Master Plan Amendment and Zone Change for
Pyramid/La Posada Commercial

Submitted to Washoe County

September 15, 2014

Prepared for

Pyramid Urban Achievers

555 So. Center Street

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Prepared by

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Washoe County Development Application

Your entire application is a public record. If you have a concern about releasing personal information, please contact Planning and Development staff at 775.328.3600.

Project Information

Staff Assigned Case No.: _____

Project Name:
Pyramid/La Posada Commercial

Project Description: Requested is a master plan amendment and regulatory zone amendment to allow for a commercial development on the subject parcels.

Project Address: 8900 La Posada Drive

Project Area (acres or square feet): 9.6± acres

Project Location (with point of reference to major cross streets **AND** area locator):
Southeast corner of Pyramid Highway and La Posada Drive

Assessor's Parcel No.(s):	Parcel Acreage:	Assessor's Parcel No(s):	Parcel Acreage:
534-091-06	6.4± acres		
534-091-07	3.2± acres		

Section(s)/Township/Range: S35 T21 R20

Indicate any previous Washoe County approvals associated with this application:
Case No.(s).

Applicant Information (attach additional sheets if necessary)

Property Owner:		**Professional Consultant:**	
Name: Washoe County c/o Parks Admin/Planning		Name: Wood Rodgers	
Address: 1001 East 9th Street Building A		Address: 5440 Reno Corporate Drive	
Reno, NV	Zip: 89520	Reno, NV	Zip: 89511
Phone: 775-325-8094	Fax:	Phone: 775-823-5211	Fax: 775-823-4066
Email: jbudge@washoecounty.us		Email: adurling@woodrodgers.com	
Cell:	Other:	Cell: 775-745-0913	Other:
Contact Person: Jennifer Budge		Contact Person: Andy Durling	
Applicant/Developer:		**Other Persons to be Contacted:**	
Name: Pyramid Urban Achievers		Name: KLS Planning & Design Group	
Address: c/o Whittemore Law Firm - 555 S. Center		Address: 9480 Double Diamond Pkwy, #299	
Reno, NV	Zip: 89501	Reno, NV	Zip: 89521
Phone:	Fax:	Phone: 775-852-7606	Fax: 775-852-7609
Email:		Email: johnk@klsdesigngroup.com	
Cell:	Other:	Cell:	Other:
Contact Person: Brian Hagen, Esq.		Contact Person: John Krmpotic	

For Office Use Only

Date Received:	Initial:	Planning Area:
County Commission District:		Master Plan Designation(s):
CAB(s):		Regulatory Zoning(s):

Master Plan Amendment
Supplemental Information

(All required information may be separately attached)

Chapter 110 of the Washoe County Code is commonly known as the Development Code. Specific references to Master Plan amendments may be found in Article 820, Amendment of Master Plan.

The Washoe County Master Plan describes how the physical character of the County exists today and is planned for the future. The plan is adopted by the community and contains information, policies and a series of land use maps. The Master Plan provides the essential framework for creating a healthy community system and helps guide decisions about growth and development in the County. The following are general types of requests the County receives to amend the Master Plan. Please identify which type of amendment you are requesting:

☑	A request to change a master plan designation(s) from the adopted master plan and/or area plan maps
☐	A request to add, amend, modify or delete any of the adopted policies found in the elements of the Master Plan
☑	A request to add, amend, modify or delete any of the adopted policies in the area plans
☐	A request to add, amend, modify or delete specific language found in the area plans
☐	Other (please identify):

Please complete this questionnaire to ensure consistent review of your request to amend the Washoe County Master Plan. Staff will review the application to determine if the amendment request is in conformance with the policies and language within the elements and area plans of the Master Plan or if the information provided supports a change to the plan. Please provide a brief explanation to all questions.

1. What is the Master Plan amendment being requested at this time?

Requested is a Master Plan Amendment to (1) eliminate the limitation in the Spanish Springs Area Plan for the amount of commercial land use acreage found in Policy SS.17.2.c and (2) to change the land use of the subject parcels from Suburban Residential (SR) to Commercial (C).

2. What conditions have changed and/or new studies have occurred since the adoption of the Washoe County Master Plan that supports the need for the amendment request?

The Washoe County Board of County Commissioners approved the elimination of Policy SS.17.2.c in 2012. Since that time, the Truckee Meadows Regional Planning Agency has been considering said request, specifically with regard to the industrial land use acreage. Further, the Washoe County Parks and Open Space Program identified that these parcels as appropriate for disposition in 2004. Provided that Washoe County has both approved of the elimination of the commercial acreage limitation and also identified that these properties are no longer required for their existing use, the properties are appropriate for a land use change at this time to commercial. The commercial land use is the most appropriate designation, given the properties size and location on the hard corner of Pyramid Highway and La Posada Drive at a signalized intersection. The property would not be appropriate for the underlying single family residential land use, nor would a multifamily designation be appropriate due to the properties relative small size, location, and current access issues.

3. Please provide the following specific information.
   a. What is the location (address or distance and direction from nearest intersection)? Please attach a legal description.

The subject properties are located on the southeast corner of Pyramid Highway and La Posada Drive. A legal description of the properties are provided with this application. Properties are identified by the Assessor's office as APN's 534-091-06 & 07.

   b. Please list the following (attach additional sheet if necessary):

APN of Parcel	Master Plan Designation	Existing Acres	Proposed Master Plan Designation	Proposed Acres
534-091-06	Suburban Residential	6.4± acres	Commercial	6.4± acres
534-091-07	Suburban Residential	3.2± acres	Commercial	3.2± acres

c. What are the adopted land use designations of adjacent parcels?

North	Commercial
South	Medium Density Residential, Business Park & General Commercial (City of Sparks)
East	Suburban Residential and Open Space (City of Sparks)
West	Commercial

4. Describe the existing conditions and uses located at the site or in the vicinity (i.e. vacant land, roadways, buildings, etc.):

The subject properties are located on Pyramid Highway and La Posada Drive a signalized intersection. The subject properties were previously utilized as the Sky Ranch Park (a County park facility). This facility has since been offered for disposition and maintenance halted. Existing commercial development and commercially zoned vacant properties are located both to the north and west. Properties surrounding the project site to the south and east are within the Stonebrook Planned Unit Development (City of Sparks). While vacant, these properties are zoned for mix of medium density residential (15 du/acre), general commercial, business park and open space.

5. Describe the natural resources associated with the site under consideration. Your description should include resource characteristics such as water bodies, vegetation, topography, minerals, soils and wildlife habitat.

The subject properties contain topography that is relatively flat with drainage channels along the southern boundary and southwest portion of the site. Currently, the site has a park facility, including parking lot, ball field, playground and general use turf areas.

6. Describe whether any of the following natural resources or systems are related to the proposed amendment:

   a. Is property located in the 100-year floodplain? (If yes, please attach documentation of the extent of the floodplain and any proposed floodplain map revisions in compliance with Washoe County Development Code, Article 416, Flood Hazards, and consultation with the Washoe County Department of Public Works.)

❑ Yes	☑ No

   Explanation:

A LOMR was approved, taking the property out of the floodplain subsequent to construction of the adjacent Reach 4 drainage channel.

   b. Does property contain wetlands? (If yes, please attach a preliminary delineation map and describe the impact the proposal will have on the wetlands. Impacts to the wetlands may require a permit issued from the U.S. Army Corps of Engineers.)

❑ Yes	☑ No

   Explanation:

Wetlands are not anticipated on the site.

   c. Does property contain slopes or hillsides in excess of 15 percent and/or significant ridgelines? (If yes, please note the slope analysis requirements contained in Article 424, Hillside Development of the Washoe County Development Code.)

❑ Yes	☑ No

   Explanation:

The property is relatively flat.

d. Does property contain geologic hazards such as active faults; hillside or mountainous areas; is subject to avalanches, landslides, or flash floods; is near a stream or riparian area such as the Truckee River, and/or an area of groundwater recharge?

❑ Yes	☑ No

Explanation:

No known or mapped faults exist on the site. The site is not located on a hillside or mountainous area, subject to avalanches or landslides. Flash flooding impacts are contained in the large Reach 4 drainage channel that traverses the southwest corner and smalller channel located along the southerly boundary of the site.

e. Does property contain prime farmland; is within a wildfire hazard area, geothermal or mining area, and/or wildlife mitigation route?

❑ Yes	☑ No

Explanation:

None of the above apply.

7. Please describe whether any archaeological, historic, cultural, or scenic resources are in the vicinity or associated with the proposed amendment:

❑ Yes	☑ No

Explanation:

The site is developed and no known archaeological, historic, cultural or scenic resources are known to exist on or directly adjacent to the site.

8. Do you own sufficient water rights to accommodate the proposed amendment? (Amendment requests in some groundwater hydrographic basins [e.g. Cold Springs, Warm Springs, etc.] require proof of water rights be submitted with applications. Please provide copies of all water rights documents, including chain of title to the original water right holder.)

❑ Yes	☑ No

If yes, please identify the following quantities and documentation numbers relative to the water rights:

a. Permit #		acre-feet per year	
b. Certificate #		acre-feet per year	
c. Surface Claim #		acre-feet per year	
d. Other #		acre-feet per year	

e. Please attach a copy(s) of the water rights title (as filed with the State Engineer in the Division of Water Resources of the Department of Conservation and Natural Resources):

Not applicable.

f. If the proposed amendment involves an intensification of land use, please identify how sufficient water rights will be available to serve the additional development.

Water rights will be obtained either from Washoe County DWR or on the open market at the time of building permit for the commercial development.

9. Please describe the source and timing of the water facilities necessary to serve the amendment:

   a. System Type:

❑ Individual wells		
❑ Private water	Provider:	
☑ Public water	Provider:	Washoe County DWR

   b. Available:

☑ Now	❑ 1-3 years	❑ 3-5 years	❑ 5+ years

   c. Washoe County Capital Improvements Program project?

❑ Yes	☑ No

   d. If a public facility is proposed and is currently not listed in the Washoe County Capital Improvements Program and not available, please describe the funding mechanism for ensuring availability of water service:

Not applicable.

10. What is the nature and timing of sewer services necessary to accommodate the proposed amendment?

   a. System Type:

❑ Individual septic		
☑ Public system	Provider:	Washoe County DWR

   b. Available:

☑ Now	❑ 1-3 years	❑ 3-5 years	❑ 5+ years

   c. Washoe County Capital Improvements Program project?

❑ Yes	☑ No

d. If a public facility is proposed and is currently not listed in the Washoe County Capital Improvements Program and not available, please describe the funding mechanism for ensuring availability of sewer service. If a private system is proposed, please describe the system and the recommended location(s) for the proposed facility.

Not applicable..

11. Please identify the street names and highways near the proposed amendment that will carry traffic to the regional freeway system.

The project site is located on the southeast corner of Pyramid Highway (SR 445) and La Posada Drive (regional arterial).

12. Will the proposed amendment impact existing or planned transportation systems? (If yes, a traffic report will be required. See attached Traffic Impact Report Guidelines.)

☐ Yes	☑ No

13. Community Services (provided and nearest facility):

a. Fire Station	Truckee Meadows Fire Station 17
b. Health Care Facility	Renown and St. Mary's facilities located on Disc Drive
c. Elementary School	Spanish Springs ES
d. Middle School	Shaw MS
e. High School	Spanish Springs HS
f. Parks	Eagle Canyon Park
g. Library	Spanish Springs Library (Lazy 5)
h. Citifare Bus Stop	Route 5 (Sun Valley)

14. Describe how the proposed amendment fosters, promotes or complies with the policies of the adopted area plans and elements of the Washoe County Master Plan:

a. Population Element:

The proposed amendment supports the population growth estimates of the population element by providing neighborhood serving commercial services to serve the growing population within the Washoe County unincorporated TMSA in Spanish Springs. Specifically, the amendment supports the following Goals and Policies of the Population Element: Goal Three, POP.3.1, Goal Four, POP.4.1.

b. Conservation Element:

The project site is located on a currently developed site with availability of municipal services (water and sewer), as well as appropriate drainage facilities and therefore supports the Conservation Element. No natural resources are detrimentally affected by this amendment. Specific Goals and Policies of the Conservation Element that support the amendment are: Goal 2, C.2.1, Goal Three, C.3.3, Goal Four.

c. Housing Element:

The requested amendment does not directly support the Housing Element's Goals and Policies. The Goals and Policies of the Housing Element largely encourage the retention and development of affordable housing. The co-location of neighborhood serving commercial with affordable housing is seen as a best practice for providing employment in close proximity to housing and reducing vehicle miles traveled.

d. Land Use and Transportation Element:

The proposed amendmet is supported by the Goals and Policies of the Land Use and Transportation Element by the following: Land Use - Goal 1, LUT.1.1, LUT.1.4, Goal Three, LUT.3.1, LUT.3.2, LUT.3.5, Goal Five, LUT.5.1, LUT.5.2, LUT.5.3, LUT.5.4, Goal Seven, LUT.7.1, LUT.17.4, LUT.18.1, LUT.26.1,

e. Public Services and Facilities Element:

Public services and facilities exist adjacent to the site to serve the proposed future intensification. Specific Goals and Policies of the PUblic Services and Facilities Element that support the amendment include: PSF.1.13.4, PSF.1.23, PSF.1.24, PSF.3.8, PSF.4.2, PSF.4.5, PSF.4.9, PSF.5.2

f. Adopted area plan(s):

The Project Description provided with this application package thoroughly addresses the fact that the Spanish Springs Area Plan's Character Statement, Goals and Policies support the proposed amendment. A narrative of the supporting features of the Character Statement and Goals and Policies is provided for all applicable elements of the Spanish Spring Area Plan.

15. If the area plan includes a Plan Maintenance component, address all policies and attach all studies and analysis required by the Plan Maintenance criteria.

The Project Description provided with this application package thoroughly addresses the fact that the Spanish Springs Area Plan's Character Statement, Goals and Policies, including the Plan Maintenance policies, support the proposed amendment. A narrative of the supporting features of the Character Statement and Goals and Policies is provided for all applicable elements of the Spanish Spring Area Plan. Supporting documentation, including an Infrastructure Feasibility Report, Traffic Analysis, and Market Analysis is provided with this application package, per the requirements of the Plan Maintenance section of the Spanish Springs Area Plan.

Applicant Comments

This page can be used by the applicant to support the master plan amendment request and should address, at a minimum, how one or more of the findings for an amendment are satisfied. (Please referrer to Article 820 of the Washoe County Development Code for the list of Findings.)

Please see the Project Description, included with this application package, for additional analysis and supporting documentation regarding the proposed amendment.

Regulatory Zone Amendment
Supplemental Information

(All required information may be separately attached)

Chapter 110 of the Washoe County Code is commonly known as the Development Code. Specific references to Regulatory Zone amendments may be found in Article 821, Amendment of Regulatory Zone.

Please complete this questionnaire to ensure consistent review of your request to amend the Washoe County Zoning Map. Please provide a brief explanation to all questions answered in the affirmative.

1. Please describe the Regulatory Zone amendment request:

Requested with this application package is a regulatory zone amendment to change 9.6± acres of Parks & Recreation to 9.6± acres of Neighborhood Commercial.

2. List the Following information regarding the property subject to the Regulatory Zone Amendment.
   a. What is the location (address, assessor's parcel number or distance and direction from nearest intersection)?

The subject properties are located on the southeast corner of Pyramid Highway and La Posada Drive. A legal description of the properties are provided with this application. Properties are identified by the Assessor's office as APN's 534-091-06 & 07.

b. Please list the following (attach additional sheet if necessary):

APN of Parcel	Master Plan Designation	Current Zoning	Existing Acres	Proposed Zoning	Proposed Acres
534-091-06	Commercial*	PR	6.4± acres	NC	6.4± acres
534-091-07	Commercial*	PR	3.2± acres	NC	3.2± acres
*upon approval of	MPA attached				

c. What are the regulatory zone designations of adjacent parcels?

	Zoning	Use (residential, vacant, commercial, etc,)
North	GC	Commercial
South	NUD (Sparks)	Vacant - Planned MFR, GC, BP
East	NUD (Sparks)	Vacant - Planned SFR
West	GC	Commercial & vacant

3. Describe the existing conditions and uses located at the site or in the vicinity (i.e. vacant land, roadways, easements, buildings, etc.):

As mentioned previously, the subject properties are located on Pyramid Highway and La Posada Drive a signalized intersection. The subject properties were previously utilized as the Sky Ranch Park (a County park facility). This facility has since been offered for disposition and maintenance halted. Existing commercial development and commercially zoned vacant properties are located both to the north and west. Properties surrounding the project site to the south and east are within the Stonebrook Planned Unit Development (City of Sparks). While vacant, these properties are zoned for mix of medium density residential (15 du/acre), general commercial, business park and open space.

4. Describe the natural resources associated with the site under consideration. Your description should include resource characteristics such as water bodies, vegetation, topography, minerals, soils and wildlife habitat.

The subject properties contain topography that is relatively flat with drainage channels along the southern boundary and southwest portion of the site. Currently, the site has a park facility, including parking lot, ball field, playground and general use turf areas.

5. Does the property contain development constraints such as floodplain or floodways, wetlands, slopes or hillsides in excess of 15%, geologic hazards such as active faults, significant hydrologic resources or major drainages or prime farmland?

❑ Yes	■ No

Explanation:

A LOMR was approved, taking the property out of the floodplain subsequent to construction of the adjacent Reach 4 drainage channel. Wetlands are not anticipated on the site. The property is relatively flat. No known or mapped faults exist on the site. The site is not located on a hillside or mountainous area, subject to avalanches or landslides. Flash flooding impacts are contained in the large Reach 4 drainage channel that traverses the southwest corner and smalller channel located along the southerly boundary of the site.

6. Please describe whether any archaeological, historic, cultural, or scenic resources are in the vicinity or associated with the proposed amendment:

❑ Yes	■ No

Explanation:

The site is developed and no known archaeological, historic, cultural or scenic resources are known to exist on or directly adjacent to the site.

7. Do you own sufficient water rights to accommodate the proposed amendment? (Amendment requests in some groundwater hydrographic basins [e.g. Cold Springs, Warm Springs, etc.] require proof of water rights be submitted with applications. Please provide copies of all water rights documents, including chain of title to the original water right holder.)

❑ Yes	■ No

If yes, please identify the following quantities and documentation numbers relative to the water rights:

a. Permit #		acre-feet per year	
b. Certificate #		acre-feet per year	
c. Surface Claim #		acre-feet per year	
d. Other #		acre-feet per year	

e. Title of those rights (as filed with the State Engineer in the Division of Water Resources of the Department of Conservation and Natural Resources):

Not applicable.

f. If the proposed amendment involves an intensification of land use, please identify how sufficient water rights will be available to serve the additional development.

Water rights will be obtained either from Washoe County DWR or on the open market at the time of building permit for the commercial development.

8. Please describe the source and timing of the water facilities necessary to serve the amendment:

   a. System Type:

❑ Individual wells		
❑ Private water	Provider:	
■ Public water	Provider:	Washoe County DWR

   b. Available:

■ Now	❑ 1-3 years	❑ 3-5 years	❑ 5+ years

   c. Is this part of a Washoe County Capital Improvements Program project?

❑ Yes	■ No

   d. If a public facility is proposed and is currently not listed in the Washoe County Capital Improvements Program and not available, please describe the funding mechanism for ensuring availability of water service:

Not applicable.

9. What is the nature and timing of sewer services necessary to accommodate the proposed amendment?

   a. System Type:

❑ Individual septic		
■ Public system	Provider:	Washoe County DWR

   b. Available:

■ Now	❑ 1-3 years	❑ 3-5 years	❑ 5+ years

   c. Is this part of a Washoe County Capital Improvements Program project?

❑ Yes	■ No

d. If a public facility is proposed and is currently not listed in the Washoe County Capital Improvements Program and not available, please describe the funding mechanism for ensuring availability of sewer service. If a private system is proposed, please describe the system and the recommended location(s) for the proposed facility.

Not applicable.

10. Please identify the street names and highways near the proposed amendment that will carry traffic to the regional freeway system.

The project site is located on the southeast corner of Pyramid Highway (SR 445) and La Posada Drive (regional arterial).

11. Will the proposed amendment impact existing or planned transportation systems? (If yes, a traffic report will be required. See attached Traffic Impact Report Guidelines.)

❑ Yes	■ No

12. Community Services (provided and nearest facility):

a. Fire Station	Truckee Meadows Fire Station 17
b. Health Care Facility	Renown and St. Mary's facilities located on Disc Drive
c. Elementary School	Spanish Springs ES
d. Middle School	Shaw MS
e. High School	Spanish Springs HS
f. Parks	Eagle Canyon Park
g. Library	Spanish Springs Library (Lazy 5)
h. Citifare Bus Stop	Route 5 (Sun Valley)

Projects of Regional Significance Information – for Regulatory Zone Amendments

Nevada Revised Statutes 278.026 defines "Projects of Regional Significance." Regulatory Zone amendment requests for properties within the jurisdiction of the Truckee Meadows Regional Planning Commission (TMRPC) must respond to the following questions. A "Yes" answer to any of the following questions may result in the application being referred first to the Truckee Meadows Regional Planning Agency for submission as a project of regional significance. Applicants should consult with County or Regional Planning staff if uncertain about the meaning or applicability of these questions.

1. Will the full development potential of the Regulatory Zone amendment increase employment by not less than 938 employees?

