

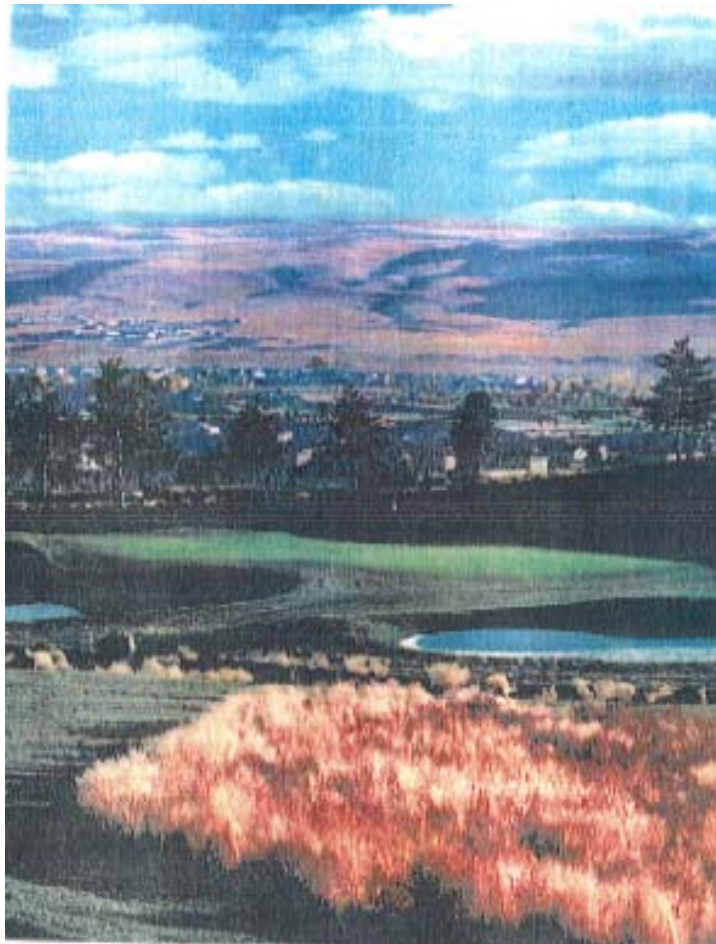
THE FOOTHILLS AT WINGFIELD SPRINGS

AMENDED BY THE CITY COUNCIL

SEPTEMBER 12, 2005

JUNE 11, 2007

SEPTEMBER 14, 2009



**APPLICATION TO INCLUDE THE FOOTHILLS AS PART OF THE
PLANNED COMMUNITY OF WINGFIELD SPRINGS**

DEVELOPMENT STANDARDS HANDBOOK

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INTRODUCTION

APPLICANT

The owner of The Foothills at Wingfield, LLC (“Foothills”), is an investment company owned and managed by Harvey Whittemore. Mr. Whittemore is also an owner and manager of Loeb Enterprises Limited Liability Company (hereinafter “Loeb”), the owner and master developer of Wingfield Springs. Loeb has been retained by the Foothills to entitle the subject property.

PROJECT OVERVIEW

The purpose of this document is to outline the master plan and overall entitlement strategy of the Foothills and set forth the standards, which will guide its future development. This Foothills Development Standards Handbook will also serve as a request for Master Plan Amendment and request for a zoning change consistent with the plan outlined herein. All of the attached appendices, exhibits, guides, and index are incorporated by reference as though fully set forth herein.

The Foothills is approximately 8 miles north of Interstate 80 (see Figures 1, 2A and 2B), and the property includes two distinct parcels of land. The first parcel runs from La Posada south to the section line along section 18.

Both properties have been annexed into the City of Sparks. The 690-acre parcel has been rezoned to New Urban District and the smaller parcel has been rezoned to A-5 similar to the former Washoe County Zoning designation.

This project is designed to provide the City of Sparks with an expanded planned community under similar standards as Wingfield Springs. It will have a variety of residential villages surrounded by extensive trails and open space amenity.

