NB
Directions Served	LR
Maximum Queue (ft)	32
Average Queue (ft)	4
95th Queue (ft)	22
Link Distance (ft)	280
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Appendix C Existing Plus Project LOS Calculations



AM Peak Hour

8: Sun Valley Blvd & 1st Ave Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.5	0.8	4.0	0.3	0.3	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	51.3	41.1	23.0	33.1	38.8	17.8	28.1	9.8	9.2	33.2	25.7	24.6

8: Sun Valley Blvd & 1st Ave Performance by movement

Movement	All
Denied Del/Veh (s)	0.2
Total Del/Veh (s)	23.7

35: 1st Ave & Project Dwy Performance by movement

Movement	EBT	EBR	WBL	WBT	WBR	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Total Del/Veh (s)	0.0	0.0	1.4	0.0	0.0	2.4	4.0	2.7	1.8

Movement	EB	EB	WB	NB	NB	NB	SB	SB	SB	
Directions Served	LT	R	LTR	L	T	TR	L	T	TR	
Maximum Queue (ft)	190	67	323	91	108	120	124	493	499	
Average Queue (ft)	69	50	157	25	26	39	13	288	289	
95th Queue (ft)	153	68	256	62	71	80	54	494	483	
Link Distance (ft)	700		900		2830	2830		1212	1212	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)		125		160			100			
Storage Blk Time (%)	43	30						29		
Queuing Penalty (veh)	47	14						4		

Intersection: 35: 1st Ave & Project Dwy

Movement	NB	SB
Directions Served	LTR	LTR
Maximum Queue (ft)	32	65
Average Queue (ft)	10	35
95th Queue (ft)	33	60
Link Distance (ft)	98	122
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

PM Peak Hour

8: Sun Valley Blvd & 1st Ave Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.4	0.6	3.8	0.2	0.1	0.1	0.0	0.0	0.0	0.5	0.0	0.0
Total Del/Veh (s)	59.2	45.9	32.4	34.7	34.1	33.1	32.3	25.2	24.7	22.5	12.7	12.9

8: Sun Valley Blvd & 1st Ave Performance by movement

Movement	All
Denied Del/Veh (s)	0.2
Total Del/Veh (s)	23.8

35: Sagebrush Dr/Project Dwy & 1st Ave Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBR	All	
Denied Del/Veh (s)	0.1	0.2	0.1	0.2	0.3	0.2	0.1	0.1	0.1	0.6	0.2	
Total Del/Veh (s)	1.4	0.0	0.1	1.7	1.1	0.6	3.8	2.9	4.6	3.4	1.8	

Movement	EB	EB	WB	NB	NB	NB	SB	SB	SB	
Directions Served	LT	R	LTR	L	T	TR	L	T	TR	
Maximum Queue (ft)	405	67	146	184	327	336	55	365	389	
Average Queue (ft)	150	51	70	93	231	236	16	102	126	
95th Queue (ft)	283	64	126	191	315	321	44	226	253	
Link Distance (ft)	700		900		2830	2830		1212	1212	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)		125		160			100			
Storage Blk Time (%)	70	13		0	17			8		
Queuing Penalty (veh)	65	18		0	25			2		

Intersection: 35: Sagebrush Dr/Project Dwy & 1st Ave

Movement	WB	NB	SB
Directions Served	LTR	LTR	LTR
Maximum Queue (ft)	58	33	68
Average Queue (ft)	3	6	28
95th Queue (ft)	23	26	58
Link Distance (ft)	797	317	285
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Appendix D Future Year Plus Project LOS Calculations



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.3	0.9	3.9	0.3	0.2	0.4	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	45.4	39.6	34.6	52.2	60.2	48.2	42.9	9.0	16.2	42.2	51.0	55.9
Vehicles Entered	42	3	125	270	27	8	66	729	36	16	1925	145
Vehicles Exited	42	3	125	266	26	8	67	736	37	18	1923	146
Hourly Exit Rate	42	3	125	266	26	8	67	736	37	18	1923	146
Input Volume	44	8	119	264	26	8	64	682	39	14	1968	137
% of Volume	95	36	105	101	101	97	105	108	95	126	98	107

8: Sun Valley Blvd & 1st Ave Performance by movement

Movement	All	
Denied Del/Veh (s)	0.2	
Total Del/Veh (s)	41.1	
Vehicles Entered	3392	
Vehicles Exited	3397	
Hourly Exit Rate	3397	
Input Volume	3374	
% of Volume	101	

36: Sagebrush Dr/Project Access & 1st Ave Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBR	SBL	SBR	All	
Denied Del/Veh (s)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
Total Del/Veh (s)	1.6	0.0	0.0	1.3	0.2	0.2	2.5	5.1	2.4	1.7	
Vehicles Entered	2	28	1	3	43	21	11	41	2	152	
Vehicles Exited	2	28	1	3	43	21	11	41	2	152	
Hourly Exit Rate	2	28	1	3	43	21	11	41	2	152	
Input Volume	1	34	1	2	51	20	9	67	4	190	
% of Volume	200	82	100	150	84	106	119	61	50	80	