❑ Yes	■ No

2. Will the full development potential of the Regulatory Zone amendment increase housing by 625 or more units?

❑ Yes	■ No

3. Will the full development potential of the Regulatory Zone amendment increase hotel accommodations by 625 or more rooms?

❑ Yes	■ No

4. Will the full development potential of the Regulatory Zone amendment increase sewage by 187,500 gallons or more per day?

❑ Yes	■ No

5. Will the full development potential of the Regulatory Zone amendment increase water usage by 625 acre-feet or more per year?

❑ Yes	■ No

6. Will the full development potential of the Regulatory Zone amendment increase traffic by 6,250 or more average daily trips?

❑ Yes	■ No

7. Will the full development potential of the Regulatory Zone amendment increase the student population from kindergarten to 12^{th} grade by 325 students or more?

❑ Yes	■ No

Applicant Comments

This page can be used by the applicant to support the regulatory zone amendment request and should address, at a minimum, how one or more of the findings for an amendment are satisfied. (Please referrer to Article 821 of the Washoe County Development Code for the list of Findings.)

Please see the Project Description, included with this application package, for additional analysis and supporting documentation regarding the proposed amendment.

Project Location

The Pyramid/La Posada Properties (herein after referred to as "Project Site") are located at the southeast corner of Pyramid Highway and La Posada Drive. The parcels are identified by the Washoe County Assessor's office as APN's 534-091-06 and 07. A Vicinity Map depicting the Project Site is provided as Exhibit "A" following this Project Description. Additionally, Exhibits "B", "C", "D", and "E" have been provided depicting the existing and proposed master plan and zoning mapping for the project site and surrounding area.

Project Request

Requested at this time is a master plan amendment and a regulatory zone amendment, with the ultimate goal of developing a neighborhood shopping center. To accomplish this, the following requests are included with this application:

1) Eliminate "commercial properties" from Policy SS.17.2(c) of the Spanish Springs Area Plan, which requires that commercial and industrial properties not exceed 9.86 percent of the Suburban Character Management Area, AND;
2) Amend the master plan designation on the subject properties from 9.6± acres of Suburban Residential to 9.6± acres of Commercial, AND;
3) Amend the regulatory zone from 9.6± acres of Parks and Recreation to 9.6± acres of Neighborhood Commercial.

Amendment Request Rationale/Justification

Project History:

The project site is currently utilized as a Washoe County park (Sky Ranch Park). The park is located in Washoe County's Park District 2C, the master plan of which was updated in 2007. In the 2007 Park District 2C Master Plan update, the park was determined to be appropriate for disposition citing safety concerns due to the parks close proximity to the busy Pyramid/La Posada intersection. This master plan updated included an extensive public engagement (from 2005 to 2007) to establish the priorities for park development, acquisitions and dispositions.

The Park District 2C Master Plan identifies Sky Ranch Park in section 3.2.C.4.1 – Property Recommended for Disposal, stating:

> *"Due to high traffic volumes and planned roadway improvements encroaching on park property (RTC Pyramid Lake Highway/La Posada Intersection), Sky Ranch Park parcels (APN 53409102 and APN 53409101) are recommended for disposal. Safety concerns exist for park participants and highway travelers with such close proximity to this heavily traveled highway. Purchased in 1984 for $100,000 with Park District 2C Residential Construction Tax (RCT), it is recommended that all proceeds for this property be*

reallocated back into this tax district for future park acquisition and development, and not allocated into the general fund. In addition to the acquisition, all park improvements were constructed with RCT."

This recommendation to dispose of Sky Ranch Park was approved as part of the Master Plan, which was presented publicly at numerous meetings with no opposition.

To accommodate for the loss of the ball field at Sky Ranch Park, three additional ball fields were constructed with Phase 3 of the Eagle Canyon Park, located ½-mile west of Sky Ranch Park, in 2008. A total of five ball fields are provided at Eagle Canyon Park. The number of ball fields at Eagle Canyon Park were planned and constructed both in anticipation of the decommissioning of Sky Ranch Park, as well to help meet the growing demand for baseball facilities in the Spanish Springs community. Organized league usage of the Sky Ranch Park ball field ended in June, 2014. The youth leagues in Spanish Springs utilizing the facility were notified of the parks ultimate closure in 2007. Washoe County has proactively worked with the leagues to relocate some improvements and appurtenances to other parks in Park District 2C in anticipation of the properties' sale.

Master Plan Amendment Request:

The requested master plan designation of "Commercial" and elimination of the 9.86 percent "commercial cap" is supported by the Spanish Springs Area Plan, the Truckee Meadows Regional Plan, as well as by locational criteria that is supportive of good planning practices for the project site. The following justifications have been provided to further detail the support of the proposed master plan amendment request.

1. The request complies with the Spanish Springs Area Plan Character Statement

The Spanish Springs Area Plan contemplates the creation of additional commercial land uses within Pyramid Highway corridor. Specifically, the Area Plan's Character Statement identifies that additional commercial should be concentrated along the Pyramid Highway corridor and should serve the Spanish Springs community rather than the greater region, stating:

"*Over the next 20 years, the community will provide a range of employment opportunities and a more limited, but still mixed, range of residential opportunities. Over this period, the distribution of land uses and the provision of public facilities and infrastructure will preserve and facilitate a community character that merges Spanish Springs' scenic, low-density, rural and western heritage with suburban residential,* ***employment and commercial opportunities****. Increasing employment opportunities will make it possible for more Spanish Springs residents to choose to work close to home, while an efficient Regional Transportation System will provide substantial and efficient links to the greater region.*

The existing and desired land use pattern in the Spanish Springs planning area is discussed in the following text. ***A distinct suburban core is, and will continue to be, concentrated along Pyramid Highway. This suburban core includes a broad mix of non-residential uses*** *together with residential densities of up to three dwelling units per acre." Spanish Springs Area Plan, page 1, September, 2010 (emphasis added)*

"The suburban core, together with the transition zone, will be known as the Suburban Character Management Area (SCMA). ***This area will contain all commercial land use designations*** *and residential densities greater than one unit per ten acres. The Suburban Character Management Area will be the designated growth area in the Spanish Springs Valley. Non-residential uses in the SCMA will maintain a link to the scenic, rural, western and agricultural character of the Spanish Springs planning area by developing a built environment that respects this heritage and seeks to preserve it whenever possible.* ***Future commercial land use designations will be aimed at providing services and employment opportunities to the local community and not the greater region****." Spanish Springs Area Plan, page 2, September, 2010 (emphasis added)*

As can be gleaned from the Character Statement and the mapped Suburban Character Management Area (SCMA), existing and future commercial properties were intended to be concentrated within the Pyramid Highway corridor within the SCMA. The project site's adjacency to Pyramid Highway and location within the SCMA supports the desires of the Character Statement for future commercial land uses.

2. The request complies with the Goals and Policies of the Spanish Springs Area Plan

The following Goals and Policies from the Spanish Springs Area Plan support the requested commercial land use designation:

Goal One: The pattern of land use designations in the Spanish Springs Area Plan will implement and preserve the community character described in the Character Statement.

- As described in the above justification, the requested commercial land use designation implements the various elements of the Character Statement.

Policy SS.1.3: The following Regulatory Zones are permitted within the Spanish Springs Suburban Character Management Area:

e. Neighborhood Commercial/Office (NC)
f. General Commercial (GC) – GC limited to the areas designated GC prior to August 17, 2004

- The requested Commercial land use designation, as well as the requested Neighborhood Commercial zoning is in compliance with the above policy. As this policy specifically limits the amount of General Commercial and not the Neighborhood Commercial, it stands to reason that additional Neighborhood Commercially zoned property was contemplated with the Area Plan.

Goal Three: The regional and local transportation system in the Spanish Springs planning area will be a safe, efficient, multi-modal system providing significant connections to the greater region, and access to commercial services, public lands and employment opportunities in the community. The system will contribute to the preservation and implementation of the community character as described in the Spanish Springs Vision and Character Statement.

- As the project site is located at the intersection of Pyramid Highway and La Posada Drive, the intensification of the site is supported by Goal Three. A commercial development at the project site will provide residents of Spanish Springs with additional neighborhood commercial opportunities that are easily accessible from the regional roadway system.

SS.3.1 Washoe County's policy level of service (LOS) for local transportation facilities in the Spanish Springs planning area is LOS "C."

SS.3.2 The Washoe County Regional Transportation Commission (RTC) sets levels of service on regional roads. Washoe County will advocate for the RTC to establish policy levels of service "C" for all regional roads in the Spanish Springs planning area.

SS.3.3 Washoe County will strongly advocate the prioritization of improvements to Pyramid Highway and qualified regional roads and arterials within the boundaries of this area plan in the Regional Transportation Improvement Program in order to achieve and maintain established levels of service.

- The project site is located on and will provide ingress/egress from regional roads. The commercial driveways on the project site are anticipated to operate at a LOS of "C" or better. Further, it is anticipated that the regional roadways (Pyramid Highway and La Posada Drive) will not see an increase in their current Level of Service. This position is supported by the fact that the project site will be developed as a neighborhood serving commercial property. As such, it is anticipated that traffic generated by the site would typically be pass-by trips already occurring in Spanish Springs and the site would not be a regional attractor for additional traffic to the Spanish Springs area.

SS.3.5 Washoe County will be an advocate for restricted access to Pyramid Highway pursuant to the provisions of the Pyramid Highway Corridor Management Plan.

- A restricted right-in/right-out driveway is anticipated on Pyramid Highway only. Additionally driveways are also anticipated on La Posada Drive. More precise driveway locations will be identified and reviewed with future special use permit and/or building permits for the proposed commercial development.

SS.3.11 At the request of the Department of Public Works, non-residential projects shall submit traffic reports and mitigation plans to the Departments of Public Works and Community Development for review and approval prior to the issuance of building permits for the project.

- A traffic study has been included with this master plan and rezone application (please see Appendix A). The study identifies that limited impacts will be experienced on the adjacent regional roadways. Mitigation efforts to appropriately place commercial driveways are included as well. An update to this report will be provided with future special use permit and/or building permit applications.

Goal Five: The built environment will implement and preserve the community character as described in the Spanish Springs Vision and Character Statement.

SS.5.1 Development, including that granted by a special use permit, but excluding educational facilities, within the Spanish Springs planning area will comply with the appropriate development standards and design guidelines as detailed in Appendix A –Western Theme Design Guidelines and Appendix B – Business Park Design Guidelines.

SS.5.2 The Washoe County Development Code will incorporate the standards and guidelines referenced in Policy SS.5.1 above.

- Future development of the property will conform to the design guidelines established in the Spanish Springs Area Plan. Compliance with the above goal and policies will be demonstrated with future special use permit and/or building permits for the project site.

Goal Seven: The Spanish Springs planning area will contain an extensive system of parks and trails that provides the community and the region with a broad range of recreational opportunities; provides connections between major developments, recreational facilities, the Regional Trail System, public lands and schools; and contributes to the preservation and implementation of the community character.

SS.7.1 Updates to the Parks District Master Plan for the Spanish Springs planning area (District 2C) will look to this goal for direction. The Parks District 2C Master Plan will seek to preserve and implement the community character.

- As summarized above, the project site is the former Sky Ranch Park site. This park was included in the 2007 update to the master plan for Park District 2C as appropriate for disposition. Sky Ranch Park was identified during the public meetings for the 2007 update to the District 2C master plan as being unsafe due to the park's ball fields and other facilities close proximity to Pyramid Highway. To accommodate for the loss of the ball field at the project site, additional fields were programmed and subsequently built at Eagle Canyon Park, located just west of the project site on Eagle Canyon Drive. As such, the disposition of the property and proposed change to commercial is a more appropriate use for the project site and is supported by the Park District 2C master plan.

Goal Twelve: Water resources will be supplied to land uses in the Spanish Springs planning area according to the best principles/practices of sustainable resource development.

SS.12.1 Residential and commercial development must utilize one or a combination of the following reliable water resources that are replenished in quantities to meet the needs of the area without reliance upon groundwater mining or recharge from agricultural uses:

a. Decreed Truckee River water rights or other approved imported surface water rights when used with an appropriate drought yield discount as determined by the water purveyor and approved by the State Engineer.

b. Imported groundwater from a source that is replenished in sufficient quantity to meet the demands placed upon a source without groundwater mining.

c. Certificated groundwater rights or permitted quasi-municipal groundwater rights (that existed as of May 22, 1990) matched by imported, decreed surface water from a source such as the Truckee River.

i. For residential developments, the quantity of imported water or decreed surface water shall be equal to 50 percent of the groundwater demand.

ii. For developments other than residential (commercial, industrial, recreational, etc.), the quantity of the matching imported or decreed surface water rights shall be equal to 100 percent of the calculated demand.

iii. The Truckee River surface water dedicated must be capable of diversion to the Orr Ditch.

Goal Fifteen: Water resources will be provided to residential and non-residential uses in a manner that implements and preserves the community character as described in the Spanish Springs Vision and Character Statement.

SS.15.1 Whenever applicable, all development within the Spanish Springs Suburban Character Management Area will connect to a community water service.

- Municipal water facilities are available on the project site. Appropriate water rights will be dedicated with future building permits for the proposed commercial development.

Goal Sixteen: Wastewater treatment and disposal will be provided to residential and nonresidential uses in a manner that implements and preserves the community character as described in the Spanish Springs Vision and Character Statement.

SS.16.1 Whenever applicable, all development within the Spanish Springs Suburban Character Management Area will connect to a community sewer service.

- Municipal sewer facilities are located both in La Posada Drive, as well as to the southwest of the property in Pyramid Highway to serve the project site. An Infrastructure Feasibility Study has been conducted and provided with this application as Appendix C.

Goal Seventeen: Amendments to the Spanish Springs Area Plan will be for the purpose of further implementing the Vision and Character Statement, or to respond to new or changing circumstances.

Amendments must conform to the Spanish Springs Vision and Character Statement. Amendments will be reviewed against a set of criteria and thresholds that are measures of the impact on, or progress toward, the Vision and Character Statement.

SS.17.1 In order for the Washoe County Planning Commission to recommend the approval of ANY amendment to the Spanish Springs Area Plan, the following findings must be made:

a. The amendment will further implement and preserve the Vision and Character Statement.
b. The amendment conforms to all applicable policies of the Spanish Springs Area Plan and the Washoe County Master Plan.
c. The amendment will not conflict with the public's health, safety or welfare.

- The proposed master plan amendment meets the above findings. A detailed analysis of the findings is provided in the Findings section of this Project Description.

SS.17.2 In order for the Washoe County Planning Commission to recommend approval of any amendment involving a change of land use, the following findings must be made:

a. A feasibility study has been conducted, commissioned and paid for by the applicant, relative to municipal water, sewer and storm water that clearly identifies the improvements likely to be required to support the intensification, and those improvements have been determined to be in substantial compliance with all applicable existing facilities and resource plans for Spanish Springs by the Department of Water Resources. The Department of Water Resources will establish and maintain the standards and methodologies for these feasibility studies.

- A feasibility study has been included with this application package (Appendix C). The study finds that municipal water, sewer, and storm water facilities are available either on or adjacent to the project site and therefore it is anticipated that serving the project site will be feasible.

b. A traffic analysis has been conducted that clearly identifies the impact to the adopted level of service within the [unincorporated] Spanish Springs Hydrographic Basin and the improvements likely to be required to maintain/achieve the adopted level of service. This finding may be waived by the Department of Public Works for projects that are determined to have minimal impacts. The Department of Public Works may request any information it deems necessary to make this determination.

- A traffic analysis has been provided with this application package (Appendix A). The traffic analysis maintains the adopted local and regional Levels of Service as established by Washoe County and the Regional Transportation Commission

c. For commercial and industrial land use intensifications, the overall percentage of commercial and industrial regulatory zone acreage will not exceed 9.86 percent of the Suburban Character Management Area.

- This policy is proposed to be removed with this master plan request. In 2012, the Washoe County Board of County Commissioners approved an amendment to the Spanish Springs Area Plan to eliminate this policy. That amendment has yet to be ratified by the Regional Planning Commission and, as such, still exists as of the time of filing of this master plan amendment request. Specifically, this application proposes to remove the commercial portion from the policy, provided the existing Truckee Meadows Regional Plan supports the ability of Washoe County to provide neighborhood serving commercial in the unincorporated Truckee Meadows Service Area. Policy 1.3.3 of the Truckee Meadows Regional Plan provides that "local master plans may allow non-residential uses of appropriate scale to serve the community and not the greater region". The project site, while containing a total of 9.6± acres will see approximately 6.5± acres developed in the future due to the constraint of existing drainage facilities reducing the overall developable area. A more detailed discussion of the elimination of this policy is provided below.

    e. If the proposed intensification will result in a drop below the established policy level of service for transportation (as established by the Regional Transportation Commission and Washoe County) within the Spanish Springs Hydrographic Basin, the necessary improvements required to maintain the established level of service are scheduled in either the Washoe County Capital Improvements Program or Regional Transportation Improvement Program within three years of approval of the intensification. For impacts to regional roads, this finding may be waived by the Washoe County Planning Commission upon written request from the Regional Transportation Commission.

    f. If roadways impacted by the proposed intensification are currently operating below adopted levels of service, the intensification will not require infrastructure improvements beyond those articulated in Washoe County and Regional transportation plans AND the necessary improvements are scheduled in either the Washoe County Capital Improvements Program or Regional Transportation Improvement Program within three years of approval of the intensification.

- As provided in the attached traffic analysis, the level of service will not be detrimentally affected by the proposed intensification.

SS.17.3 For proposals to establish or intensify commercial land uses, a market analysis has been conducted that clearly establishes a community serving trade area, provides convincing evidence of a need to increase the inventory of community serving commercial land use opportunities, and demonstrates no negative impact on the qualitative jobs/housing balance in the Spanish Springs planning area (i.e. the relationship between anticipated employment types/wages and housing costs).

- A market analysis has been included with this application package (Appendix B). As the overall developable area of the project site (approximately 6.5± acres) is relatively small, there is an extensive trade area of existing and proposed residential units within close proximity, and the site is appropriately located for commercial development, the market analysis finds that this site is appropriate for the master plan and zoning designations proposed with this application. The market study found that approximately 192,000± additional square feet of commercial

development could be accommodated for in the Spanish Springs trade area and the 56,000± of additional commercial proposed with this project does not surpass this.

3. The project site is appropriately located for commercial development.

The project site is located on State Route 445 (Pyramid Highway) at the southeast corner of La Posada Drive. Adjacent surrounding land uses include:

North: Existing commercial development (General Commercial)
East: Existing commercial development (General Commercial), existing single family residential (Suburban Residential), and a mix of residential densities in the Stonebrook Planned Development (City of Sparks)
South: Currently vacant land located in the Stonebrook PD (City of Sparks) – the land to the south is planned for a mix of multifamily residential, business park, and general commercial development
West: Existing commercial development (General Commercial)

The project site provides an appropriate and viable location for additional commercial development. A commercial designation on the project site is more appropriate, given the properties proximity to a highway and arterial. Due to highway noise and proximity to existing commercial, the site is not appropriate for the existing underlying Suburban Residential master plan designation. Further, as has been stated above, the Washoe County Parks and Open Space Department identified the Sky Ranch Park as appropriate for disposition, citing concerns about safety and high traffic volumes due to the parks proximity to Pyramid Highway.

4. The Truckee Meadows Regional Plan supports the master plan amendment request.

The Truckee Meadows Regional Plan supports both the elimination of the "commercial cap" (Spanish Springs Area Plan Policy SS.17.2.c), as well as a commercial designation on the subject properties. Specifically, the following Goals and Policies contained in the Regional Plan address this master plan request:

"Goal 1.3 – Unincorporated Washoe County within the TMSA will support Module #1 by providing a development pattern that includes a range of residential densities appropriate to the location and typified by medium density, and ***shall include appropriate neighborhood or local serving retail uses, and employment opportunities design to reduce trips****, enhance housing affordability, and promote jobs-housing." Truckee Meadows Regional Plan, Module 1 – Page 26, December 8, 2011 (emphasis added)*

"Policy 1.3.3 – To conform with the Regional Plan, in unincorporated areas within the TMSA, ***local master plans may allow non-residential uses of appropriate scale to serve the community and not the greater region. The appropriate scale of non-residential development shall be based on generally accepted service standards for population, employment, service area, and market analysis.*** *Industrial/warehouse uses are permitted only within existing or master planned multi-*

business parks found in conformance with the Regional Plan." Truckee Meadows Regional Plan, Module 1 – Page 27, December 8, 2011 (emphasis added)

The project site's developable area of approximately 6.5± acres and proposed Neighborhood Commercial regulatory zone fulfills the requirements of the above goal and policy from the Regional Plan. Further, the market analysis provided supports the notion that the service area for a small neighborhood commercial project at this location will include the Spanish Springs valley only and not be regional serving. Additionally, the Regional Plan, via the above adopted policy, clearly contemplates the ability to provide new commercial uses within the unincorporated Washoe County TMSA. The cap on non-residential uses to 9.86% of Spanish Springs contained in policy SS.17.2.c should only apply to industrial uses, not the ability to provide additional neighborhood serving commercial.

Regulatory Zone Amendment Request:

The requested Neighborhood Commercial regulatory zone complies with the amended master plan as described above. Neighborhood serving commercial and the supporting zoning designations are supported by the Spanish Springs Area Plan, the Truckee Meadows Regional Plan, as well as locational criteria fitting for commercial development. The sites location on a highway and arterial roadway, as well as surrounding land uses further support this proposal.