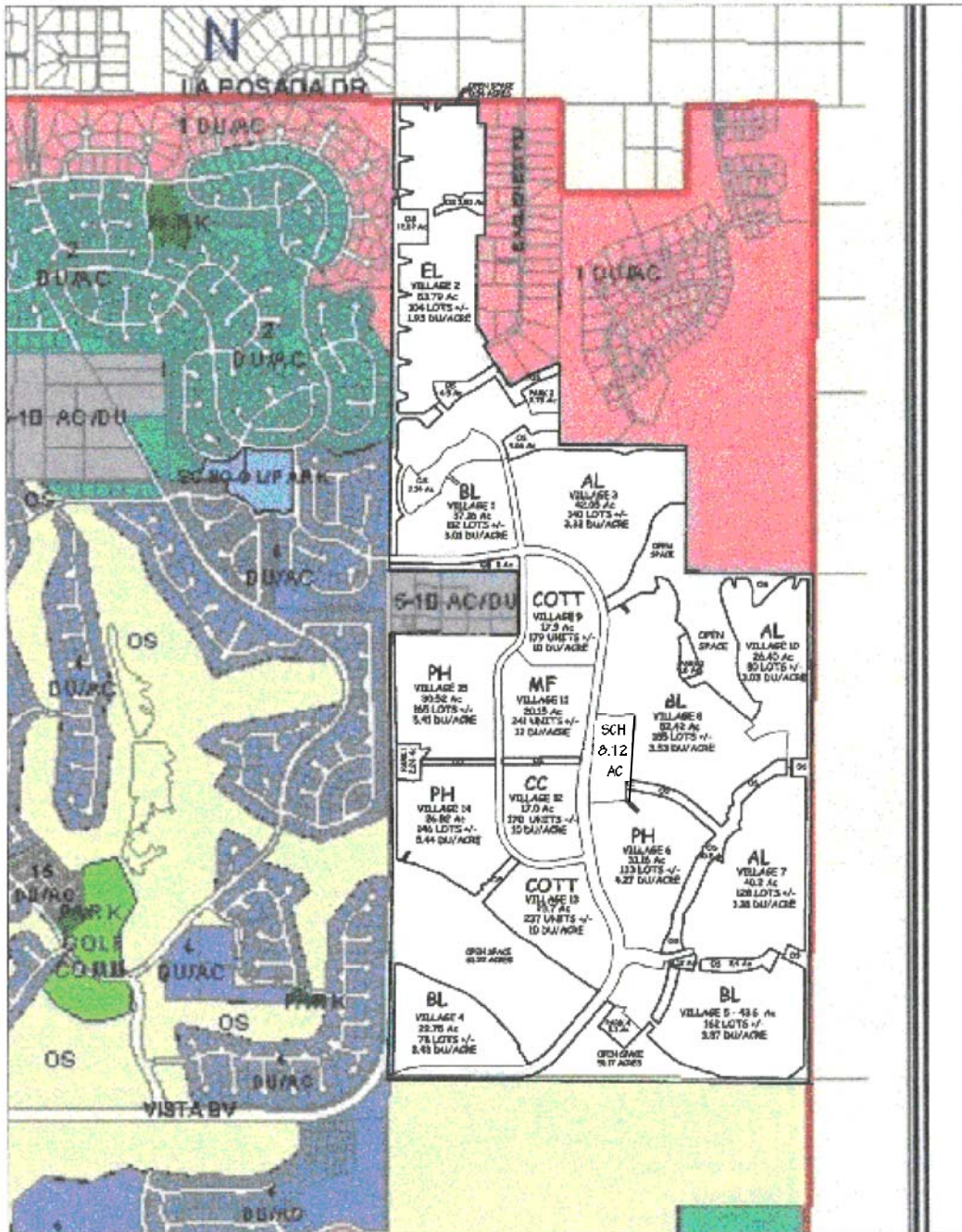