Movement	EB	EB	WB	NB	NB	NB	SB	SB	SB
Directions Served	LT	R	LTR	L	T	TR	L	Т	TR
Maximum Queue (ft)	228	150	566	116	212	219	124	1226	1205
Average Queue (ft)	51	77	232	41	76	90	13	596	607
95th Queue (ft)	124	141	377	81	151	154	57	975	983
Link Distance (ft)	706		1814		2001	2001		1205	1205
Upstream Blk Time (%)								0	0
Queuing Penalty (veh)								4	2
Storage Bay Dist (ft)		125		160			100		
Storage Blk Time (%)	0	7			1			40	
Queuing Penalty (veh)	0	3			1			6	

Intersection: 36: Sagebrush Dr/Project Access & 1st Ave

Movement	NB	SB
Directions Served	LTR	LTR
Maximum Queue (ft)	33	50
Average Queue (ft)	10	27
95th Queue (ft)	34	49
Link Distance (ft)	268	372
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
WOVETHERI	LDL	LUI	LDIN	VVDL	VVDI	WDIX	NDL	וטוו	NDIX	JDL	וטכ	JUIN
Denied Del/Veh (s)	0.5	0.5	3.5	0.2	0.3	0.4	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	64.8	70.3	15.5	48.5	54.0	35.7	51.4	45.6	48.6	50.3	25.5	25.2
Vehicles Entered	131	18	108	100	7	16	151	1976	114	39	959	129
Vehicles Exited	132	18	107	101	7	15	149	1938	113	39	946	129
Hourly Exit Rate	132	18	107	101	7	15	149	1938	113	39	946	129
Input Volume	136	22	103	108	15	16	158	1992	103	23	995	114
% of Volume	97	81	104	94	47	94	94	97	110	168	95	113

8: Sun Valley Blvd & 1st Ave Performance by movement

Movement	All
Denied Del/Veh (s)	0.1
Total Del/Veh (s)	40.1
Vehicles Entered	3748
Vehicles Exited	3694
Hourly Exit Rate	3694
Input Volume	3786
% of Volume	98

36: Sagebrush Dr/Project Access & 1st Ave Performance by movement

Movement	EBT	WBL	WBT	WBR	NBL	NBR	SBL	All	
Denied Del/Veh (s)	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	
Total Del/Veh (s)	0.1	2.5	0.6	0.2	4.3	2.5	4.8	1.6	
Vehicles Entered	46	13	22	71	2	3	53	210	
Vehicles Exited	45	13	22	71	2	3	53	209	
Hourly Exit Rate	45	13	22	71	2	3	53	209	
Input Volume	43	11	21	71	1	6	41	196	
% of Volume	104	116	106	100	200	48	128	107	