Master Plan Amendment Findings Review

The Planning Commission shall make all required findings contained in the area plan for the planning are in which the property that is the subject of the Master Plan amendment is located and, at a minimum, make at least three (3) of the following general findings of fact unless a military installation is required to be noticed, then in addition to the above, a finding of fact pursuant to subsection (6) shall also be made:

General Master Plan Amendment Findings:

(1) Consistency with Master Plan.
(i) Approval: The proposed amendment is in substantial compliance with the policies and action programs of the Master Plan.

Response: The proposed master plan amendments are in substantial compliance with the policies and action programs of the Washoe County Master Plan as outlined in the Amendment Request Rationale/Justification provided above. The site supports the goals and policies of the master plan by locating neighborhood serving commercial development in close proximity to regional roadways and residential land uses. The establishment of commercial development on this property promotes the policies held in the Population, Land Use and Transportation, Housing, and the Public Services and Facilities Elements of the Washoe County Master Plan. Additionally, the amendment request is in substantial conformance with, and supported by, the goals and policies of the Spanish Springs Area Plan as outlined in this Project Description.

Specific Goals & Policies that support the amendment request include:

- Population Element: Goal Three, POP.3.1, Goal Four, POP.4.1
- Conservation Element: Goal 2, C.2.1, Goal Three, C.3.3, Goal Four
- Land Use and Transportation Element: Land Use - Goal 1, LUT.1.1, LUT.1.4, Goal Three, LUT.3.1, LUT.3.2, LUT.3.5, Goal Five, LUT.5.1, LUT.5.2, LUT.5.3, LUT.5.4, Goal Seven, LUT.7.1, LUT.17.4, LUT.18.1, LUT.26.1
- Public Services and Facilities Element: PSF.1.13.4, PSF.1.23, PSF.1.24, PSF.3.8, PSF.4.2, PSF.4.5, PSF.4.9, PSF.5.2
- Spanish Springs Area Plan: Goal One, Policy SS.1.3, Goal Three, SS.3.1, SS.3.2, SS.3.3, SS.3.5, S.3.11, Goal Five, SS.5.1, SS.5.2, Goal Seven, SS.7.1, Goal Twelve, SS.12.1, Goal Fifteen, SS.15.1, Goal Sixteen, SS.16.1, SS.17.1, SS.17.2, SS.17.3

(2) Compatible Land Uses.
(i) Approval: The proposed amendment will provide for land uses compatible with (existing or planned) adjacent land uses, and will not adversely impact the public health, safety or welfare.

Response: The Commercial master plan designation is appropriate for the project site. Three of the four corners of the intersection of Pyramid Highway and La Posada Drive are currently master

planned, and mostly all developed, as commercial properties. Additionally, vacant land to the south within the Stonebrook Planned Development (City of Sparks) has a mix of general commercial, business park, and high density residential. Furthermore, it should also be noted that the current master plan designation and use of the property (Sky Ranch Park) was found to not be a compatible land use with the 2007 update to the Park District 2C Master Plan. As such, the proposed commercial designation is a more compatible use for this location.

(3) Response to Change Conditions.
(i) Approval: The proposed amendment responds to changed conditions or further studies that have occurred since the plan was adopted by the Board of County Commissioners, and the requested amendment represents a more desirable utilization of land.

Response: As mentioned earlier, this project site has been found to no longer be compatible for the existing use (Sky Ranch Park) due to proximity to Pyramid Highway and La Posada Drive. The same factors that support removing the existing park also support establishing commercial on this site. The proximity to the regional roadways at a signalized intersection is appropriate for commercial uses.

Additionally, with respect to the elimination of the "commercial cap" of 9.86% of the land area in Spanish Springs, the Washoe County Board of Commissioners changed the condition in 2012 with their approval of the outright elimination of Spanish Springs Area Plan Policy SS.17.2.C. The Truckee Meadows Regional Plan Policy 1.3.3 supports the elimination of the "commercial cap" by encouraging neighborhood serving commercial land uses in the unincorporated TMSA.

(4) Availability of Facilities.
(i) Approval: There are or are planned to be adequate transportation, recreation, utility, and other facilities to accommodate the uses and densities permitted by the proposed Master Plan designation.

Response: The properties are located at a major intersection. Utilities and public facilities are located adjacent to the project site adequate to serve the future commercial development. An Infrastructure Feasibility Study has been conducted to support this master plan amendment request.

(5) Desired Pattern of Growth.
(i) Approval: The proposed amendment will promote the desired pattern for the orderly physical growth of the County and guides development of the County based on the projected population growth with the least amount of natural resource impairment and the efficient expenditure of funds for public services.

Response: As outlined in the above findings responses, as well as the rationale and justification for this master plan amendment, the subject properties are most appropriate for commercial development. While they have been found by the County to no longer be appropriate for a park use, they present an opportunity for commercial development – a logical and efficient use of the property. The site's location at a major intersection is a common and appropriate requirement for commercial

development. Further, locating neighborhood serving commercial in close proximity to residential provides employment opportunities, as well as commercial amenities for residents.

(6) Effect on a Military Installation.
(i) Approval: The proposed amendment will not affect the location, purpose and mission of the military installation.

Response: Not applicable.

Spanish Springs Area Plan Findings:

In order for the Washoe County Planning Commission to recommend the approval of ANY amendment to the Spanish Springs Area Plan, the following findings must be made:

a. The amendment will further implement and preserve the Vision and Character Statement.

Response: The Character Statement for the Spanish Springs Area Plan clearly contemplates future, additional commercial properties being located in the Pyramid Highway Corridor that are neighborhood serving in nature. Please refer to Item 1 above under the Amendment Request Rationale/Justification section of this Project Description for a detailed analysis of how the proposed amendment will further implement the Spanish Springs Area Plan Character Statement.

b. The amendment conforms to all applicable policies of the Spanish Springs Area Plan and the Washoe County Master Plan.

Response: A detailed analysis has been provided above to demonstrate the policies that support the proposed amendment. To address requirements of the plan maintenance policies, additional reports, including Infrastructure Feasibility, Traffic Analysis, and Market Studies have been included with this application package demonstrating that no detrimental impacts will occur because of the amendment and that the proposed commercial designation is appropriate at this location.

c. The amendment will not conflict with the public's health, safety or welfare.

Response: The proposed amendment will not conflict with the public's health, safety or welfare. As has been demonstrated above, arguably, this amendment and decommissioning of the existing Sky Ranch Park will improve the public's safety. Safety concerns have been raised regarding the parks location adjacent to Pyramid Highway, leading to the recommendation by the County that the park be disposed of.

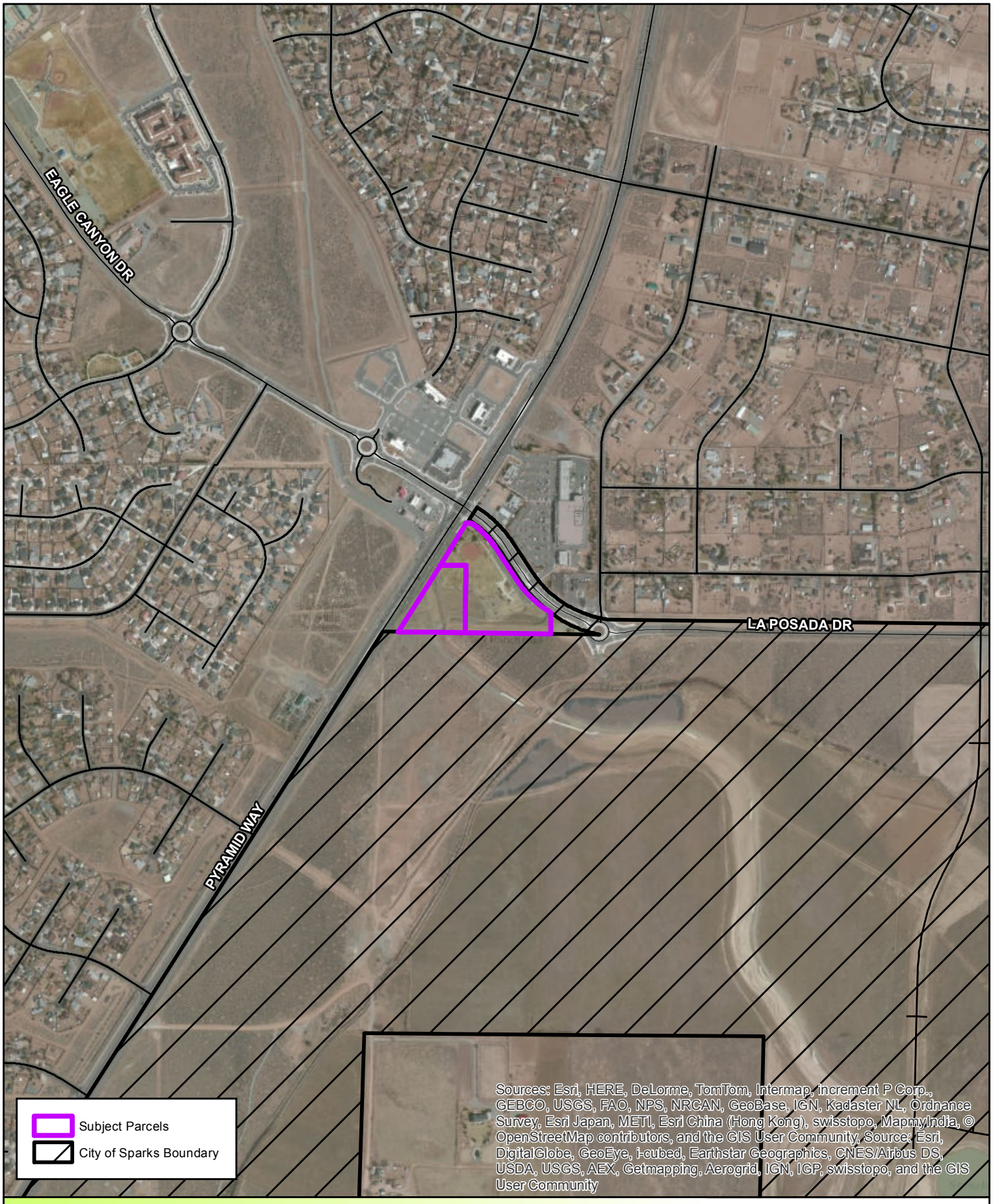

Exhibit A - Aerial

Pyramid / La Posada MPA / RZA

September, 2014

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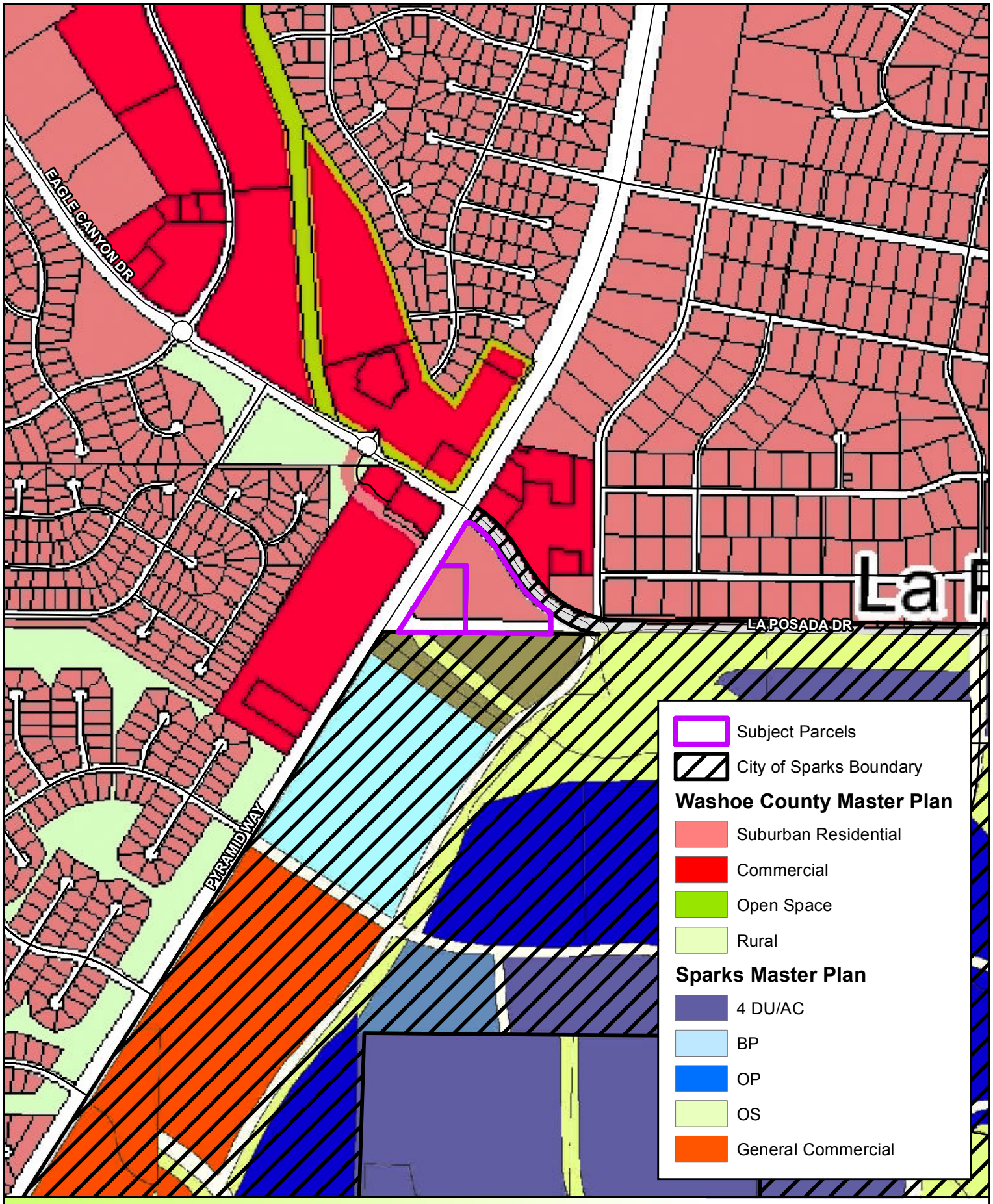

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Exhibit B - Existing Master Plan

Pyramid / LaPosada MPA / RZA

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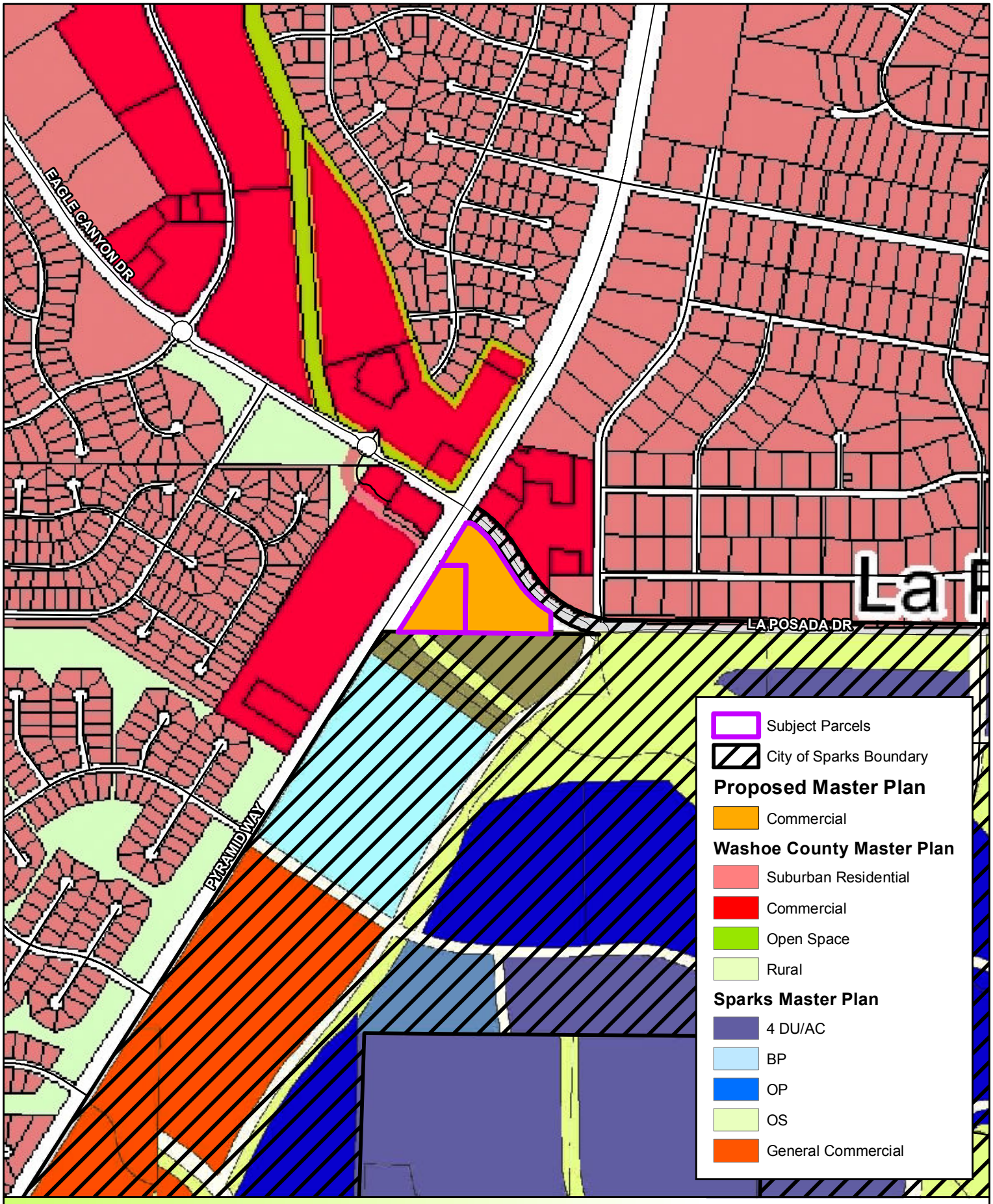

Exhibit C - Proposed Master Plan

Pyramid / LaPosada MPA / RZA

September, 2014

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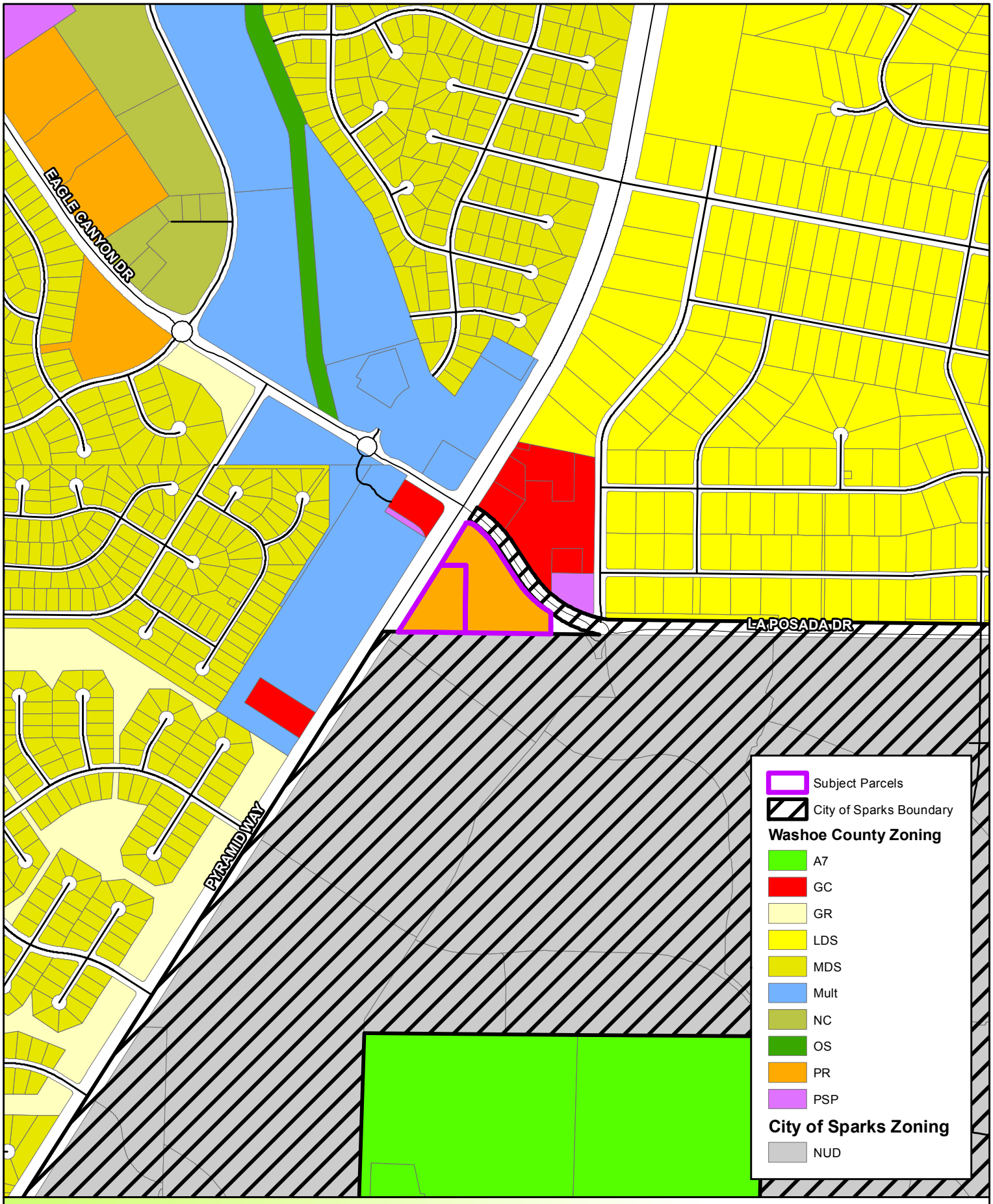