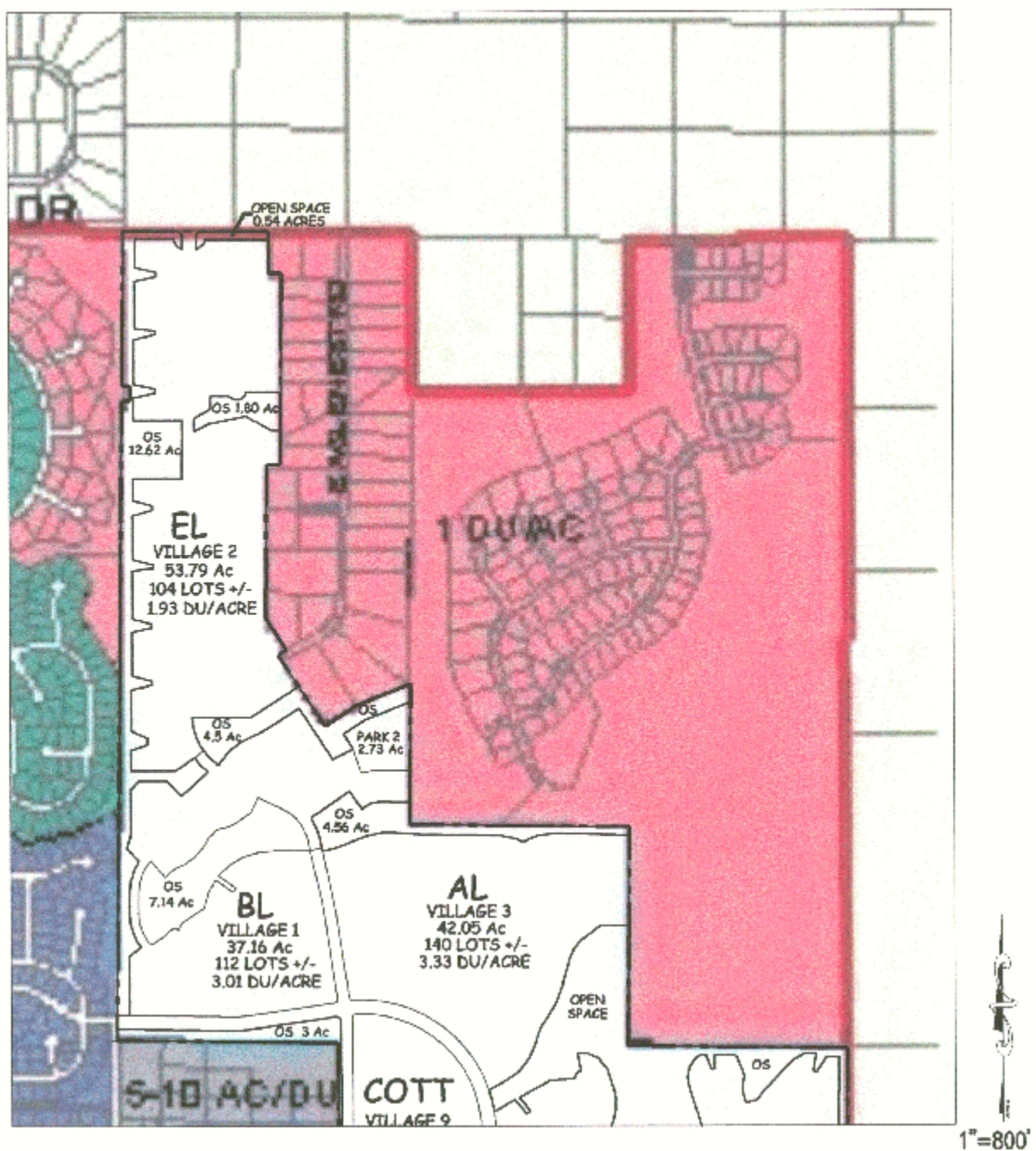