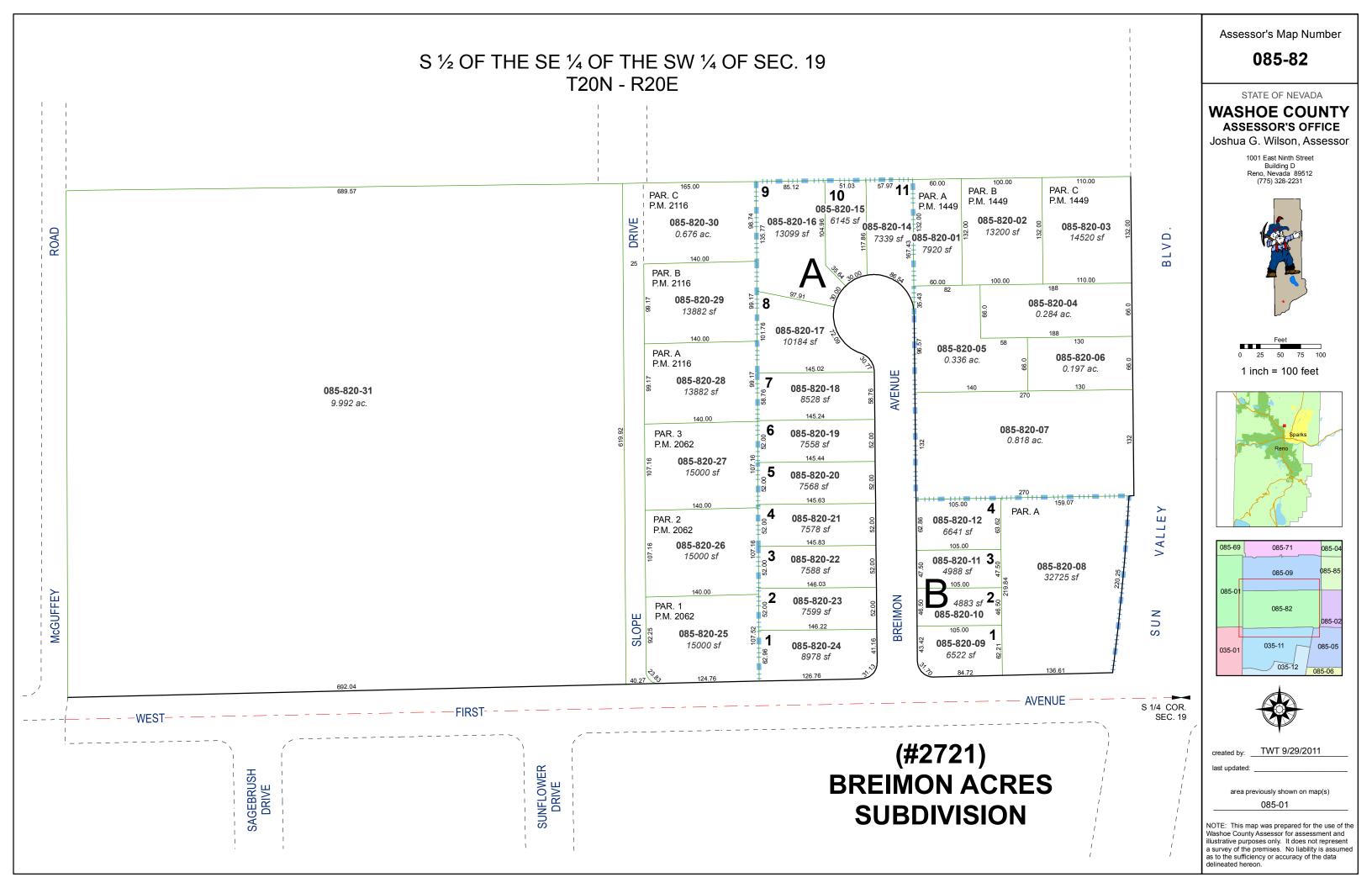
Movement	EB	EB	WB	NB	NB	NB	B33	B33	B33	SB	SB	SB
Directions Served	LT	R	LTR	L	Т	TR	T	Т		L	T	TR
Maximum Queue (ft)	277	150	208	184	1172	1155	784	793	793	125	504	513
Average Queue (ft)	135	84	99	103	581	608	237	240	106	49	280	297
95th Queue (ft)	228	164	167	214	1097	1126	805	815	536	121	453	480
Link Distance (ft)	706		906		2010	2010	765	765	765		1205	1205
Upstream Blk Time (%)							0	0	0			
Queuing Penalty (veh)							1	1	2			
Storage Bay Dist (ft)		125		160						100		
Storage Blk Time (%)	18	0		1	25					2	25	
Queuing Penalty (veh)	18	0		9	39					8	6	

Intersection: 36: Sagebrush Dr/Project Access & 1st Ave

Movement	WB	NB	SB
Directions Served	LTR	LTR	LTR
Maximum Queue (ft)	33	32	53
Average Queue (ft)	2	4	26
95th Queue (ft)	16	22	50
Link Distance (ft)	290	280	311
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

TAB G





APN: 085-820-31

Escrow No. 00211480 - 004 - 12 RPTT 3,075.00 When Recorded Return to: Stan Lucas 2850 Temple Ave Long Beach, CA 90806 Mail Tax Statements to: Grantee same as above DOC #4551065

01/15/2016 04:40:50 PM Electronic Recording Requested By FIRST CENTENNIAL – RENO Washoe County Recorder Lawrence R. Burtness Fee: \$18.00 RPTT: \$3075.00

Page 1 of 2

SPACE ABOVE FOR RECORDERS USE

Grant, Bargain, Sale Deed

For valuable consideration, the receipt of which is hereby acknowledged,

Washoe Ability Resource Center, a Nevada non-profit corporation

do(es) hereby Grant, Bargain, Sell and Convey to

Stan Lucas, a single man

all that real property situate in the County of Washoe, State of Nevada, described as follows:

The Southwest 1/4 of the Southeast 1/4 of the Southwest 1/4 in Section 19, Township 20 North, Range 20 East, M/D.B.&M.

EXCEPTING THEREFROM a strip of land thirty (30) feet wide on the South side for County Road purposes.

Together with all and singular the tenements, hereditaments and appurtenances thereunto belonging or in anywise appertaining.

4551065 Page 2 of 2 - 01/15/2016 04:40:50 PM

Witness my/our hand(s) this // day of, 2016
Washoe Ability Resource Center Lavonne Brooks President
STATE OF NEVADA COUNTY OF WASHOE
This instrument was acknowledged before me on 0114 2016, by Lavonne Brooks * ×460
NOTARY PUBLIC
TINA GAVIN Notary Public - State of Nevada Appointment Recorded in Washoe County No: 13-11633-2 - Expires September 6, 2017



COMMITMENT FOR TITLE INSURANCE

Issued by

Chicago Title Insurance Company

NOTICE

IMPORTANT—READ CAREFULLY: THIS COMMITMENT IS AN OFFER TO ISSUE ONE OR MORE TITLE INSURANCE POLICIES. ALL CLAIMS OR REMEDIES SOUGHT AGAINST THE COMPANY INVOLVING THE CONTENT OF THIS COMMITMENT OR THE POLICY MUST BE BASED SOLELY IN CONTRACT.