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Exhibit D - Existing Zoning

Pyramid / LaPosada MPA / RZA

September, 2014

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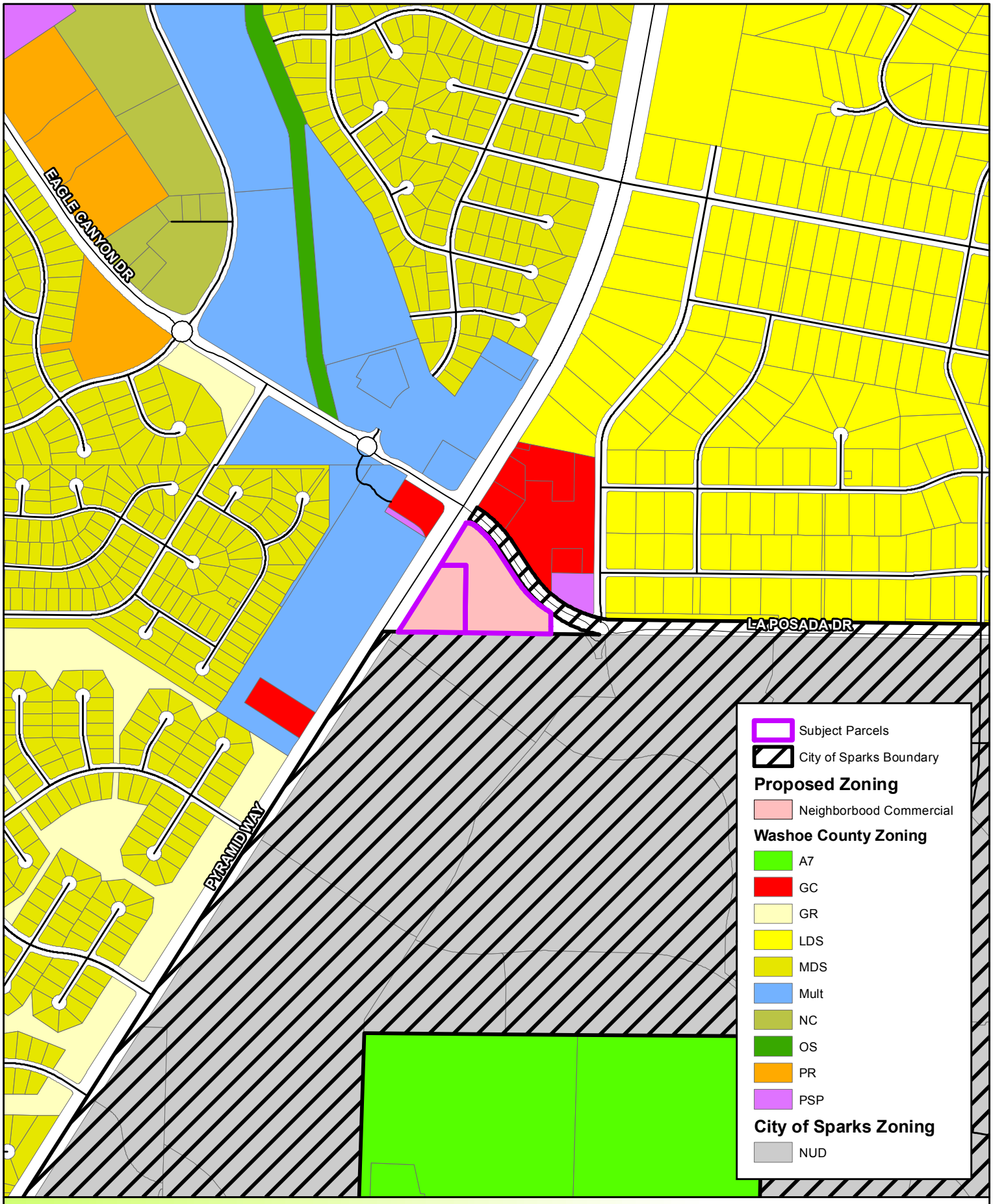

Exhibit E - Proposed Zoning

Pyramid / LaPosada MPA / RZA

September, 2014

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APPENDIX A

TRAFFIC STUDY

Traffic Engineering & Transportation Planning

September 11, 2014

Andy Durling, AICP
Wood Rodgers, Inc.
5440 Reno Corporate Drive
Reno, NV 89511

Traffic Impact Study – Pyramid / La Posada Commercial Center

INTRODUCTION

This report presents the findings of a Traffic Impact Study completed to assess the potential traffic impacts to local roadways and intersections associated with construction of the proposed Pyramid / La Posada Commercial Center. The study of anticipated traffic impacts was undertaken for planning purposes and to assist in determining what traffic controls or mitigation may be needed to reduce potential impacts. The project site is located in the southeast quadrant of the Pyramid Highway/La Posada Drive intersection in the Spanish Springs area of Washoe County as shown in **Figure 1**. The proposed project consists of a 6.5 acre commercial site assuming a 0.2 floor to area ratio, which translates to approximately 56,628 square feet of shopping center. Three access points are proposed for the development; one on Pyramid Highway (Driveway 1) and two on La Posada Drive (Driveway 2 and Driveway 3). Driveway 1 and Driveway 2 are proposed as right-in/right-out access only. Driveway 3, which forms a four-legged intersection with an existing intersection has left-in/right-in/right-out access to the proposed development. The driveway locations are also shown in **Figure 2**.

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 following three intersections were identified for this study because they serve as the primary access points to the project site:

- Pyramid Highway/Driveway 1
- La Posada Drive/Driveway 2
- La Posada Drive/Driveway 3/Existing Driveway

The Pyramid Highway/La Posada Drive intersection was not included in this analysis because that intersection is part of the much larger scale Pyramid Freeway study and any minor impacts associated

with this project would be addressed by the Pyramid Highway improvement plans. Similarly, the existing roundabout intersection to the east of the project site was not evaluated because that intersection was constructed as a two-lane roundabout with capacity well in excess of the existing traffic volumes. No impacts would be anticipated at the La Posada Drive/Rockwell Boulevard intersection.

It should be noted that the proposed project is intended to serve as a "neighborhood" commercial center serving the northern reaches of Spanish Springs. The majority of trips to and from the project site will be pass-by trips made by drivers already on Pyramid Highway, La Posada Drive, and at existing intersections. For this reason, the study focuses on the proposed driveways.

This study includes analysis of the both the weekday AM peak hour and PM peak hour as these are the periods of time in which peak traffic is anticipated to occur. The evaluated development scenarios are:

- Existing Conditions (no project)
- Existing 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.

Signalized and Un-signalized Intersections

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

Level of service calculations were performed for the study intersections using the Synchro 8 software package with analysis and results reported in accordance with the HCM 2000 methodology.

Roadway Segments

Table 2 shows the level of service thresholds for roadway segments as established in the Washoe County 2035 Regional Transportation Plan (RTP). The average daily traffic volumes were compared to the daily volume thresholds shown in **Table 2** to determine roadway segment level of service.

Table 1: Level of Service Definition for Intersections

Level of Service	Brief Description	Un-signalized Intersections (average delay/vehicle in seconds)	Signalized Intersections (average delay/vehicle in seconds)
A	Free flow conditions.	< 10	< 10
B	Stable conditions with some affect from other vehicles.	10 to 15	10 to 20
C	Stable conditions with significant affect from other vehicles.	15 to 25	20 to 35
D	High density traffic conditions still with stable flow.	25 to 35	35 to 55
E	At or near capacity flows.	35 to 50	55 to 80
F	Over capacity conditions.	> 50	> 80

Source: Highway Capacity Manual (2010), Chapters 16 and 17

Table 2: Average Daily Traffic LOS Thresholds by Facility Type for Roadway Planning

Facility Type	Maximum Service Flow Rate (daily for given service level)				
Number of Lanes	LOS A	LOS B	LOS C	LOS D	LOS E
Freeway					
4	≤ 28,600	42,700	63,500	80,000	90,200
6	≤ 38,300	61,200	91,100	114,000	135,300
8	51,100	81,500	121,400	153,200	180,400
10	63,800	101,900	151,800	191,500	225,500
Arterial-High Access Control					
2	n/a	9,400	17,300	19,200	20,300
4	n/a	20,400	36,100	38,400	40,600
6	n/a	31,600	54,700	57,600	60,900
8	n/a	42,500	73,200	76,800	81,300
Arterial-Moderate Access Control					
2	n/a	5,500	14,800	17,500	18,600
4	n/a	12,000	32,200	35,200	36,900
6	n/a	18,800	49,600	52,900	55,400
8	n/a	25,600	66,800	70,600	73,900
Arterial/Collector-Low Access Control					
2	n/a	n/a	6,900	13,400	15,100
4	n/a	n/a	15,700	28,400	30,200
6	n/a	n/a	24,800	43,100	45,400
8	n/a	n/a	34,000	57,600	60,600
Arterial/Collector-Ultra-Low Access Control					
2	n/a	n/a	6,500	13,300	14,200
4	n/a	n/a	15,300	27,300	28,600
6	n/a	n/a	24,100	41,200	43,000
8	n/a	n/a	33,300	55,200	57,400
Source: Washoe County RTP Table 3-4.					

Level of Service Policy

The 2035 Regional Transportation Plan (2035 RTP) establishes level of service criteria for regional roadway facilities in Washoe County, the City of Reno, and City of Sparks. The current Level of Service policy is:

- "All regional roadway facilities projected to carry less than 27,000 ADT at the latest RTP horizon – LOS D or better."
- "All regional roadway facilities projected to carry 27,000 or more ADT at the latest RTP horizon – LOS E or better."
- "All intersections shall be designed to provide a level of service consistent with maintaining the policy level of service of the intersecting roadways".

LOS "E" for the Pyramid Highway/Driveway 1 intersection and LOS "D" for other two intersections on La Posada Drive have been used as the criteria consistent with the above regional policies. Additionally, we understand Washoe County wishes to maintain LOS "C" on County roadways in the Spanish Springs area.

EXISTING CONDITIONS

Transportation Facilities

A brief description of the key roadways in the study area is provided below.

Pyramid Highway is a major thoroughfare through Spanish Springs. It is a four-lane roadway running generally in a north-south direction connecting the Reno metropolitan area to Pyramid Lake. According to the 2035 Regional Transportation Plan (RTP), Pyramid Highway is classified as a High Access Control (HAC) arterial. The posted speed limit is 55 miles per hour (mph).

La Posada Drive is a two-lane east/west roadway that is designated a Medium Access Control (MAC) arterial in the 2035 RTP. The posted speed limit is 35 mph.

Alternative Travel Modes

Sidewalks exist on both the north and south sides of La Posada Drive, and on portions of Pyramid Highway. There are dedicated bike lanes adjacent to the project site on both Pyramid Highway and La Posada Drive. There are currently no public transit routes near the project site.

Existing Intersection Traffic Volumes

Traffic volumes were obtained by conducting new AM and PM peak hour turning movement counts at the La Posada Drive/Existing Driveway (location 3) on Wednesday, September 3, 2014. The traffic volumes on Pyramid Highway were obtained from the Washoe County RTC traffic counts database. The existing peak hour intersection traffic volumes are shown on **Figure 3** attached.

Existing Intersection Conditions Level of Service

Level of service calculations were performed using the existing traffic volumes, lane configurations, and traffic controls. The results are presented in **Table 3** and the calculation sheets are provided in **Appendix A**, attached.

Table 3: Existing Conditions Intersection Level of Service Summary

Intersection	Control	Existing AM		Existing PM	
		LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
Pyramid Hwy/Driveway 1	NA	NA	NA	NA	NA
La Posada Dr/Driveway 2	NA	NA	NA	NA	NA
La Posada Dr/Existing Driveway	TWSC	B	12.1	B	14.6

Delay = Worst Approach Delay at TWSC intersections, Delay = Overall Average Delay at Signalized and AWSC intersections

LOS = Worst Approach Level of Service at TWSC intersections, LOS = Overall Level of Service at Signalized intersections

TWSC = Two-Way Stop Control, AWSC = All-Way Stop Control

As shown in **Table 3**, the La Posada Drive/Existing Driveway intersection operates at acceptable levels of service (LOS "B") during both the AM and PM peak hours. Detailed calculation sheets are provided in **Appendix A**.

Existing Roadway Conditions Level of Service

This section evaluates the roadway level of service on Pyramid Highway and La Posada Drive. **Table 4** shows the existing daily traffic volumes and level of service conditions.

Table 4: Existing Conditions Roadway Level of Service Summary

Class	Segment	# Lanes	Daily Volume	LOS
HAC	Pyramid Highway – South of La Posada Drive	4	27,000	C
MAC	La Posada Drive – East of Pyramid Highway	4	8,000	B

As shown in **Table 4**, the roadway segments currently operate at acceptable levels of service (LOS "D" or better).

PROJECT GENERATED TRAFFIC

Project Description

The project site is located in the southeast quadrant of the Pyramid/La Posada intersection in Spanish Springs. The site was formerly a county park but is now proposed as a 6.5 acre neighborhood commercial site. We have assumed a 0.2 floor to area ratio, which translates to approximately 56,628 square feet of building area. The anticipated land use is a neighborhood shopping center.

Trip Generation

Trip generation rates for the proposed project were obtained from the Trip Generation Manual, 8th Edition, published by the Institute of Transportation Engineers. **Table 5** provides the Daily, AM Peak Hour, and PM Peak Hour trip generation calculation details for the proposed project.

As shown in **Table 5**, the proposed project is estimated to generate 2,432 total daily trips, 57 total AM peak hour trips (35 Inbound and 22 Outbound), and 211 total PM peak hour trips (103 Inbound and 108 Outbound). 44% of the total PM peak hour trips were assumed to be pass-by trips based on the ITE standard rates. The ITE Trip Generation Manual does not provide any pass-by rates for the Daily or AM peak hour periods, hence 0% pass-by was assumed for calculating Daily and AM peak hour trips. This is a very conservative approach since many of the daily and AM peak hour trips will also be pass-by trips.

Table 5: Trip Generation Estimates

Shopping Center (56,628 sq ft)	Total Trips			Pass-By Trips			Net New Trips		
	Total	In	Out	Total	In	Out	Total	In	Out
Daily Trips	2,432	1,216	1,216	No ITE pass-by for Daily			2,432	1,216	1,216
AM Peak Trips	57	35	22	No ITE pass-by for AM Peak			57	35	22
PM Peak Trips	211	103	108	93	45	48	118	58	60

NOTES:

ITE Land Use Code 820 – Shopping Center Daily ITE Rate = 42.94/ksf (Inbound 50% and Outbound 50%)

AM ITE Rate = 1.00/ksf (Inbound 61% and Outbound 39%) PM ITE Rate = 3.73 /ksf (Inbound 49% and Outbound 51%)

Project Access

Three access points are proposed for the proposed development; one on Pyramid Highway (Driveway 1) and two on La Posada Drive (Driveway 2 and Driveway 3). Driveway 1 and Driveway 2 are proposed as right-in/right-out access only. Driveway 3, which forms a four-legged intersection with the existing driveway intersection would have left-in/right-in/right-out access to the proposed development. The new configuration maintains full access into and out of the existing shopping center. The driveway locations are shown in **Figure 2**. The recommended configuration for the La Posada Drive/Driveway 3/Existing Driveway intersection is shown in **Figure 4**.

Access Spacing

Existing access to the project site (formerly a County Park) consists of two driveways located on La Posada Drive. The existing west access has a right-in only configuration and is located approximately 150 feet from Pyramid Highway (measured between curb returns). The existing east driveway has a right-out only configuration and is located just east of the existing shopping center driveway (but on the opposite, south, side of La Posada Drive). The existing access configuration is not sufficient to serve a neighborhood commercial center.

The project proposes to improve access spacing and access alignment on La Posada Drive by constructing a new right-in/right-out driveway (Driveway 2) approximately 200 feet west of Pyramid Highway, which is more consistent with the access management standards outlined in the 2035 Regional Transportation Plan, than the existing west driveway at 150 feet. The Driveway 2 location meets the 2035 RTP access standards for a Moderate Access Control (MAC) facility as it would be located at least 200 feet from Pyramid Highway. Since there is just over a 500 foot distance between Pyramid Highway and the existing shopping center driveway (on the north side of La Posada), a second right-in/right-out/left-in configuration driveway (Driveway 3) can be located opposite the existing driveway and for all intensive purposes will meet the access spacing criteria of 300 feet between adjacent driveways. It is commonly desirable in access management standards to align opposing driveways whenever possible, and this would be achieved, making it possible to construct the left-in movement, which is also permitted in the 2035 RTP access standards. Therefore, Driveway 2 and Driveway 3 can be constructed to meet the regional access spacing criteria.

Driveway 1 is proposed as a right-in/right-out access on Pyramid Highway approximately 320 feet south of La Posada Drive. At least 250 feet of separation is required on this High Access Control (HAC) facility, and this would be achieved. This driveway will serve the high percentage of pass-by trips to/from northbound Pyramid Highway without forcing those drivers to travel through the Pyramid/La Posada intersection twice (northbound right turn and the westbound thru or right) and avoids those same pass-by trips making an eastbound to westbound U-turn at the roundabout east of the project when returning to Pyramid Highway. Without Driveway 1, traffic volumes would unnecessarily increase at the Pyramid/La Posada intersection, in both travel directions on La Posada Drive, and at the La Posada/Rockwell Boulevard roundabout. Driveway 1 will eliminate unnecessary trip length and reduce traffic conflicts overall. The right-turn volumes into and out of Driveway 1 are not anticipated to be high enough to require deceleration or acceleration lanes.

Trip Distribution and Assignment

Traffic generated by the project was distributed to the road network based on the location of the project, major activity centers, existing travel patterns, and roadway connections. The following trip distribution percentages were used for distributing primary project trips:

- 30% travelling to/from the north on Pyramid Highway
- 10% travelling to/from the south on Pyramid Highway
- 30% travelling to/from the east on La Posada Drive
- 30% travelling to/from the west on Eagle Canyon Road

Project generated trips were assigned to the adjacent roadway system based on the distribution outlined above. The project trip assignment is shown on **Figure 5**, attached.

EXISTING PLUS PROJECT CONDITIONS

Intersection Level of Service Analysis

Existing plus project traffic volumes were developed by adding the project generated trips (**Figure 5**) to the existing traffic volumes (**Figure 3**) and are shown in **Figure 6**, attached. **Table 6** presents the level of service analysis summary for this study scenario assuming the existing intersection configurations.

As shown in **Table 6**, even with the addition of project traffic, all the study intersections are anticipated to operate at acceptable levels of service (LOS "D" or better). Delay at the La Posada Drive/Existing Driveway/Driveway 3 intersection increases by approximately 1.6 seconds/vehicle with the addition of project traffic and the LOS changes from LOS "B" to LOS "C". Since all the intersections operate at acceptable LOS conditions with the addition of project traffic, the project has no significant impacts on the study intersections. Detailed calculation sheets are provided in **Appendix B**.

Table 6: Existing Plus Project Conditions Intersection Level of Service Summary

Intersection	Control	AM Peak		PM Peak	
		LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
Pyramid Hwy/Driveway 1	TWSC	A	9.5	B	14
La Posada Dr/Driveway 2	TWSC	A	9.1	B	12
La Posada Dr/Existing Driveway/Driveway 3	TWSC	B	12.8	C	18.7

Delay = Worst Approach Delay at TWSC intersections, Delay = Overall Average Delay at Signalized and AWSC intersections

LOS = Worst Approach Level of Service at TWSC intersections, LOS = Overall Level of Service at Signalized intersections

TWSC = Two-Way Stop Control, AWSC = All-Way Stop Control

Roadway Level of Service Analysis

Existing plus project daily traffic volumes were developed by adding the project generated daily trips to the existing daily traffic volumes. **Table 7** shows the existing plus project daily traffic volumes and level of service conditions.

Table 7: Existing plus Project Roadway Level of Service Summary

Class	Segment	# Lanes	Daily Volume	LOS
HAC	Pyramid Highway – South of La Posada Drive	4	27,243	C
MAC	La Posada Drive – East of Pyramid Highway	4	10,189	B

As shown in **Table 7**, the roadway segments operate at acceptable levels of service (LOS "D" or better) even with the addition of the project traffic.

CONCLUSIONS & RECOMMENDATIONS

The following is a list of our findings and recommendations to best manage the traffic generated by the proposed project:

Project Trips: The proposed project is estimated to generate 2,432 total daily trips, 57 total AM peak hour trips (35 Inbound and 22 Outbound), and 211 total PM peak hour trips (103 Inbound and 108 Outbound). 44% of total PM peak hour trips were assumed to be pass-by trips. The ITE Trip Generation Manual does not provide any pass-by rates for the Daily or AM peak hour periods, hence 0% pass-by was assumed for calculating Daily and AM peak hour trips, which is very conservative.