FIGURE 1: VICINITY MAP



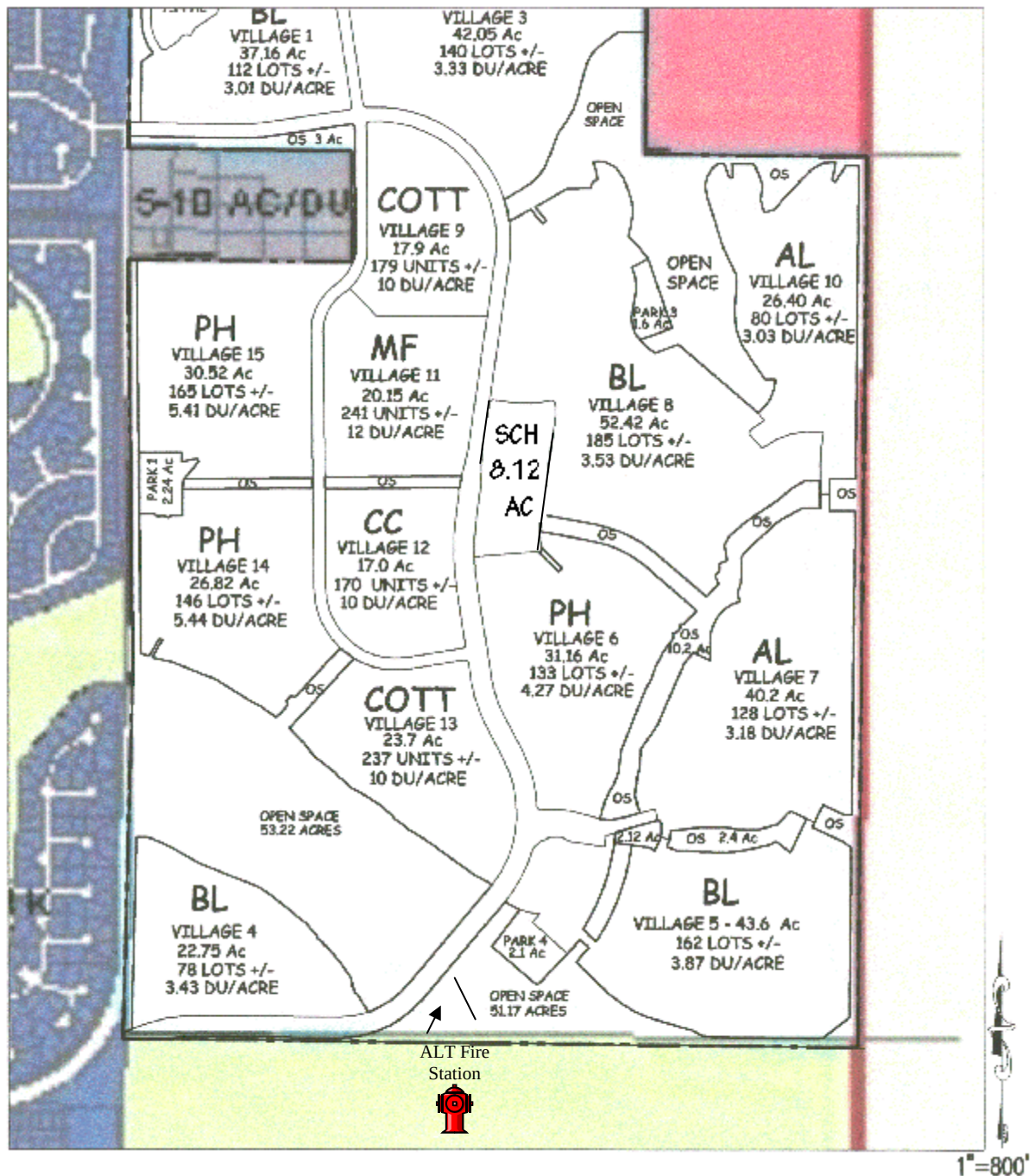


FIGURE 2B: PROPOSED MASTER PLAN

DEVELOPMENT AND PLANNING PROCESS

INTRODUCTION

In 2002, the Foothills entered into a purchase agreement with Tim Tucker and the Estate of Scott Tucker for the 690 acres adjacent to Wingfield and another 60 acres in Section 18. The 750 acres was annexed into the City of Sparks and the 690 acres was zoned NUD in May of 2003. The remaining 60 acres was zoned A-5 under the same action. This Development Standards Handbook is specific to the 690 acre parcel that was zoned NUD in May 2003. The 60-acre parcel in Section 18 remains zoned A-5 and is not part of this Handbook.