THIS COMMITMENT IS NOT AN ABSTRACT OF TITLE, REPORT OF THE CONDITION OF TITLE, LEGAL OPINION, OPINION OF TITLE, OR OTHER REPRESENTATION OF THE STATUS OF TITLE. THE PROCEDURES USED BY THE COMPANY TO DETERMINE INSURABILITY OF THE TITLE, INCLUDING ANY SEARCH AND EXAMINATION, ARE PROPRIETARY TO THE COMPANY, WERE PERFORMED SOLELY FOR THE BENEFIT OF THE COMPANY, AND CREATE NO EXTRACONTRACTUAL LIABILITY TO ANY PERSON, INCLUDING A PROPOSED INSURED.

THE COMPANY'S OBLIGATION UNDER THIS COMMITMENT IS TO ISSUE A POLICY TO A PROPOSED INSURED IDENTIFIED IN SCHEDULE A IN ACCORDANCE WITH THE TERMS AND PROVISIONS OF THIS COMMITMENT. THE COMPANY HAS NO LIABILITY OR OBLIGATION INVOLVING THE CONTENT OF THIS COMMITMENT TO ANY OTHER PERSON.

COMMITMENT TO ISSUE POLICY

Subject to the Notice; Schedule B, Part I—Requirements; Schedule B, Part II—Exceptions; and the Commitment Conditions, Chicago Title Insurance Company, a Florida Corporation (the "Company"), commits to issue the Policy according to the terms and provisions of this Commitment. This Commitment is effective as of the Commitment Date shown in Schedule A for each Policy described in Schedule A, only when the Company has entered in Schedule A both the specified dollar amount as the Proposed Policy Amount and the name of the Proposed Insured.

If all of the Schedule B, Part I—Requirements have not been met within 180 Days after the Commitment Date, this Commitment terminates and the Company's liability and obligation end.

Countersigned:

Authorized Signature

ATTEST

Mayoru Kemopua

This page is only a part of a 2016 ALTA® Commitment for Title Insurance issued by Chicago Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I—Requirements; and Schedule B, Part II—Exceptions; and a counter-signature by the Company or its issuing agent that may be in electronic form.



COMMITMENT CONDITIONS

1. **DEFINITIONS**

- (a) "Knowledge" or "Known": Actual or imputed knowledge, but not constructive notice imparted by the Public Records.
- (b) "Land": The land described in Schedule A and affixed improvements that by law constitute real property. The term "Land" does not include any property beyond the lines of the area described in Schedule A, nor any right, title, interest, estate, or easement in abutting streets, roads, avenues, alleys, lanes, ways, or waterways, but this does not modify or limit the extent that a right of access to and from the Land is to be insured by the Policy.
- (c) "Mortgage": A mortgage, deed of trust, or other security instrument, including one evidenced by electronic means authorized by law.
- (d) "Policy": Each contract of title insurance, in a form adopted by the American Land Title Association, issued or to be issued by the Company pursuant to this Commitment.
- (e) "Proposed Insured": Each person identified in Schedule A as the Proposed Insured of each Policy to be issued pursuant to this Commitment.
- (f) "Proposed Policy Amount": Each dollar amount specified in Schedule A as the Proposed Policy Amount of each Policy to be issued pursuant to this Commitment.
- (g) "Public Records": Records established under state statutes at the Commitment Date for the purpose of imparting constructive notice of matters relating to real property to purchasers for value and without Knowledge.
- (h) "Title": The estate or interest described in Schedule A.
- 2. If all of the Schedule B, Part I—Requirements have not been met within the time period specified in the Commitment to Issue Policy, this Commitment terminates and the Company's liability and obligation end.
- 3. The Company's liability and obligation is limited by and this Commitment is not valid without:
 - (a) the Notice;
 - (b) the Commitment to Issue Policy;
 - (c) the Commitment Conditions;
 - (d) Schedule A;
 - (e) Schedule B, Part I—Requirements;
 - (f) Schedule B, Part II—Exceptions; and
 - (g) a counter-signature by the Company or its issuing agent that may be in electronic form.

4. COMPANY'S RIGHT TO AMEND

The Company may amend this Commitment at any time. If the Company amends this Commitment to add a defect, lien, encumbrance, adverse claim, or other matter recorded in the Public Records prior to the Commitment Date, any liability of the Company is limited by Commitment Condition 5. The Company shall not be liable for any other amendment to this Commitment.

5. LIMITATIONS OF LIABILITY

- (a) The Company's liability under Commitment Condition 4 is limited to the Proposed Insured's actual expense incurred in the interval between the Company's delivery to the Proposed Insured of the Commitment and the delivery of the amended Commitment, resulting from the Proposed Insured's good faith reliance to:
 - (i) comply with the Schedule B, Part I—Requirements;
 - (ii) eliminate, with the Company's written consent, any Schedule B, Part II—Exceptions; or
 - (iii) acquire the Title or create the Mortgage covered by this Commitment.