Project Access: Three access points are proposed for the development; one on Pyramid Highway (Driveway 1) and two on La Posada Drive (Driveway 2 and Driveway 3). Driveway 1 and Driveway 2 are proposed as right-in/right-out access only. Driveway 3, which forms a four-legged intersection with the existing driveway intersection would have left-in/right-in/right-out access to the proposed development. The new configuration maintains full access into and out of the existing shopping center. The driveway locations are shown in **Figure 2**. The recommended configuration of the La Posada Drive/Driveway 3/Existing Driveway intersection is shown in **Figure 4**.

Existing access to the project site (formerly a County Park) consists of two driveways located on La Posada Drive. The existing west access has a right-in only configuration and is located approximately 150 feet from Pyramid Highway (measured between curb returns). The existing east driveway has a right-out only configuration and is located just east of the existing shopping center driveway (but on the opposite, south, side of La Posada Drive). The existing access configuration is not sufficient to serve a neighborhood commercial center.

The project proposes to improve access spacing and access alignment on La Posada Drive by constructing a new right-in/right-out driveway (Driveway 2) approximately 200 feet west of Pyramid Highway, which is more consistent with the access management standards outlined in the 2035 Regional Transportation Plan, than the existing west driveway at 150 feet. The Driveway 2 location meets the 2035 RTP access standards for a Moderate Access Control (MAC) facility as it would be located at least 200 feet from

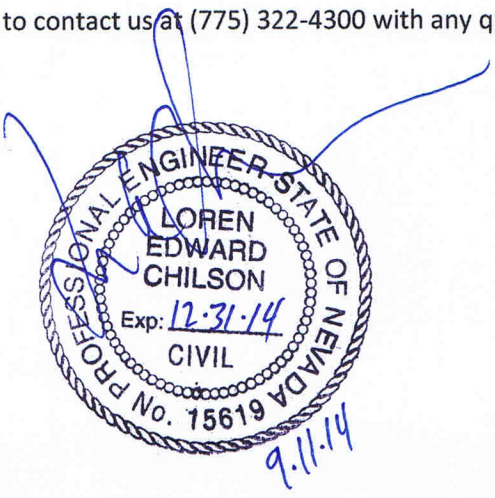
Pyramid Highway. Since there is just over a 500 foot distance between Pyramid Highway and the existing shopping center driveway (on the north side of La Posada), a second right-in/right-out/left-in configuration driveway (Driveway 3) can be located opposite the existing driveway and for all intensive purposes will meet the access spacing criteria of 300 feet between adjacent driveways. It is commonly desirable in access management standards to align opposing driveways whenever possible, and this would be achieved, making it possible to construct the left-in movement, which is also permitted in the 2035 RTP access standards. Therefore, Driveway 2 and Driveway 3 can be constructed to meet the regional access spacing criteria.

Driveway 1 is proposed as a right-in/right-out access on Pyramid Highway approximately 320 feet south of La Posada Drive. At least 250 feet of separation is required on this High Access Control (HAC) facility, and this would be achieved. This driveway will serve the high percentage of pass-by trips to/from northbound Pyramid Highway without forcing those drivers to travel through the Pyramid/La Posada intersection twice (northbound right turn and the westbound thru or right) and avoids those same pass-by trips making an eastbound to westbound U-turn at the roundabout east of the project when returning to Pyramid Highway. Without Driveway 1, traffic volumes would unnecessarily increase at the Pyramid/La Posada intersection, in both travel directions on La Posada Drive, and at the La Posada/Rockwell Boulevard roundabout. Driveway 1 will eliminate unnecessary trip length and reduce traffic conflicts overall. The right-turn volumes into and out of Driveway 1 are not anticipated to be high enough to require deceleration or acceleration lanes.

Impacts: The proposed project does not have any impacts that require mitigation at the study intersections. Even with the addition of project traffic, all the study intersections are anticipated to operate at acceptable LOS conditions. The intersection approaches operate at LOS “C” or better in accordance with Washoe County specific goals. Since there are no impacts requiring mitigation, no improvements are recommended, other than the reconfiguration for Driveway 3.

Please do not hesitate to contact us at (775) 322-4300 with any questions.

Sincerely,
TRAFFIC WORKS, LLC



Loren E. Chilson, PE
Principal

Attachments:

Figures
Figure 1: Vicinity Map
Figure 2: Project Location
Figure 3: Existing Volumes
Figure 4: Driveway 3 Configuration
Figure 5: Trip Distribution & Assignment
Figure 6: Existing Plus Project Volumes

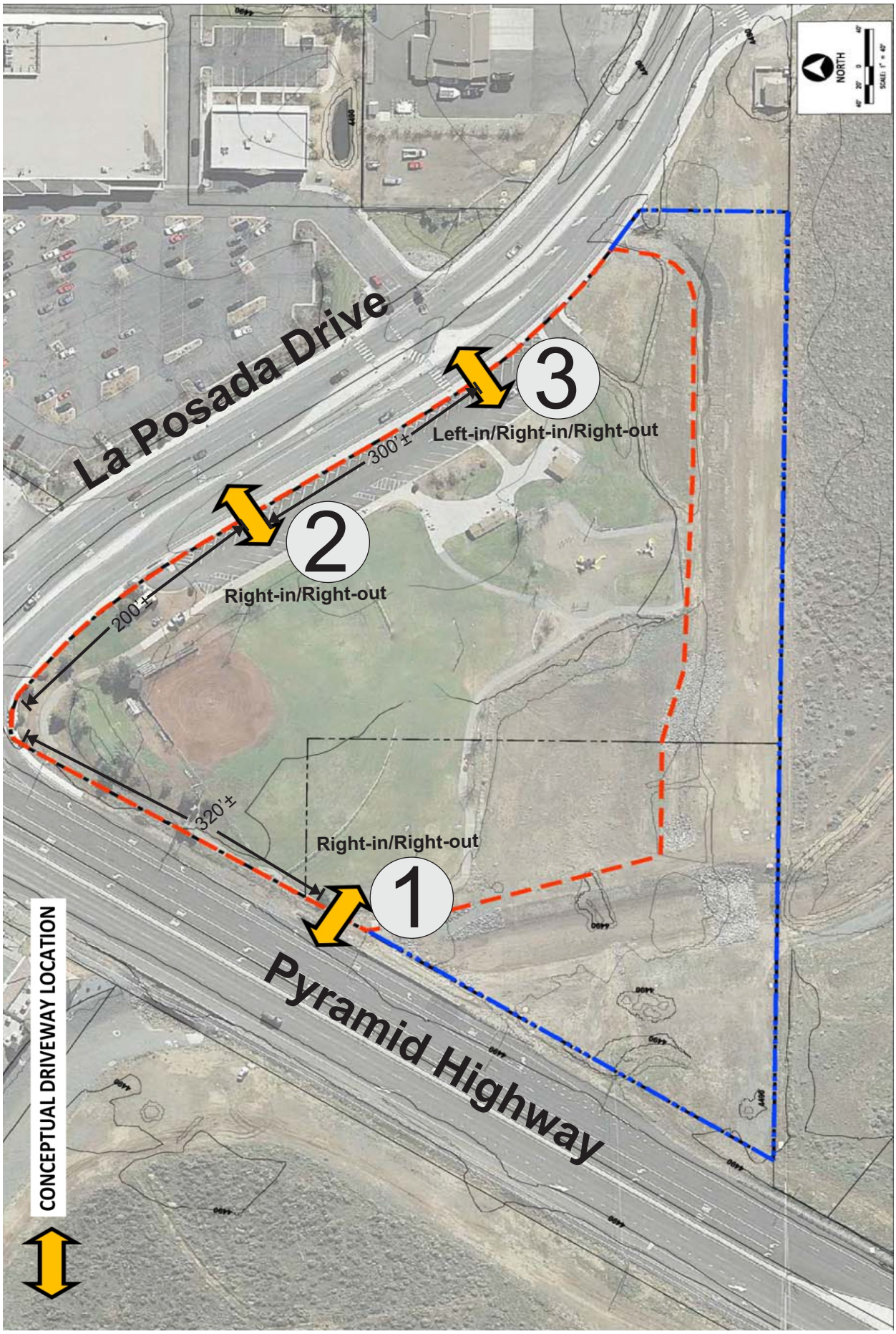
Appendices
A. Existing Conditions LOS Calculations
B. Existing Plus Project LOS Calculations

TRAFFIC WORKS LLC

NO SCALE

Figure 1

Pyramid/La Posada Commercial Center
Traffic Impact Study
Project Location



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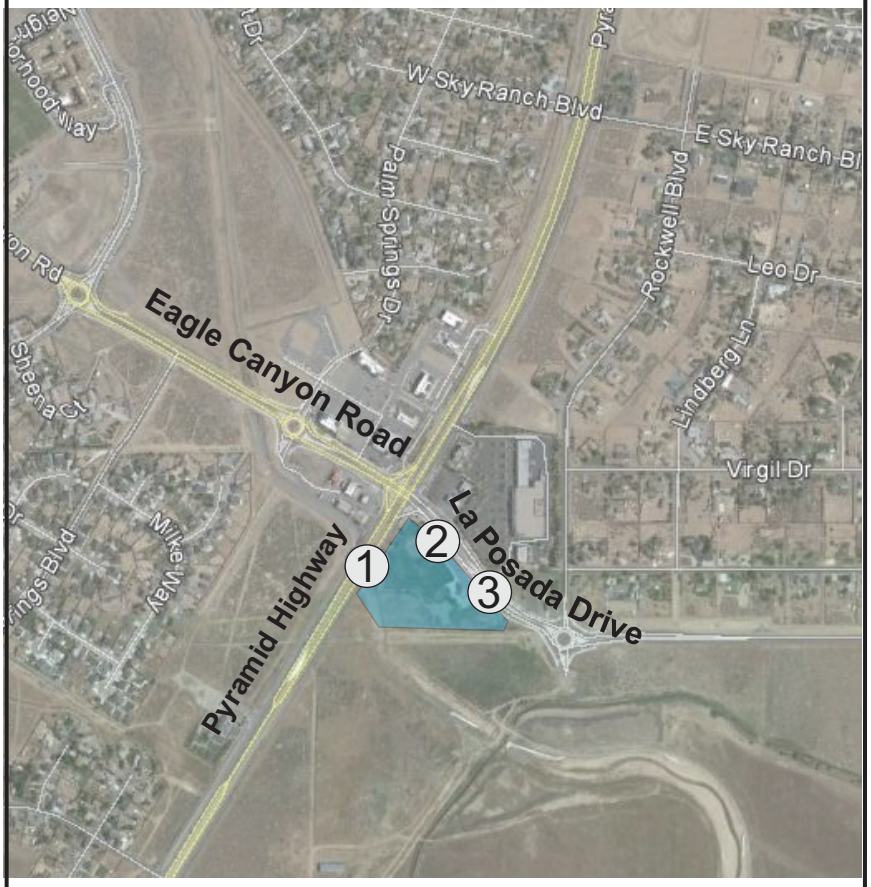
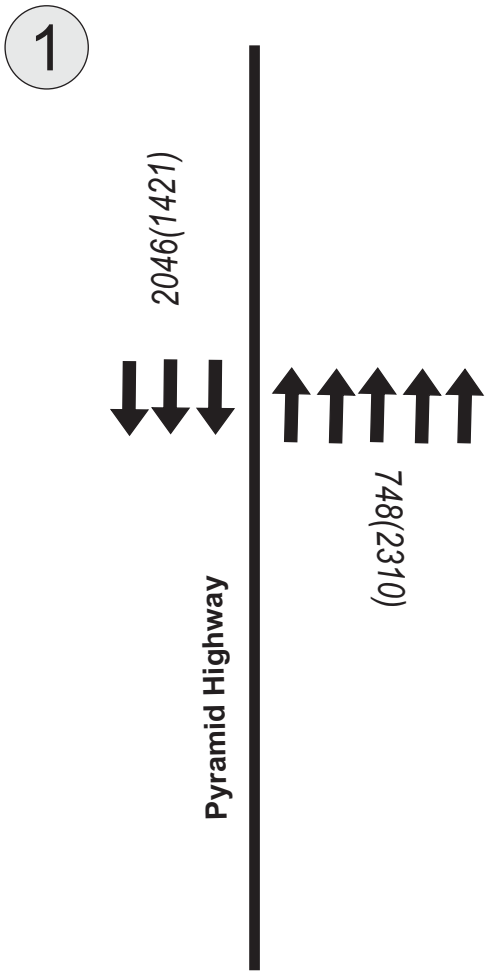
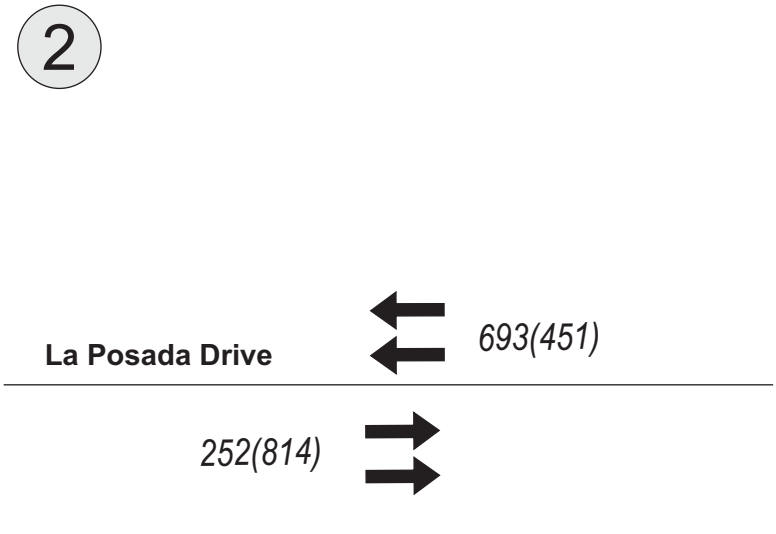
NO SCALE

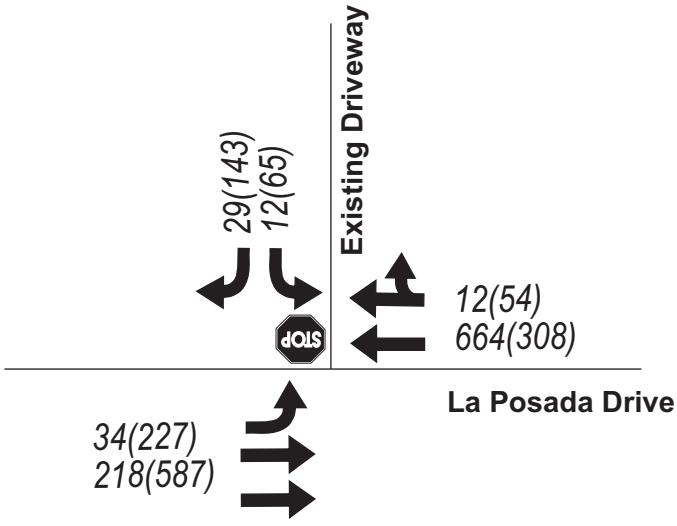
Figure 2

Pyramid/La Posada Commercial Center
Traffic Impact Study
Proposed Access Plan









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LEGEND

AM(PM) - Peak Hour Traffic Volumes

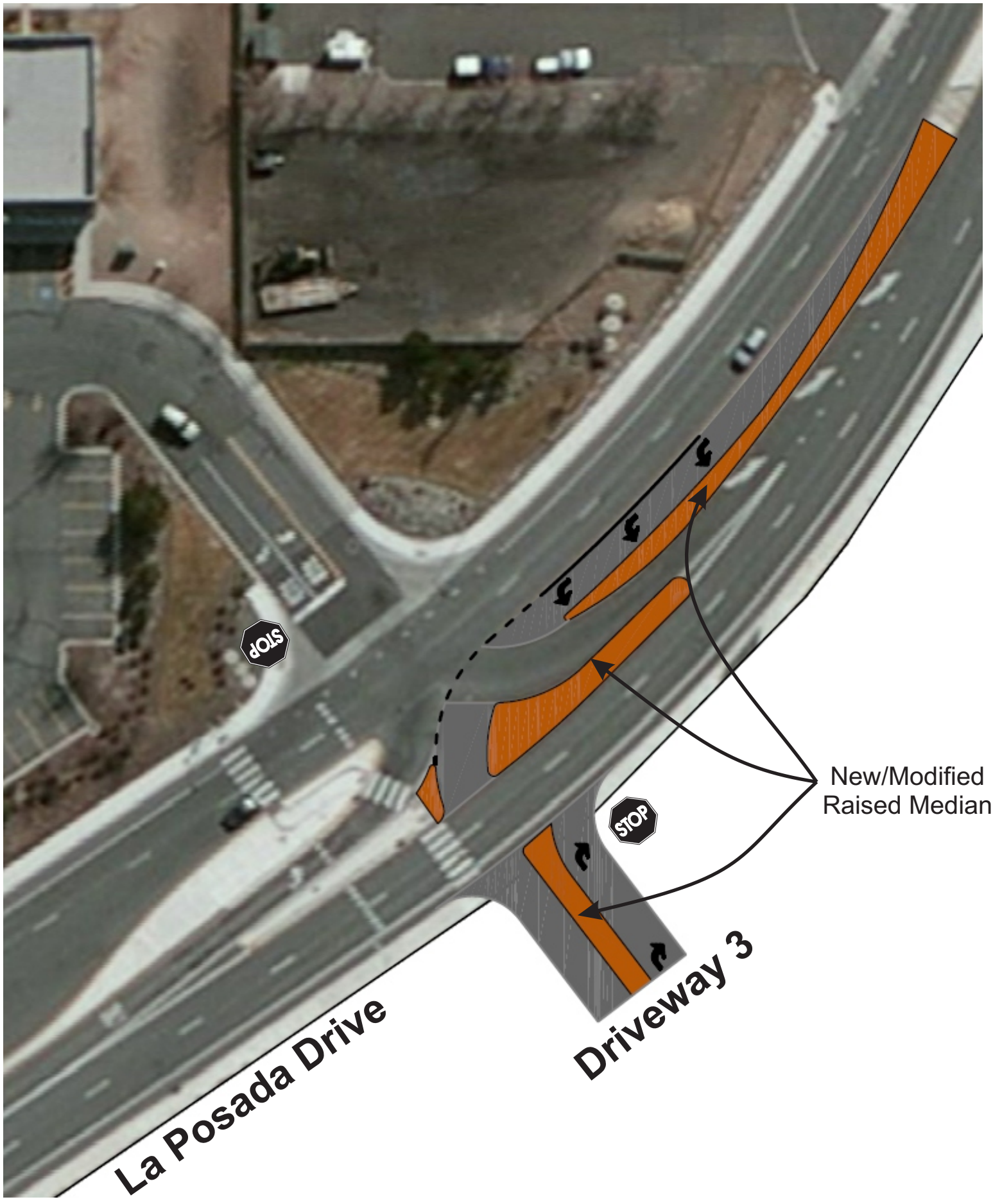
- Study Intersection

- Lane Configuration

NO SCALE

Figure 3

Pyramid/La Posada Commercial Center
Traffic Impact Study
Existing Volumes



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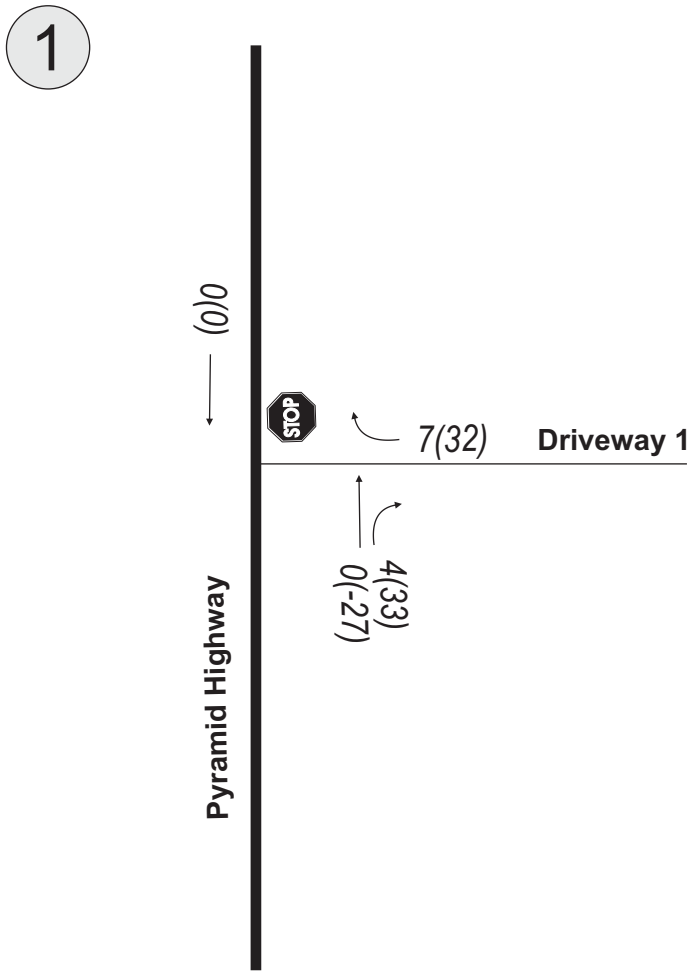
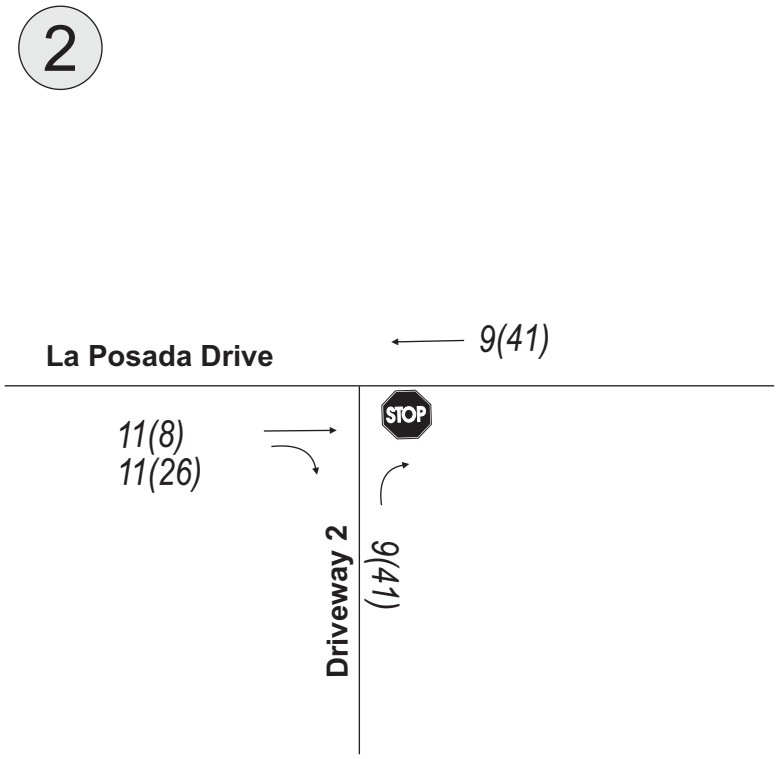
NO SCALE

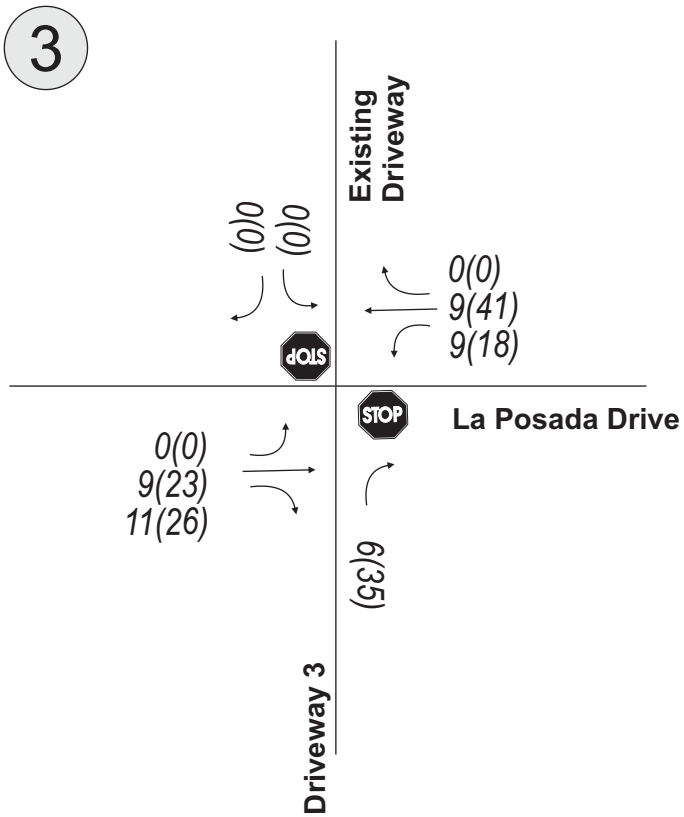
Figure 4

Pyramid/La Posada Commercial Center
Traffic Impact Study
Driveway 3 Configuration

xx% Distribution of Primary Trips







TRAFFIC WORKS LLC

LEGEND

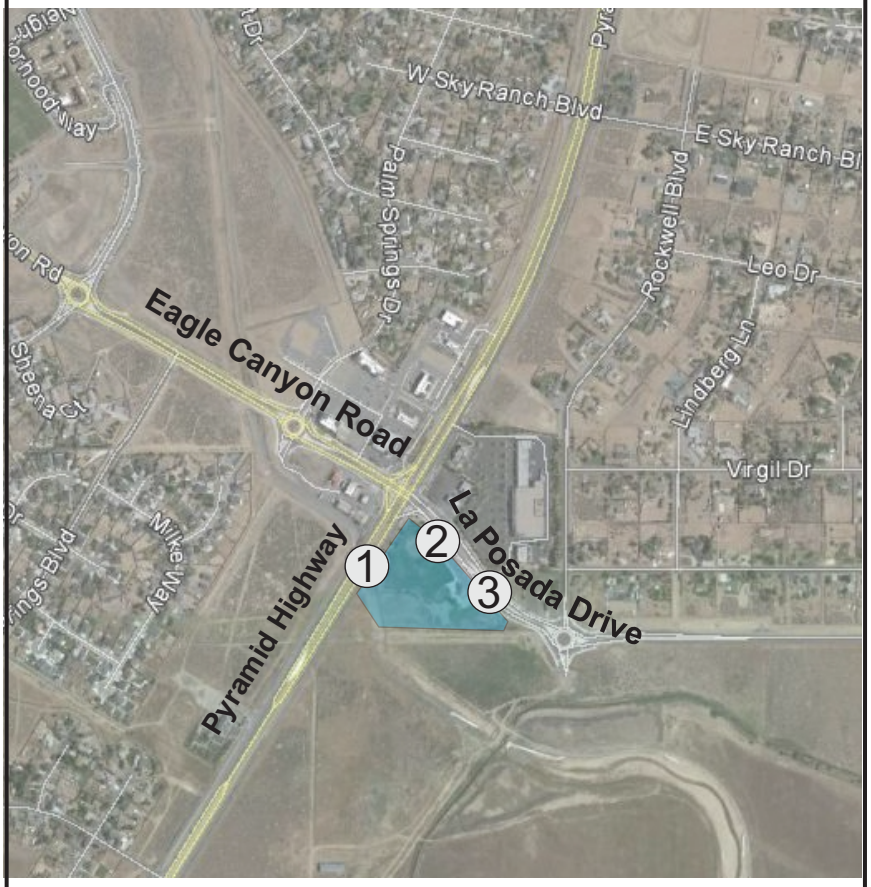
AM(PM) - Peak Hour Trip Assignment

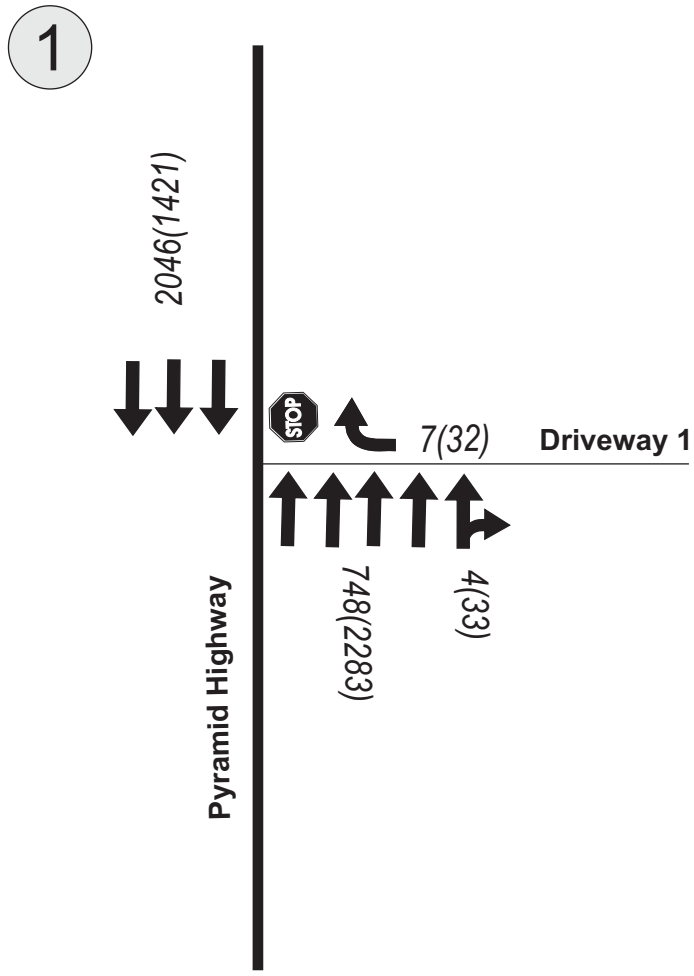
- Study Intersection

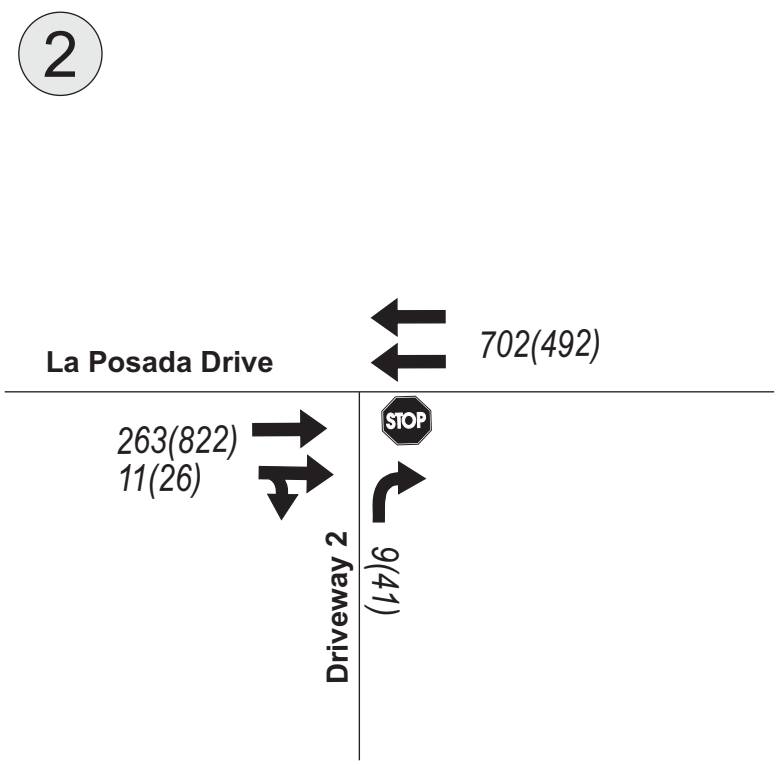
NO SCALE

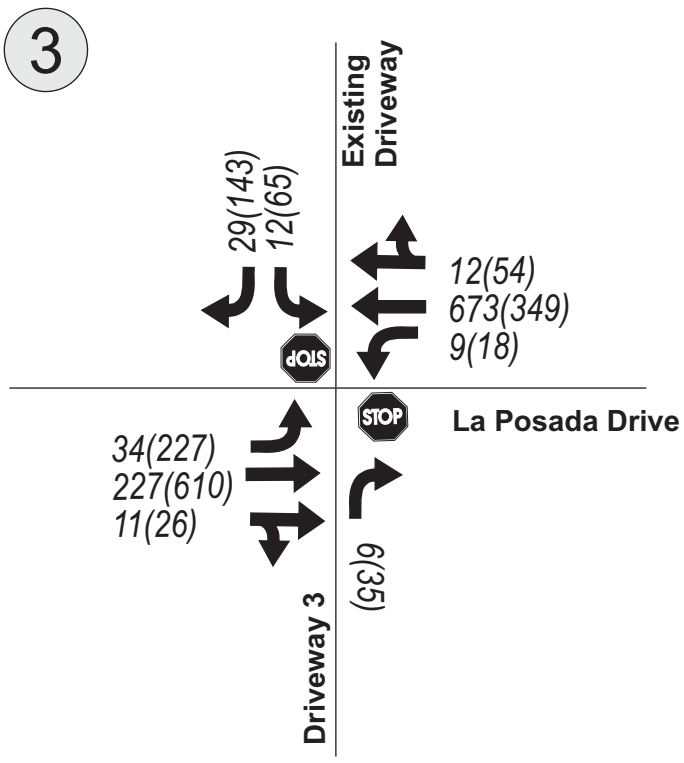
Figure 5

Pyramid/La Posada Commercial Center
Traffic Impact Study
Trip Distribution & Assignment









TRAFFIC WORKS LLC

LEGEND

AM(PM) - Peak Hour Traffic Volumes

- Study Intersection

- Lane Configuration

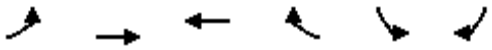
NO SCALE

Figure 6

Pyramid/La Posada Commercial Center
Traffic Impact Study
Existing Plus Project Volumes

APPENDIX A

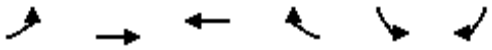
Existing Conditions LOS Calculations



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	34	218	664	12	12	29
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	36	229	699	13	13	31
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	Raised			
Median storage veh)			1			
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	712				892	356
vC1, stage 1 conf vol					705	
vC2, stage 2 conf vol					186	
vCu, unblocked vol	712				892	356
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)					5.8	
tF (s)	2.2				3.5	3.3
p0 queue free %	96				97	95
cM capacity (veh/h)	884				369	641

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	SB 1	SB 2
Volume Total	36	115	115	466	246	13	31
Volume Left	36	0	0	0	0	13	0
Volume Right	0	0	0	0	13	0	31
cSH	884	1700	1700	1700	1700	369	641
Volume to Capacity	0.04	0.07	0.07	0.27	0.14	0.03	0.05
Queue Length 95th (ft)	3	0	0	0	0	3	4
Control Delay (s)	9.2	0.0	0.0	0.0	0.0	15.1	10.9
Lane LOS	A					C	B
Approach Delay (s)	1.2			0.0		12.1	
Approach LOS						B	

Intersection Summary			
Average Delay	0.8		
Intersection Capacity Utilization	35.4%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	227	587	308	54	65	143
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	239	618	324	57	68	151
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	Raised			
Median storage veh)			1			
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	381				1139	191
vC1, stage 1 conf vol					353	
vC2, stage 2 conf vol					787	
vCu, unblocked vol	381				1139	191
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)					5.8	
tF (s)	2.2				3.5	3.3
p0 queue free %	80				74	82
cM capacity (veh/h)	1174				259	819

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	SB 1	SB 2
Volume Total	239	309	309	216	165	68	151
Volume Left	239	0	0	0	0	68	0
Volume Right	0	0	0	0	57	0	151
cSH	1174	1700	1700	1700	1700	259	819
Volume to Capacity	0.20	0.18	0.18	0.13	0.10	0.26	0.18
Queue Length 95th (ft)	19	0	0	0	0	26	17
Control Delay (s)	8.8	0.0	0.0	0.0	0.0	23.8	10.4
Lane LOS	A					C	B
Approach Delay (s)	2.5			0.0		14.6	
Approach LOS						B	

Intersection Summary			
Average Delay	3.6		
Intersection Capacity Utilization	36.4%	ICU Level of Service	A
Analysis Period (min)	15		

Traffic Study

APPENDIX B

Existing Plus Project Conditions LOS Calculations

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	7	748	4	0	2046
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	7	787	4	0	2154
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1507	199			792	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1507	199			792	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	99			100	
cM capacity (veh/h)	112	809			825	

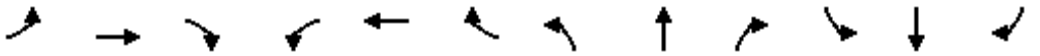
Direction, Lane #	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3
Volume Total	7	225	225	225	117	718	718	718
Volume Left	0	0	0	0	0	0	0	0
Volume Right	7	0	0	0	4	0	0	0
cSH	809	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.01	0.13	0.13	0.13	0.07	0.42	0.42	0.42
Queue Length 95th (ft)	1	0	0	0	0	0	0	0
Control Delay (s)	9.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A							
Approach Delay (s)	9.5	0.0				0.0		
Approach LOS	A							

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	42.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	263	11	0	702	0	9
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	277	12	0	739	0	9
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			288		652	144
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			288		652	144
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	99
cM capacity (veh/h)			1270		401	877

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1
Volume Total	185	104	369	369	9
Volume Left	0	0	0	0	0
Volume Right	0	12	0	0	9
cSH	1700	1700	1700	1700	877
Volume to Capacity	0.11	0.06	0.22	0.22	0.01
Queue Length 95th (ft)	0	0	0	0	1
Control Delay (s)	0.0	0.0	0.0	0.0	9.1
Lane LOS					A
Approach Delay (s)	0.0		0.0		9.1
Approach LOS					A

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	22.7%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	34	227	11	9	673	12	0	0	6	12	0	29
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	36	239	12	9	708	13	0	0	6	13	0	31
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			Raised							
Median storage veh)					1							
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	721			251			720	1056	125	931	1056	361
vC1, stage 1 conf vol							316	316		734	734	
vC2, stage 2 conf vol							404	740		197	322	
vCu, unblocked vol	721			251			720	1056	125	931	1056	361
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)							6.5	5.5		6.5	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	96			99			100	100	99	96	100	95
cM capacity (veh/h)	877			1312			393	304	902	307	320	636

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1	SB 2
Volume Total	36	159	91	9	472	249	6	13	31
Volume Left	36	0	0	9	0	0	0	13	0
Volume Right	0	0	12	0	0	13	6	0	31
cSH	877	1700	1700	1312	1700	1700	902	307	636
Volume to Capacity	0.04	0.09	0.05	0.01	0.28	0.15	0.01	0.04	0.05
Queue Length 95th (ft)	3	0	0	1	0	0	1	3	4
Control Delay (s)	9.3	0.0	0.0	7.8	0.0	0.0	9.0	17.2	10.9
Lane LOS	A			A			A	C	B
Approach Delay (s)	1.2			0.1			9.0	12.8	
Approach LOS							A	B	

Intersection Summary				
Average Delay	1.0			
Intersection Capacity Utilization	35.7%	ICU Level of Service		A
Analysis Period (min)	15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	32	2283	33	0	1421
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	34	2403	35	0	1496
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2919	618			2438	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2919	618			2438	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	92			100	
cM capacity (veh/h)	12	432			190	

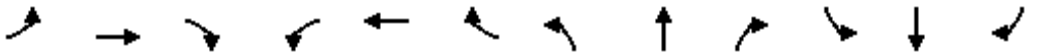
Direction, Lane #	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3
Volume Total	34	687	687	687	378	499	499	499
Volume Left	0	0	0	0	0	0	0	0
Volume Right	34	0	0	0	35	0	0	0
cSH	432	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.08	0.40	0.40	0.40	0.22	0.29	0.29	0.29
Queue Length 95th (ft)	6	0	0	0	0	0	0	0
Control Delay (s)	14.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	B							
Approach Delay (s)	14.0	0.0				0.0		
Approach LOS	B							

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	43.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	822	26	0	492	0	41
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	865	27	0	518	0	43
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			893		1138	446
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			893		1138	446
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	92
cM capacity (veh/h)			755		195	560

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1
Volume Total	577	316	259	259	43
Volume Left	0	0	0	0	0
Volume Right	0	27	0	0	43
cSH	1700	1700	1700	1700	560
Volume to Capacity	0.34	0.19	0.15	0.15	0.08
Queue Length 95th (ft)	0	0	0	0	6
Control Delay (s)	0.0	0.0	0.0	0.0	12.0
Lane LOS					B
Approach Delay (s)	0.0		0.0		12.0
Approach LOS					B

Intersection Summary			
Average Delay	0.4		
Intersection Capacity Utilization	33.5%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	227	610	26	18	349	54	0	0	35	65	0	143
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	239	642	27	19	367	57	0	0	37	68	0	151
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			Raised							
Median storage veh)					1							
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	424			669			1506	1596	335	1269	1581	212
vC1, stage 1 conf vol							1134	1134		434	434	
vC2, stage 2 conf vol							372	462		836	1147	
vCu, unblocked vol	424			669			1506	1596	335	1269	1581	212
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)							6.5	5.5		6.5	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	79			98			100	100	94	62	100	81
cM capacity (veh/h)	1131			917			117	153	661	180	159	793

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1	SB 2
Volume Total	239	428	241	19	245	179	37	68	151
Volume Left	239	0	0	19	0	0	0	68	0
Volume Right	0	0	27	0	0	57	37	0	151
cSH	1131	1700	1700	917	1700	1700	661	180	793
Volume to Capacity	0.21	0.25	0.14	0.02	0.14	0.11	0.06	0.38	0.19
Queue Length 95th (ft)	20	0	0	2	0	0	4	41	17
Control Delay (s)	9.0	0.0	0.0	9.0	0.0	0.0	10.8	36.7	10.6
Lane LOS	A			A			B	E	B
Approach Delay (s)	2.4			0.4			10.8	18.7	
Approach LOS							B	C	

Intersection Summary				
Average Delay	4.2			
Intersection Capacity Utilization	37.5%	ICU Level of Service		A
Analysis Period (min)	15			

APPENDIX B

MARKET STUDY

NEW ECONOMICS & ADVISORY®

LAND USE ANALYSIS & STRATEGIES

MEMORANDUM

To: Andrew Durling, Wood Rodgers
From: Jesse W. Walker
Date: September 15, 2014
Re: Market Analysis for a Proposed Spanish Springs Commercial Development at Pyramid Highway and La Posada Drive

New Economics & Advisory has conducted a market analysis for a proposed commercial development (Project) located at the south-east corner of Pyramid Lake Highway and La Posada Drive in unincorporated Washoe County (County). The Project is located within the Spanish Springs Area Plan, which was adopted in September, 2010, and is currently used as a neighborhood park. As New Economics understands, the Project proposes to convert from its existing recreational zoning to Neighborhood Commercial (NC) zoning designation. In order to process the Project's application, the County requires that a Market Analysis be conducted to evaluate the market support for the proposed use, and to determine the Project's potential impact on the area's jobs/ housing balance. Specifically, policy SS.17.3 of the Spanish Springs Area Plan states the following:

> "For proposals to establish or intensify commercial uses, a market analysis has been conducted that clearly establishes a community-serving trade area, provides convincing evidence of a need to increase the inventory of community-serving commercial land use opportunities, and demonstrates no negative impact on the qualitative jobs/ housing balance in the Spanish Springs planning area (i.e., the relationship between anticipated employment types/ wages and housing costs)."