This page is only a part of a 2016 ALTA® Commitment for Title Insurance issued by Chicago Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I—Requirements; and Schedule B, Part II—Exceptions; and a counter-signature by the Company or its issuing agent that may be in electronic form.

72C165B28 ALTA Commitment for Title Insurance 8-1-16 with NV Mods

- (b) The Company shall not be liable under Commitment Condition 5(a) if the Proposed Insured requested the amendment or had Knowledge of the matter and did not notify the Company about it in writing.
- (c) The Company will only have liability under Commitment Condition 4 if the Proposed Insured would not have incurred the expense had the Commitment included the added matter when the Commitment was first delivered to the Proposed Insured.
- (d) The Company's liability shall not exceed the lesser of the Proposed Insured's actual expense incurred in good faith and described in Commitment Conditions 5(a)(i) through 5(a)(iii) or the Proposed Policy Amount.
- (e) The Company shall not be liable for the content of the Transaction Identification Data, if any.
- (f) In no event shall the Company be obligated to issue the Policy referred to in this Commitment unless all of the Schedule B, Part I—Requirements have been met to the satisfaction of the Company.
- (g) In any event, the Company's liability is limited by the terms and provisions of the Policy.

6. LIABILITY OF THE COMPANY MUST BE BASED ON THIS COMMITMENT

- (a) Only a Proposed Insured identified in Schedule A, and no other person, may make a claim under this Commitment.
- (b) Any claim must be based in contract and must be restricted solely to the terms and provisions of this Commitment.
- (c) Until the Policy is issued, this Commitment, as last revised, is the exclusive and entire agreement between the parties with respect to the subject matter of this Commitment and supersedes all prior commitment negotiations, representations, and proposals of any kind, whether written or oral, express or implied, relating to the subject matter of this Commitment.
- (d) The deletion or modification of any Schedule B, Part II—Exception does not constitute an agreement or obligation to provide coverage beyond the terms and provisions of this Commitment or the Policy.
- (e) Any amendment or endorsement to this Commitment must be in writing and authenticated by a person authorized by the Company.
- (f) When the Policy is issued, all liability and obligation under this Commitment will end and the Company's only liability will be under the Policy.

7. IF THIS COMMITMENT HAS BEEN ISSUED BY AN ISSUING AGENT

The issuing agent is the Company's agent only for the limited purpose of issuing title insurance commitments and policies. The issuing agent is not the Company's agent for the purpose of providing closing or settlement services.

8. PRO-FORMA POLICY

The Company may provide, at the request of a Proposed Insured, a pro-forma policy illustrating the coverage that the Company may provide. A pro-forma policy neither reflects the status of Title at the time that the pro-forma policy is delivered to a Proposed Insured, nor is it a commitment to insure.

This page is only a part of a 2016 ALTA® Commitment for Title Insurance issued by Chicago Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I—Requirements; and Schedule B, Part II—Exceptions; and a counter-signature by the Company or its issuing agent that may be in electronic form.

Transaction Identification Data for reference only:

Issuing Agent: Ticor Title of Nevada, Inc.

Issuing Office: 5441 Kietzke Lane, Suite 100, Reno, NV 89511

Issuing Office File Number: 02101555-098-TO-CLP

Property Address: 5100 W. 1st Avenue, Sun Valley, NV

Revision Number:

SCHEDULE A

AMERICAN LAND TITLE ASSOCIATION COMMITMENT

Title Officer: Cheryl Perez

Reference No.: 52944

1. Commitment Date: January 29, 2021 at 7:30 A.M.

- 2. Policy to be issued:
 - (a) ALTA Standard Owners Policy

Proposed Insured: **UD Development LLC**Proposed Policy Amount: \$30,000,000.00

(b) None

Proposed Insured:

Proposed Policy Amount: \$0.00

(c) None

Proposed Insured:

Proposed Policy Amount: \$0.00

3. The estate or interest in the Land described or referred to in this Commitment is:

FEE

4. Title to the Fee estate or interest in the Land is at the Commitment Date vested in:

Stan Lucas, a single man

5. The Land is described as follows:

See Exhibit A attached hereto and made a part hereof.

This page is only a part of a 2016 ALTA® Commitment for Title Insurance issued by Chicago Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I—Requirements; and Schedule B, Part II—Exceptions; and a counter-signature by the Company or its issuing agent that may be in electronic form.

EXHIBIT A LEGAL DESCRIPTION

THE LAND REFERRED TO HEREIN BELOW IS SITUATED SUN VALLEY, IN THE COUNTY OF WASHOE, STATE OF NEVADA, AND IS DESCRIBED AS FOLLOWS:

All that certain real property situate in the County of Washoe, State of Nevada, described as follows:

The Southwest 1/4 of the Southeast 1/4 of the Southwest 1/4 of Section 19, Township 20 North, Range 20 East, M.D.B.&M.

EXCEPTING THEREFROM a strip of land 30 feet wide on the South side for County Road purposes.

085-820-31

This page is only a part of a 2016 ALTA® Commitment for Title Insurance issued by Chicago Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I-Requirements; and Schedule B, Part II—Exceptions; and a counter-signature by the Company or its issuing agent that may be in electronic form.



SCHEDULE B

PART I - REQUIREMENTS

All of the following Requirements must be met:

- 1. Instrument creating the estate or interest to be insured must be executed and filed for record, to wit:
 - A Grant Deed
- 2. The Proposed Insured must notify the Company in writing of the name of any party not referred to in this Commitment who will obtain an interest in the Land or who will make a loan on the Land. The Company may then make additional Requirements or Exceptions.
- 3. Pay the agreed amount for the estate or interest to be insured.
- 4. Pay the premiums, fees, and charges for the Policy to the Company.
- 5. Documents satisfactory to the Company that convey the Title or create the Mortgage to be insured, or both, must be properly authorized, executed, delivered, and recorded in the Public Records.
- 6. Notice: Please be aware that due to the conflict between federal and state laws concerning the cultivation, distribution, manufacture or sale of marijuana, the Company is not able to close or insure any transaction involving Land that is associated with these activities.
- 7. Original note, deed of trust and properly signed request for full reconveyance, or the executed full reconveyance for the following deeds of trust:

None

- 8. Pay the demand(s) of the following items:
 - Item #3, 4 and 5 of Special Exceptions
- 9. Payment of all fees due the Company at the time of closing.
- 10. Additional requirements will be made when the Company is provided with the complete name and status of the proposed Buyer/Lender.
- 11. PLEASE CONTACT THE ESCROW OFFICE FOR WIRING INSTRUCTIONS.

Escrow No.: 52944

Escrow Company: Royal Abstract

Escrow Branch Address: 125 Park Avenue, New York, NY 10017

Escrow Branch Phone: (646) 547-2039

12. Any documents being executed in conjunction with this transaction must be signed in the presence of an authorized Company employee, an authorized employee of an agent, an authorized employee of the insured lender, or by using Bancserv or other approved third-party service. If the above requirement cannot be met, please call the Company at the number provided in this report.

This page is only a part of a 2016 ALTA® Commitment for Title Insurance issued by Chicago Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I—Requirements; and Schedule B, Part II—Exceptions; and a counter-signature by the Company or its issuing agent that may be in electronic form.

72C165 Commitment for Title Insurance (Adopted 6-17-06 Revised 08-01-2016)



SCHEDULE B PART I – Requirements

(Continued)

- 13. Your application for title insurance was placed by reference to only a street address or tax identification number. Based on our records, we believe that the legal description in this report covers the parcel(s) of Land that you requested. If the legal description is incorrect, the seller/borrower must notify the Company and/or the settlement company in order to prevent errors and to be certain that the correct parcel(s) of Land will appear on any documents to be recorded in connection with this transaction and on the policy of title insurance.
- 14. Pay current all taxes, sewer, water and Waste Management fees.
- 15. In the event an ALTA/Extended Owners Policy or ALTA Extended Lender's Policy is requested, this office will require an ALTA/NSPS Land Title Survey certified to Chicago Title Insurance Company be provided for review prior to the close of this transaction.
- 16. Provide to title insurer an Owners Affidavit prior to close of this transaction. Additional requirements may be requested upon receipt and review.
- 17. The Company will require the following documents for review prior to the issuance of any title insurance predicated upon a conveyance or encumbrance from the entity named below:

Limited Liability Company: UD Development LLC

- a) A copy of its operating agreement, if any, and any and all amendments, supplements and/or modifications thereto, certified by the appropriate manager or member
- b) If a domestic Limited Liability Company, a copy of its Articles of Organization and all amendments thereto with the appropriate filing stamps
- c) If the Limited Liability Company is member-managed, a full and complete current list of members certified by the appropriate manager or member
- d) If the Limited Liability Company was formed in a foreign jurisdiction, evidence, satisfactory to the Company, that it was validly formed, is in good standing and authorized to do business in the state of origin
- e) If less than all members, or managers, as appropriate, will be executing the closing documents, furnish evidence of the authority of those signing.

The Company reserves the right to add additional items or make further requirements after review of the requested documentation.

This page is only a part of a 2016 ALTA® Commitment for Title Insurance issued by Chicago Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I—Requirements; and Schedule B, Part II—Exceptions; and a counter-signature by the Company or its issuing agent that may be in electronic form.

SCHEDULE B PART I – Requirements

(Continued)

18. The search did not disclose any open mortgages or deeds of trust of record, therefore the Company reserves the right to require further evidence to confirm that the property is unencumbered, and further reserves the right to make additional requirements or add additional items or exceptions upon receipt of the requested evidence.

END OF SCHEDULE B, PART I-REQUIREMENTS

This page is only a part of a 2016 ALTA® Commitment for Title Insurance issued by Chicago Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I—Requirements; and Schedule B, Part II—Exceptions; and a counter-signature by the Company or its issuing agent that may be in electronic form.