To satisfy this requirement of the Area Plan, New Economics has performed a Market Analysis for this project, and this memorandum summarizes the results of our analysis.

Summary of Findings

Finding 1: While many details of the Project are as yet unknown, it is likely to comprise approximately 56,000 square feet of neighborhood-serving commercial use. The Project's location at the intersection of La Posada and Pyramid Highway is along busy corridor that is close to population and employment centers, and offers great visibility and synergy with other nearby commercial centers. For these and other reasons, the Project is likely to competitive as a neighborhood-serving shopping center. While the exact tenanting for the proposed commercial center has not yet been determined, a project of this character is likely to be anchored by a grocery, pharmacy, discount retailer, or other similar user, supported by a variety of in-line tenants that could include restaurants, fast food,

dry cleaning, beauty salons, and other convenience-oriented retailers or services. The market for this type of neighborhood-serving use typically draws from an approximate 3-mile radius.

Finding 2: Based on long-term industry standards, this analysis concludes that while retail demand from existing Trade Area household spending will support the Project, future residential growth may be required to sustain the Project over time. The Trade Area's annual household spending on retail purchases is approximately $264 million, which will grow to an estimated $540 million once planned residential development in the area is constructed and occupied. Of this amount, New Economics projects that approximately $135 million would likely be spent at neighborhood shopping centers. Given these figures – and the supply of existing neighborhood shopping centers – the Trade Area can support an estimated 192,000 square feet of additional neighborhood-serving retail space, although this relies upon the spending from planned residential development in the nearby area.

Finding 3: The Project will not have a negative impact the area's jobs/ housing balance and is expected to have affordable housing options for Project employees within relatively close proximity. The Project will increase the number of jobs in the area without adding residential units, and will therefore not negatively impact the existing ratio of jobs-to-housing. Given the relatively small nature of the project, the actual number of new jobs created is unlikely to present a major impact to the local economy, but could fall within the range of approximately 75 to 125 positions. These employees are likely to be able to afford for-sale or rental housing within the surrounding area.

Project Description

The Project is located on the south-east corner of La Posada Drive and Pyramid Lakes Highway, and is currently used as a recreational park site. While the Project is situated on approximately 9.5 gross acres of land, we understand that only approximately 6.5 acres is developable since existing drainage infrastructure and other constraints limit its full development. Information provided by Wood Rodgers indicates that the Project will likely develop with a floor-area-ratio (FAR) of 20-percent, which would allow a total building size of approximately 56,000 square feet.

The intersection at which the Project is located is among two busy vehicular thoroughfares, with eight lanes of traffic on both Pyramid Lake Highway and on La Posada Drive. The Pyramid Lake Highway serves as a major regional thoroughfare connecting neighborhoods in the northern portion of Washoe County to the central city area, and La Posada Drive (which becomes Eagle Canyon Road to the west) provides access to nearby residential and employment centers. The intersection is already a bustling commercial node, as the other three corners possess varying levels of commercial space.

New Economics understands that the Project proponent is interested in converting the site from its existing recreational zoning category to a Neighborhood Commercial (NC) designation, as defined by the Spanish Springs Area Plan. The NC designation allows for a variety of potential use types, which are primarily characterized by a neighborhood-serving retail use, such as retail sales (including convenience and specialty retail), child care, automobile servicing, entertainment, restaurant, professional services, gasoline stations, hotels, medical services, etc.

Because of these allowances, the size of the site, its location amid a busy intersection, and its proximity to existing and proposed residential areas, a neighborhood-serving retail center is the most likely candidate for development, possibly anchored by a grocery store, discount store, or pharmacy. It is also possible that the site could be oriented more toward convenience commercial including a gasoline station, convenience store, and supporting restaurants, similar to other nearby retail centers.

Retail Development Trends

This section provides some context into key trends pertaining to retail development in the U.S., and defines some key terms and retail typologies that are discussed throughout this memorandum.

It is worth noting that retail development dynamics in the U.S., have changed significantly over the past several years, as factors such as changes in consumer tastes, residual effects from massive recession which began in 2007, and the rise of internet shopping have re-shaped retail spending patterns in various ways. Many consumers now favor purchasing "shoppers' goods" such as electronics from an online platform where they can quickly and easily compare prices, research specifications, and read reviews from the comfort of their home. Furthermore, patrons at "brick and mortar" shopping centers are now expecting a more compelling experience that includes walkable, park-like settings with a variety of recreational options, outdoor dining, and other amenities which make shopping a more enjoyable activity. "Big box" stores have been particularly vulnerable during this transition, and some are adjusting to the new reality by building smaller-format stores which appeal to younger and more urban-oriented demographic.

However, as these changes to the retail landscape have continued to occur over the past several years, local neighborhood-oriented shopping centers seem to have fared more favorably, as groceries and other convenience-oriented goods are still necessary components of household spending, and are often sought in a location that is close to home.

Retail Center Types

The Urban Land Institute (ULI) has defined several categories of shopping centers, ranging from small neighborhood-serving commercial centers to large regional or

super-regional centers that are much larger and draw from a broader customer base among a wider geographic area.

Table 1 below shows key attributes of these various retail shopping center types. As shown, "Neighborhood Shopping Centers" typically range in size from 30,000 to 100,000 building square feet on 3 to 10 acres. This type of center typically draws the majority of its customers from residents of the surrounding 1 to 3 mile radius, or 5- to 10-minute drive time. The typical anchor tenant for a neighborhood shopping center include a supermarket, drugstore/ pharmacy, or discount retailer such a "dollar store" or other similar retailer. Aside from these primary anchor-types, the most popular tenants in Neighborhood Shopping Centers include medical and dental offices, hair salons, nail salons, pizza parlors, restaurants with liquor, and dry cleaners.

Table 1
Spanish Springs Commercial Market Analysis
Typical Attributes of Various Shopping Center Categories

Shopping Center Type	Typical Anchor(s)	Typical GLA	General Range in GLA	Typical Minimum Site Area (acres)	Typical Trade Area Radius [1]
Neighborhood	Supermarket, drugstore, discounter	60,000	30,000 - 100,000	3 - 10	1-3 miles
Community	Supermarket, drugstore, discount department store, mixed apparel	180,000	100,000 - 400,000	10 - 30	3-5 miles
Regional	One or two full-line department stores	600,000	300,000 - 900,000	10 - 60	8 miles
Super Regional	Three or more full-line department stores	1,000,000	600,000 - 2,000,000	15 - 100+	12 miles

Source: The Urban Land Institute Retail Development Handbook, 2008

[1] The typical trade radii shown are general guidelines, which must be modified according to the characteristics of the specific shopping center being considered.

Trade Area Characteristics

Since the Regional, Super-Regional, or Community Shopping Centers are not likely candidates for development at the Project for a variety of reasons (most prominently because of the limited developable area of the parcel), New Economics has conducted this analysis under the assumption that it will develop as a

"Neighborhood Shopping Center." For the purposes of this analysis, New Economics has established the Trade Area (which defines that area within which the majority of customers are located) as a 3-mile radius surrounding the site, which is a typical market area for a shopping center of this type.

Trade Area Households and Future Growth

New Economics has conducted an assessment of the overall demographics and socio-economics of the Trade Area. As shown in **Table 2**, the Trade Area contains approximately 10,200 households and comprises a population of approximately 30,000 residents. The average annual income per household is $83,200.

Table 2
Spanish Springs Commercial Market Analysis
Demographics in Trade Area - 2014

Item	Number
Households	10,237
Population	30,509
Persons Per Household	2.98
Average Household Income	$83,198

Source: Claritas, Inc. 2014

In addition to the existing residential and commercial uses in the Trade Area, significant new growth is anticipated for this area in the future. According to information provided by Wood Rodgers, there are approximately 10,700 single family homes in the Trade Area that have been approved by the County but are as-yet unbuilt. In total, existing and planned development in the Trade Area comprise approximately 21,000 households, as shown in **Table 3**.

Table 3
Spanish Springs Commercial Market Analysis
Households in Trade Area

Item	Number
Existing Households [1]	10,237
Planned Growth [2]	10,700
Total Existing and Planned Growth	**20,937**

[1] From Claritas
[2] From Wood Rodgers

Market Evaluation for Neighborhood Commercial Development

This section provides the calculations and supporting information that pertain to a market evaluation which estimates the market support for neighborhood-serving commercial development at the Project. This analysis is based on a careful assessment of the existing supply of competing commercial development within the Trade Area, and analyzes whether the demand for neighborhood-serving retail (derived from spending from the residents of the surrounding area and future spending from new residents), is sufficient to support the development of additional commercial space.

Existing Trade Area Commercial

The Project is located within a larger node of commercial activity serving the surrounding area. Commercial development in the region is characterized by relatively low-intensity neighborhood- and community-serving shopping centers comprising a mix of local and national retailers.

There are three commercial centers of various sizes within the trade area that are located at the corner of La Posada and Pyramid Highway. These centers are summarized in **Table 4**, and more information about each center is provided in the following sections.

Table 4
Spanish Springs Commercial Market Analysis
Summary of Competing Retail Centers Within the Trade Area

Retail Center	Location	Parcel Acreage	Building Size (Sq. Ft.)	Tenants
Save Mart Shopping Center	9750 Pyramid Way	12.0	81,900	Save Mart, Burger King, Port of Subs
Eagle Landing	9725 Pyramid Highway	16.0	54,000	Walgreens, Bullys Sports Bar, Autozone, Subway, McDonalds
Eagle Canyon Center	15 Eagle Canyon Drive	2.0	3,000	7-11, Simply Thai, Pizza Hut
Total			**138,900**	

Sources: Claritas, Google Earth, and Washoe County Assessor

Save Mart Shopping Center

The largest shopping center in the Trade Area is anchored by a Save Mart Grocery store. Other center tenants include Burger King, Port of Subs, Papa Murphy's, and a Chevron gasoline station. The Save Mart Shopping Center comprises approximately 82,000 square feet of commercial building space, and it is situated on approximately 12 acres.

Eagle Landing

The Eagle Landing shopping center is anchored by a Walgreens pharmacy, and includes a variety of other retailers, including a sports bar, pet store, automotive parts store, and a variety of fast-food and casual restaurants. The center is relatively new, having been constructed in 2008 and 2009, and includes some vacant buildings. The center is 16 acres in total and includes 54,000 square feet of commercial space.

Eagle Canyon

Eagle Canyon is a convenience-oriented commercial center that includes a 7-11 Convenience Store and gasoline station, as well as some other ancillary uses which include Pizza Hut, Simply Thai, and L7 Martial Arts. This is a small shopping center, whose total size is estimated at 3,000 square feet.

Retail Demand from Household Spending

New Economics has estimated total retail spending that could take place at the Project based on the Project's potential capture of retail expenditures from Trade Area households. **Table 5,** below, shows that existing households could support in the range of an estimated 162,000 square feet of neighborhood-serving retail, and future households could support an additional 170,000 sq. ft. **In total, existing and planned development would likely provide support for up to 332,000 square feet of neighborhood-serving commercial space in the Trade Area.**

There are several key assumptions implicit in this analysis, which are described in the footnotes of **Table 5** below.

Table 5
Spanish Springs Commercial Market Analysis
Summary of Neighborhood Retail Market Support Within Trade Area

Item	Existing Households Within PTA (3-Mile Radius)	Planned Development Within PTA (3-Mile Radius)	Total Existing and Planned Development
Households	10,237	10,693 [1]	**20,930**
Average Household Income	$83,198	$83,000 [2]	
Total Retail Expenditures [3]	$264,026,357	$275,130,890	**$539,157,247**
Assumed Percentage at Neighborhood Centers [4]	25%	25%	**25%**
Amount at Neighborhood Commercial Centers	$66,006,589	$68,782,723	**$134,789,312**
Assumed Capture Rate [5]	80%	80%	**80%**
Expenditures at Neighborhood Centers in Trade Area	$52,805,271	$55,026,178	**$107,831,449**
Average Annual Sales Per Square Foot [6]	$325	$325	**$325**
Supportable Square Feet in the Trade Area	**162,478**	**169,311**	**331,789**

Sources: Claritas, Washoe County, Wood Rodgers, U.S. Bureau of Labor Statistics, and the Urban Land Institute

[1] The number of new households is from an analysis of planned growth prepared by Wood Rodgers. Represents approved, unbuilt projects within a 3-mile radius.
[2] Assumes household income levels of new households are similar to those of the existing households in the area.
[3] Assumes total retail expenditures represent 31% of total household income, based on the Bureau of Labor Statistics Consumer Expenditure Survey (2011) for households with over $70,000 annual income.
[4] Assumes retail expenditures and neighborhood shopping centers represent 25 percent of total retail expenditures. Remaining 75% of expenditures elsewhere, such as community, regional, super-regional shopping centers, or other formats such as online shopping. This assumption has been commonly-accepted in retail market studies for project throughout the West, but is subject to refinement since supporting data is not readily-available.
[5] Assumes that 80% of Trade Area households' retail spending at neighborhood shopping centers occur within the Trade Area.
[6] Assumes average annual sales-per-square foot factor of $325, which is the approximate average for neighborhood shopping centers in the U.S., according to the Urban Land Institute.

It should be noted here that the demand calculations in **Table 5** use several conservative assumptions, and do not account for retail spending from employees in the surrounding area, nor does it account from pass-by patronage from drivers on Pyramid Lakes Highway. Since these two customer cohorts could provide

significant additional spending at the Project, in reality the market support is likely to be greater than the numbers shown in **Table 5** above. The following section describes a methodology which measures "leakage" in retail sales, which better accounts for these factors and provides an alternative, illustrative method to measure demand for retail development.

Existing Retail Leakage

In order to inform and support this analysis of retail demand, New Economics has conducted an assessment of retail leakage in the Trade Area. Retail leakage was estimated based on data provided by Claritas, which compares retail "demand" in the Trade Area (using an estimate of household expenditures on retail goods) to the retail "supply" (using an estimate of actual retail sales within a defined area). It is important to note that this leakage analysis is conducted for the Trade Area only (which does not include any major "Community" or "Regional" Shopping Centers); therefore, it is not surprising that significant retail leakage exists, since most spending occurs in these major retail types. However, this exercise is useful in helping to determine the magnitude of retail spending that occurs outside the Trade Area, identify the various categories of leakage in these categories, and assess whether some of this leakage could be stemmed through construction of neighborhood-serving retail at the Project.

Table 6 summarizes the magnitude of leakage within the Trade Area. As shown, Trade Area households account for approximately $530 million in retail sales annually, yet only $96 million occurs within the Trade Area, leaving $434 million in spending to occur elsewhere. New Economics has taken a closer look at various retail store categories which comprise this leakage, and assessed which would be likely candidates to be housed at a neighborhood shopping center. **Table 6** breaks out these stores that are conducive to neighborhood shopping centers, and shows that, together, these categories account for $185 million in retail leakage. In order to provide a better understanding of the significance of these results, the final column in the table shows the average annual sales at typical stores which fall within each of these categories.

Table 6
Spanish Springs Commercial Market Analysis
Summary of Retail Leakage in Primary Trade Area

Category	2014 Demand (Consumer Expenditures	2014 Supply (Retail Sales)	Leakage	Typical Retail Store Annual Sales [1]
Total Retail Sales	**$529,702,663**	**$95,856,526**	**$433,846,137**	
Retail Stores Conducive to Neighborhood Shopping Centers				
Food and Beverage Stores	$61,959,980	$19,469,600	$42,490,380	$18,960,000 (Supermarket)
Health and Personal Care Stores	$25,600,580	$4,543,740	$21,056,840	$226,000 (Hair Salon)
Gasoline Stations	$50,020,251	$15,148,234	$34,872,017	n/a
General Merchandise Stores	$61,826,609	$24,591,139	$37,235,470	$832,000 (Dollar Store)
Misc. Retailers (Florists, Office, etc.)	$14,039,833	$3,406,936	$10,632,897	n/a
Foodservice and Drinking Places	$49,568,645	$10,809,484	$38,759,161	$989,000 (Restaurant w. Liquor)
Subtotal	**$263,015,898**	**$77,969,133**	**$185,046,765**	

Sources: Claritas and the Urban Land Institute

[1] These figures were derived by multiplying the median store size by the median sales per square foot for each store type, as provided by the Urban Land Institutes Dollars and Cents of Shopping Centers.

Comparison of Supply and Demand for Retail Development

Table 7 shows the total existing supply of neighborhood-serving commercial within the Trade Area, as compared to the supportable square footage of neighborhood commercial uses from existing and planned development. As shown, the Trade Area can support up to 192,000 square feet of new neighborhood-serving retail space, including both existing and planned residential development.

Table 7
Spanish Springs Commercial Market Analysis
Summary of Supportable Neighborhood Retail Sq. Ft. (Rounded)

Item	Square Feet
Neighborhood Retail Demand	
Demand from Existing Households	162,000
Demand from Future Households	169,000
Total Existing and Future Neighborhood Retail Demand	**331,000**
Less Existing Neighborhood Commercial Retail	**(139,000)**
Total Supportable Neighborhood Retail	**192,000**

The Project's Impact on the Area's Jobs/ Housing Balance

New Economics has assessed the Project's likely impact on the jobs/ housing balance in the surrounding area. Because the Project only includes commercial uses (and does not include residential), the jobs/ housing ratio only stands to be improved by the addition of new employees. Even so, the sheer volume of new employees is not likely to be large and will not confer a major shift in the ratio of jobs to housing. Using a commonly-accepted factor of 500 square feet per employee at retail businesses, a 56,000 square foot commercial center would include up to 125 jobs; thus the overall impact on the entire area is likely to be insignificant.

In order to evaluate this issue in greater detail, New Economics has gone on to consider the quality-of-life for employees of the Project, and their ability to live near their place of employment, thus minimizing the time spent commuting, and also abating negative impacts on the region's roadways. A typical employee of a retailer within the Project is likely to fall within the retail sales representative, retail store manager, or other similar employment category. These types of employees will likely earn within the range of $30,000 to $50,000 per year for lower-level employees, while management positions will likely range from $50,000 to $75,000 per year, based on research on available jobs listings in the area. Assuming that most households include two wage earners, and further assuming that the second household earner draws a similar wage, the total household income for Project employees is likely to fall generally within the range of $50,000 to $100,000 per year.

The US Department of Housing and Urban Development (HUD) guidelines state that households should spend no more than 30 percent of their gross income on housing-related expenses. As such, a household with an annual of approximately $50,000 could stand to spend approximately $15,000 per year on housing (or $1,250 per month). More experienced employees or those in management positions could earn significantly more than this amount, and assuming a total household income of $100,000 per year, could spend approximately $30,000 per year on housing (or approximately $2,500 per month).

New Economics has reviewed home prices from Realtor listing data in the surrounding area, and found that the median asking price for homes within a 2-mile radius is $229,925, although the range of home prices is quite broad and there are many options are available below the $150,000 price point. At the median price point of $229,925, the total monthly mortgage expense would be approximately $985.[1]

[1] Assuming a 30-year fixed mortgage with a 5% interest rate, and a 20% down payment. Does not include utilities, insurance, taxes, or fees.

In addition to for-sale housing, there are several rental apartment complexes located in reasonably close proximity to the Project. Many fall below $1,200 per month, with some options in the $750 to $950 range.

Thus, New Economics has determined that there are a variety of affordable housing options for employees of the Project, and the Project's development is not likely to negatively impact the jobs-housing balance of the surrounding area.

APPENDIX C

INFRASTRUCTURE FEASIBILITY STUDY

PYRAMID/LA POSADA MASTER PLAN AMENDMENT

INFRASTRUCTURE FEASIBILITY STUDY

Prepared for:

Pyramid Urban Achievers

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September 2014

jn: 3002

PURPOSE

The purpose of this feasibility study is to fulfill the requirements of the Washoe County Spanish Springs Area Plan (Area Plan) with respect to a Master Plan Amendment to land use. Specifically, this report will address issues as outlined in the Spanish Springs Area Plan for modification and as shown below:

> *A feasibility study (has) been conducted, commissioned and paid for by the applicant, relative to municipal water, sewer and storm water that clearly identifies (1) the improvements likely to be required to support the intensification, and (2) those improvements have been determined to be in substantial compliance with all applicable existing facilities and resource plans for Spanish Springs by the Department of Water Resources. The Department of Water Resources will establish and maintain the standards and methodologies for these feasibility studies.*

PROJECT LOCATION

The project area is located southeast of the intersection of La Posada Drive and Pyramid Lake Highway in Unincorporated Washoe County. The project encompasses two parcels (APN 534-091-06 and 07, consisting of a total of 9.58± acres) currently owned by Washoe County. Please reference to location maps included in the main application packet.

PROJECT DESCRIPTION

The parcel to be modified is currently master planned suburban residential (3 dwelling units per acre) according to Spanish Springs Master Plan. The proposed modification will change all 9.58± acres to Commercial within the Master Plan, of which approximately 6.5 acres is assumed to be developable due to existing utility

infrastructure and regional drainage improvements in the south portion of the property. Additionally, the area is zoned Parks/Open Space, and will be changed to Neighborhood Commercial. The areas to the north, west and east of the project are zoned Commercial, and the area to the south is within the City of Sparks. Subheadings of this report will cover various issues regarding the modification including sanitary sewer, domestic water and effluent water, existing and required infrastructure, onsite and offsite storm drainage issues, FEMA flood zone information, and dry utilities including gas, electric, etc. Please reference to applicable maps within the body of the main application packet for zoning, intensity, etc.

DOMESTIC WATER

The domestic water system within the area is under the jurisdiction of the Washoe County Department of Water Resources (WCDWR). Domestic wells in the area and wholesale water purchase from the Truckee Meadows Water Authority (TMWA) provide water to the WCDWR system. The following outlines possibilities with respect to domestic water service for the property in the ultimate build out condition. Although the following represent possibilities for service and storage in the area, a "Discovery" will be necessary through WCDWR to determine the full extent of necessary improvements/upgrades to the existing system and storage, if any:

Service

- A 10" water line exists parallel to the east side of Pyramid Highway adjacent to the western edge of the subject property. The line lies within the Pyramid Highway right-of-way and turns east at the southern property boundary of the site and ties to the existing Spring Creek Wells 2 and 3 just east of the southeast corner of the site.

- A 20" water line within an easement along the southern boundary of the site, and is part of the La Posada transmission main which runs east-west along La Posada drive east of the site, and connects with mains along the west side of Pyramid Highway.

Storage

- Several water storage tanks exist within the vicinity of the site, including the Desert Spring and Desert Spring 2B tanks to the northwest of the site, and the Spring Creek 4 tank east of the site.

Please reference to **Figure 1** for locations of potential connection points for domestic water.

TMWA WATER RIGHTS - METHODOLOGY FOR CALCULATING DEMAND AND WATER RESOURCES REQUIREMENTS – WATER RIGHTS SUBJECT TO TMWA RULE 7

Project Site: 6± Acres

Neighborhood Commercial – (AFY = ac-ft/year)

- 6.5 acres – Assume 1.0 AFY/per acre retail/convenience store, etc.
  = 6.5 x 1.0 = 6.5 AFY
- Landscape (estimated-20%-3.41 AF/acre) = 4.1 AFY
- **TOTAL WATER RIGHTS RESIDENTIAL AREA**
  = 6.5 + 4.1 = 10.6 AFY

TOTAL WATER RIGHTS WITH 1.11 TRUCKEE RIVER RIGHTS MULTIPLIER

- **10.6 x 1.11 = 11.8 AFY**

* See Appendix for TMWA Rule 7 excerpts.

SANITARY SEWER

The property lies under the jurisdiction of Washoe County Department of Water Resources (WCDWR) with respect to sanitary sewer service. The following outlines possibilities with respect to sewering of the property in the ultimate buildout condition:

- Option 1 is to utilize the existing 8" sanitary sewer line in La Posada Drive to the north and east of the property. The site drains slightly north to south, so La Posada is slightly uphill from the property. However, the sanitary sewer in La Posada is approximately 10 feet deep, so there is opportunity to connect to this line from at least the northern portions of the site.

- Option 2 is to connect directly to the City of Sparks 27" Northwest Interceptor Main which crosses the southwest corner of the property. The main is south of the North Spanish Springs Flood Detention Facility (NSSFDF) outlet channel (to be discussed under separate heading), which crosses the southwest portion of the property. Any connection to this main would require crossing of the outlet channel, however, the sanitary sewer main is sufficiently deep (up to 10 feet below the channel flow line) that crossing of the channel is not an issue.

Total Sanitary Sewer outflow from the proposed zone change is as follows:

Land Use	**Acreage (acres)**	**Average Daily Flow**	**Average Daily Flow (gpd)**	**Peaking Factor**	**Peak Daily Flow (gpd)**
Neighborhood Commercial (NC)	6.5	2,536 gpd/acre	16,484	3	49,452
Total	**6.5**		**16,484**		**49,452**

* Flow rates per WCDWR Sewer Design Standards for Neighborhood Commercial (NC). Please reference to the **Appendix**.

Please reference to **Figure 1** for locations of potential connection points for sanitary sewer.

It should also be noted that the sanitary sewer within the area is under jurisdiction of WCDWR. However, sanitary sewer from this area feeds south into the City of Sparks system and ultimately feeds to the Truckee Meadows Water Reclamation Facility (TMWRF). Through an interlocal agreement with the City of Sparks, WCDWR applies a reduction factor to the sewer connection fee of 75%, bringing the fee from $5,400 per equivalent residential unit (ERU) to $4,050. A connection fee in the amount of $5,618 per ERU is then required to be paid to the benefit of the City of Sparks for use of their system.

DRY UTILITIES

NV Energy currently has electrical lines running parallel to the east side of Pyramid Highway servicing properties to the north, adjacent to the west side of the property, and lines running east-west along the south boundary of the property. An 8" gas main exists in La Posada Drive northeast of the property. In order to gage whether or not additional infrastructure would be necessary to service the subject property, a discovery would need to be performed by NV Energy, but it is anticipated that existing gas and electric facility will be sufficient to service the future uses on the property.

Please reference to **Figure 1** for locations of potential connection points for dry utilities.

FEMA FLOOD ZONE MITIGATION/STORM DRAINAGE

FEMA Flood Zone Mitigation

Historically, flooding from storm flows originating from drainage areas to the north, most specifically Griffith Canyon, have adversely impacted the overall Spanish Springs area, in particular the intersection of La Posada Drive and Pyramid Highway just to the north of the project site. The purpose of the NSSDF project was to alleviate these flooding issues. As part of the NSSDF, a large drainage channel was constructed along the southeast and south edges of the property.

The NSSDF project was analyzed and designed by two separate studies. Hydrology was completed within the Application for Conditional Letter of Map Revision (CLOMR) for *North Spanish Springs Detention Facility, Washoe County, Nevada* in October of 2006 prepared for the Washoe County Department of Water Resources (Hydrologic Report). The hydraulics of the channel and detention facilities was completed within the *Drainage Report for North Spanish Springs Flood Detention Facilities* prepared by AMEC in May of 2006 for the Washoe County Department of Water Resources (Hydraulics Report). The scope of the NSSDF project included construction of a sedimentation basin, a large regional detention facility and conveyance channels. The large drainage channel constructed along the southeast and south edges of the property was completed as part of the NSSDF and FEMA flood zone is now contained in the channel. Reference **Figure 2** for the channel location and the FEMA flood zone area.

Storm Drainage

The property naturally drains to the south for eventual outflow south and east. In the proposed condition, storm drainage is anticipated to be piped for outfall into the NSSDF channel along the south edge of the property. Detention will likely be necessary, either underground or open, as the original studies for the NSSDF channel would have been completed assuming the area to be either suburban residential or open space/park. Neighborhood commercial will cause an increase in overall imperviousness of the area, and an increase in volume and peak runoff can be expected. Onsite detention should be provided to assure that outfall from the site meets the intent of the NSSDF design.

CONCLUSION

In conclusion, the findings included in this Infrastructure Feasibility Report support the requirements of the Area with respect to a Master Plan Amendments, specifically, *(1) the improvements likely to be required to support the intensification, and (2) those improvements have been determined to be in substantial compliance with all applicable existing facilities and resource plans for Spanish Springs by the Department of Water Resources.*

Infrastructure Feasibility Study

APPENDIX

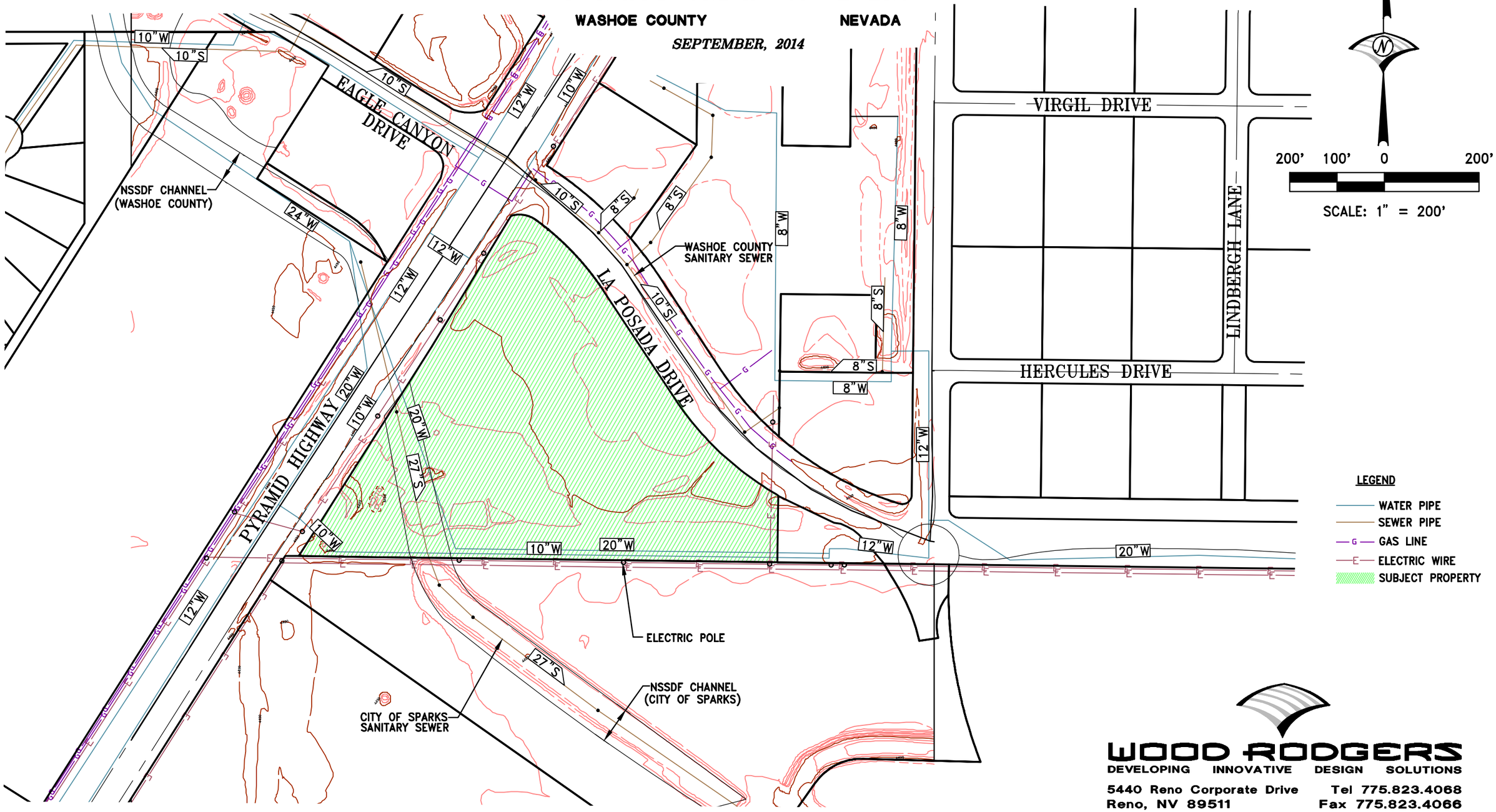
(FIGURE 1 - UTILITIES EXHIBIT)

LA POSADA/PYRAMID

PYRAMID URBAN ACHIEVERS

WASHOE COUNTY **NEVADA**

SEPTEMBER, 2014



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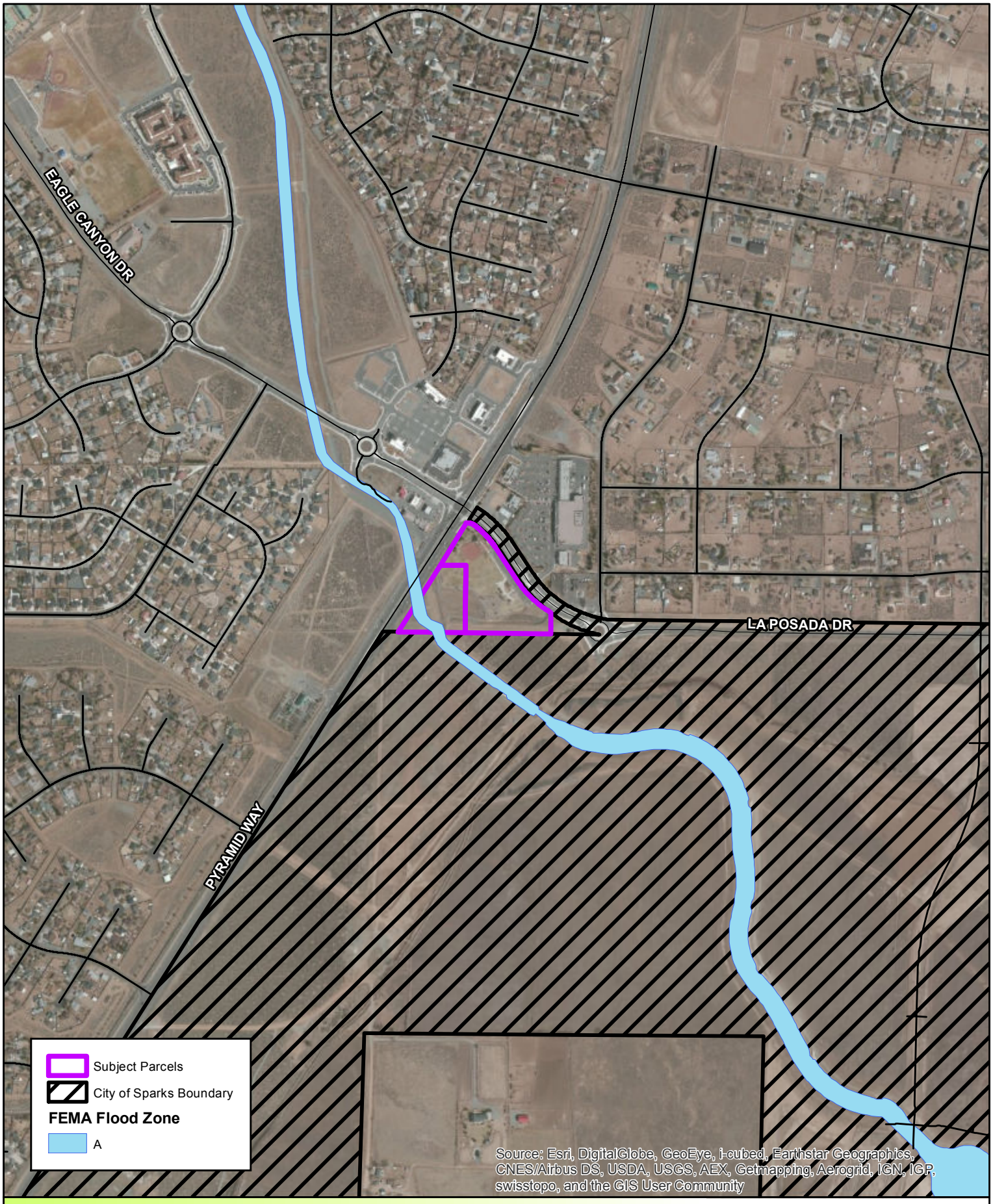

Figure 2 - FEMA Flood Zone

Pyramid / LaPosada MPA / RZA

September, 2014

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Truckee Meadows Water Authority

RULE 7

REQUIREMENTS FOR WILL-SERVE COMMITMENT LETTERS

E. Methodology for Calculating Demand and Water Resources Requirement

1. The Applicant's Demand for new Service or Modified Service shall be computed as follows:

Type of Unit	Demand (Acre Feet Per year)
Single family residential lot based on square foot lot size, with a minimum Demand of .12 acre feet per lot	$\frac{1}{1.1 + (10{,}000 / \text{Lot size})}$
Mobile home parks with separate irrigation (per space)	0.25
Demand per unit for apartments, duplexes, condominiums, or townhouse units (excluding outside, utility room, laundry room and/or recreation uses)	0.12
Commercial or Industrial Services (including residential utility room/ recreation areas)	The best available data and estimating procedures as determined by the Authority shall be used or estimated average annual Demand as furnished by the Applicant or Customer and accepted by the Authority shall be used.
Irrigation	3.41 acre feet per acre, or, for drip systems, the Demand as calculated by a landscape architect or other qualified professional and verified by the Authority.

2. The acre feet required for a new Service or Modified Service will be computed as follows:

   Total Acre Feet Required (AFA) = (Demand + Deficit Demand) x Multiplier

   Multiplier = (a) for mainstream Truckee River Rights the multiplier shall be 1.11.

   (b) for groundwater rights, the multiplier shall be 1.00.

Added: 03/23/01 Amended: 10/01/03; 6/19/13

2.1.01.2 The subdivider/developer shall provide DWR with information as necessary to determine the adequacy of the existing sanitary sewer system to accommodate flows from the proposed subdivision or development from the point of connection to a sanitary sewer interceptor. DWR may require modeling and analysis for all developments.

2.1.01.3 All sanitary sewers, including laterals, shall be constructed to a depth sufficient to allow for gravity flow to public sanitary sewers from all floors of residential or commercial structures, including basement areas. Alternative means may be approved on a case-by-case basis, and shall require the approval of DWR prior to construction. Cost for any required easements or rights-of-way shall be included in the estimate.

2.1.01.4 Concrete collars shall be placed around all manholes, valves or other appurtenances within any right-of-way or easement. Such collar shall encircle all casting with a minimum width of one foot. Manhole collars shall conform to standard details; all other collars shall extend to a minimum depth of one foot. Concrete shall meet the Standard Specifications for Public Works Construction for severe weather.

2.1.01.5 Public sewer facilities shall be installed within public street sections. No public sewer facilities will be permitted along lot lines or other locations unless approved by DWR. Appropriate public sanitary sewer easements and improved access in accordance with DWR standards are to be provided for maintenance purposes.

2.1.01.6 Sanitary sewer mains shall be extended with a subdivision or development to adjacent undeveloped property for future extensions in accordance with approved plans, unless otherwise approved by DWR. A sanitary sewer manhole and minimum 20 foot long stub with cap shall be placed at the terminus of the sewer main at the property line of the un-development adjacent property. A mechanical plug shall be installed into the downstream pipe and inside the terminal manhole.

2.1.02 SEWER DESIGN CRITERIA

The following design criteria shall govern the design of sewage collection systems to be dedicated to the County. The intent of these criteria is to provide safe, adequate, and dependable sewer service without excessive maintenance costs.

2.1.02.01 Flow Determination -The average flow from residential units shall be based on a average daily residential rate of 270 gallons. Fixture units may be used to determine

the flow from commercial and industrial areas or by historical water consumption records. If fixture unit counts are not available, avergae daily flows for commercial property shall be:

1.) Parks and Open Space: 664 gallons/day/acre

2.) Commercial:

General Commercial (GC): 780 gallons/day/acre (9.9 employees/acre)

Neighborhood Commercial (NC): 2,536 gallons/day/acre (32.2 employees/acre)

Tourist Commercial (TC): 3,245 gallons/day/acre (41.2 employees/acre)

3.) Industrial: 457 gallons/day/acre

4.) or as approved by DWR

(Washoe County Community Development Standards)

2.1.02.02 Pipe Size -The minimum size of collection lines shall be 8-inches in diamater. Service laterals which serve single residences shall be a minimum of 4-inches in diameter. All other lines shall be sized using accepted hydraulic analysis techniques. Such sizing analysis shall be performed using peak hour flows.

2.1.02.03 Pipe Slope -The minimum pipe slope is the slope at which the flow velocity is at least 2.5 feet per second when flowing half full or as approved by DWR. In general, slopes which permit sewage velocities in excess of 10 feet per second will not be without DWR approval.

2.1.02.04 Depth of Flow - The depth of flow in the sanitary sewer pipes shall not exceed 0.8D where D is the nominal diameter of the pipe.

2.1.02.05 Capacity – Sewer collection system shall be designed for peak flows. Design engineer shall determine peaking factor. When sizing a sewage collection system for a given area, the system shall be sized so that it will be adequate to carry the design flow from the entire future tributary area even though it is not within the project boundaries. The minimum peaking factor shall be 3 or as aaproved by DWR.

2.1.02.06 Analysis - Manning's Formula is to be used in computing depth of flow and velocities of all sanitary sewer conduits, with the roughness coefficient "n" value equal to 0.012 for PVC pipe, 0.012 for Reinforced Concrete pipe, 0.012 for Ductile Iron pipe and 0.011 for High Density Polyethylene (HDPE) pipe.

2.1.03 DEPTH