72C165 Commitment for Title Insurance (Adopted 6-17-06 Revised 08-01-2016)



SCHEDULE B PART II – EXCEPTIONS

THIS COMMITMENT DOES NOT REPUBLISH ANY COVENANT, CONDITION, RESTRICTION, OR LIMITATION CONTAINED IN ANY DOCUMENT REFERRED TO IN THIS COMMITMENT TO THE EXTENT THAT THE SPECIFIC COVENANT, CONDITION, RESTRICTION, OR LIMITATION VIOLATES STATE OR FEDERAL LAW BASED ON RACE, COLOR, RELIGION, SEX, SEXUAL ORIENTATION, GENDER IDENTITY, HANDICAP, FAMILIAL STATUS, OR NATIONAL ORIGIN.

The Policy will not insure against loss or damage resulting from the terms and provisions of any lease or easement identified in Schedule A, and will include the following Exceptions unless cleared to the satisfaction of the Company:

- 1. Any defect, lien, encumbrance, adverse claim, or other matter that appears for the first time in the Public Records or is created, attaches, or is disclosed between the Commitment Date and the date on which all of the Schedule B, Part I—Requirements are met.
- (a) Taxes or assessments that are not shown as existing liens by the records of any taxing authority that
 levies taxes or assessments on real property or by the Public Records; (b) proceedings by a public
 agency that may result in taxes or assessments, or notices of such proceedings, whether or not shown by
 the records of such agency or by the Public Records.
- 3. Any facts, rights, interests, or claims that are not shown by the Public Records but that could be ascertained by an inspection of the Land or that may be asserted by persons in possession of the Land.
- 4. Easements, liens or encumbrances, or claims thereof, not shown by the Public Records.
- 5. Discrepancies, conflicts in boundary lines, shortage in area, encroachments or any other facts which a correct survey would disclose, and which are not shown by the Public Records.
- 6. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b) or (c) are shown by the Public Records.
- 7. Any lien or right to a lien for services, labor of material not shown by the Public Records.

SPECIAL EXCEPTIONS

- 1. Property taxes, which are a lien not yet due and payable, including any assessments collected with taxes to be levied for the fiscal year 2021-2022. Tax Identification No.: 085-820-31
- 2. The lien of supplemental taxes, if any, assessed pursuant to the provisions of Nevada Revised Statutes.
- 3. Any liens which may be levied by reason of the Land being within the Washoe County Public Works Department, Utility Division. Specific amounts may be obtained from Washoe County Public Works Department, Phone Number (775) 954-4601.
- 4. Any liens, charges or assessments levied by the Sun Valley General Improvement District by reason that the Land is located within said district.

This page is only a part of a 2016 ALTA® Commitment for Title Insurance issued by Chicago Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I—Requirements; and Schedule B, Part II—Exceptions; and a counter-signature by the Company or its issuing agent that may be in electronic form.

72C165 Commitment for Title Insurance (Adopted 6-17-06 Revised 08-01-2016)



SCHEDULE B PART II – Exceptions

(Continued)

- 5. Any unpaid charges for Waste Management, plus any interest and/or penalties, which would create a lien and attach to said Land, pursuant to Nevada Revised Statutes.
- 6. Water rights, claims or title to water, whether or not disclosed by the public records.
- 7. Rights of way for any existing roads and alleys, trails, canals, ditches, flumes, conduits, pipes, poles or transmission lines on, under, over, through or across the Land.
- 8. Rights of the public to any portion of the Land lying within the area commonly known as McGuffey Road and Slope Drive.
- 9. Reservations, exceptions and provisions contained in the patent from the United States of America, and in the acts authorizing the issuance thereof.

Recording Date: August 20, 1897

Recording No: Book A, Page 579, Patent Records

10. Covenants, conditions, restrictions and easements but omitting any covenants or restrictions, if any, including but not limited to those based upon race, color, religion, sex, sexual orientation, familial status, marital status, disability, handicap, national origin, ancestry, source of income, gender, gender identity, gender expression, medical condition or genetic information, as set forth in applicable state or federal laws, except to the extent that said covenant or restriction is permitted by applicable law, as set forth in the document

Recording Date: June 30, 1961

Recording No: Book 588, Page 21, Document No. 339807, Deed Records

11. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

Granted to: Sierra Pacific Power Company, a Nevada corporation and Bell Telephone Company of Nevada. a corporation

Purpose: underground electric and communication facilities, gas and water distribution

lines, together with the necessary or convenient appurtenances connected

therewith

Recording Date: November 17, 1986

Recording No: Book 2443, Page 581, Document No. 1117214, Official Records

12. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

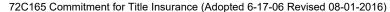
Purpose: a permanent easement and right-of-way for slope and drainage facilities, said

easement also being the future right of way for Slope Drive Recording Date: November 18. 1986

Recording No: Book 2444, Page 539, Document No. 1117622, Official Records

Affects: The Easterly portion of said Land

This page is only a part of a 2016 ALTA® Commitment for Title Insurance issued by Chicago Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I—Requirements; and Schedule B, Part II—Exceptions; and a counter-signature by the Company or its issuing agent that may be in electronic form.



SCHEDULE B PART II – Exceptions

(Continued)

13. Easement(s) for the purpose(s) shown below and rights incidental thereto as provided in a document:

Purpose: Perpetual air or flight easement, also referred to as "avigation rights."

Recording Date: January 25, 1989

Recording No: Book 2858, Page 368, Document No. 1301126, Official Records

Affects: All the air space above said Land. Reference is hereby made to said document for full particulars.

14. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

Granted to: The Board of Trustees of the Washoe County School District, a body corporate

Purpose: a perpetual non-exclusive easement and right-of-way to establish, construct,

repair, and maintain the necessary grade and slope for the construction, repair, and use of the adjacent public roadway, together with any works or

appurtenances necessary or incidental to maintaining the grade and slope

Recording Date: December 17, 1990

Recording No: Book 3188, Page 520, Document No. 1448481, Official Records

Affects: The Westerly portion of said land

15. Easement(s) for the purpose(s) shown below and rights incidental thereto, as granted in a document:

Granted to: The Board of Trustees of the Washoe County School District, a body corporate

Purpose: a perpetual non-exclusive easement and right-of-way to construct, maintain,

repair, and use a public roadway, together with any works or appurtenances

necessary or incidental thereto

Recording Date: December 17, 1990

Recording No: Book 3188, Page 526, Document No. 1448482, Official Records

Affects: The Westerly portion of said land

Assignment of Easement

Assignee: Board of County Commissioners of Washoe County

Recording Date: March 16, 1992

Recording No: Book 3438, Page 717, Document No. 1554130, Official Records

16. Rights and claims of parties in possession by reason of unrecorded leases, if any, that would be disclosed by an inquiry of the parties or by an inspection of said Land.

NOTES:

Note: Property taxes for the fiscal year shown below are PAID. For proration purposes the amounts are:

Assessor's Parcel No.: 085-820-31 Fiscal Year: 2020-2021 Total Taxes: \$2,489.86

Note: The following information is provided strictly as an accommodation. According to the Assessor, the

address of the Land is as follows:

Type of Dwelling: Vacant Land

Address: 5100 W. 1st Avenue, Sun Valley, Nevada

This page is only a part of a 2016 ALTA® Commitment for Title Insurance issued by Chicago Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I—Requirements; and Schedule B, Part II—Exceptions; and a counter-signature by the Company or its issuing agent that may be in electronic form.

72C165 Commitment for Title Insurance (Adopted 6-17-06 Revised 08-01-2016)

SCHEDULE B PART II – Exceptions

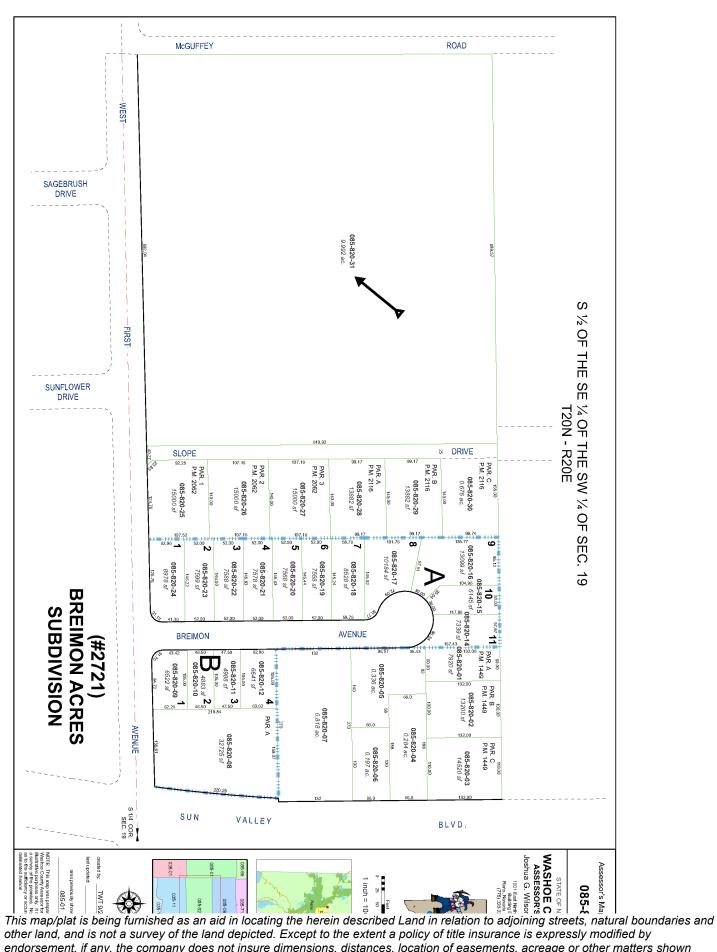
(Continued)

F SCHEDULE B	

This page is only a part of a 2016 ALTA® Commitment for Title Insurance issued by Chicago Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I—Requirements; and Schedule B, Part II—Exceptions; and a counter-signature by the Company or its issuing agent that may be in electronic form.

72C165 Commitment for Title Insurance (Adopted 6-17-06 Revised 08-01-2016)





endorsement, if any, the company does not insure dimensions, distances, location of easements, acreage or other matters shown thereon.