GOALS, POLICIES AND PROCEDURES

The master plan for the Foothills community is consistent with the plans, policies and action programs identified in the NSSOI. The specific goals and policies to guide the development of the project are outlined below:

DEVELOPER'S PROJECT GOALS

To provide the City of Sparks with an exciting, environmentally sensitive planned community featuring a mix of quality residential, commercial, open space and recreational uses within the unique setting of the foothills next to Wingfield Springs.

POLICIES

- Provide for continuity in the development of the residential and non-residential aspects of the project and ensure compatibility between uses through a Development Agreement, a Design Review Committee ("DRC"), a Development Standards Handbook and the recordation of Covenants, Conditions and Restrictions ("CC&R's"). These documents will generally parallel Wingfield Springs to assure conformity of the development, but have been modified to reflect changes proposed by City planning staff as a result of changes in the City's policies toward development within the City of Sparks since the approval of Wingfield's Development Handbook.
- Encourage a mix of housing densities, sites, styles and settings, through the establishment of unique and individual residential villages.
- Provide for a safe, efficient and aesthetically pleasing access and circulation network which will include roadways and pathways of varying types and styles within the project.
- Require the design and use of compatible and coordinated lighting, signage and fencing throughout the project.
- Maintain significant site features.

- Develop an open space network by integrating public and private open space and recreational areas into the project and providing for connections to trails outside of the project boundaries.
- Encourage walking and biking through development of an extensive pathway system throughout the project. Promote car-pooling and transit by accommodating future development of bus stops, turnouts and shelters at appropriate locations.
- Orient residential and non-residential lots and structures to take advantage of views to the wetlands, lakes, open space, recreational and golf course areas and the valley beyond.
- Provide for the management of storm water by enhancing and blending drainage features into the open space network.
- Promote water conservation throughout the project.
- Provide for and promote resource efficient landscaping and building design, using water conserving irrigation systems throughout common areas and development parcels within the project in accordance with the City of Sparks Landscape Ordinance, Building Code and Water Conservation Ordinance.
- Require site sensitive grading and erosion control practices, in accordance with the City of Sparks Hillside Development regulations, Washoe County District Health and Nevada Division of Environmental Protection regulations and best management practices.
- Promote clustering where appropriate to ensure aesthetic qualities of the property are maintained.
- Assure that each development provides the appropriate amenities, infrastructure and water rights to support itself.
- When available, and if economically and logistically feasible, utilize reclaimed water resources as appropriate to irrigate some or all of the parks and open space.

PROCEDURES

DEVELOPMENT REVIEW PROCESS

PURPOSE / INTENT

The review and approval process established for subsequent submittals under the Development Agreement and this Development Standards Handbook embodies the intent of the City of Sparks procedures and practices, but simplifies and streamlines certain steps because of the nature and scope of the controls and assurances provided by the Foothills Development Standards Handbook. All of these procedures and practices are consistent with the goals and policies of the City of Sparks and the State of Nevada.

ADMINISTRATORS

The Sparks City Manager or his/her designee shall be the administrator or his designated representative, hereinafter referred to individually or collectively as the “Administrator” of this process. The Administrator shall have the authority to interpret and make decisions based on plans, standards, and guidelines contained herein according to the scope of the responsibilities granted in the Sparks Municipal Code.

REVIEW PROCESS

PLAN PROCESS AND SUBMITTALS

Submittals

Upon receipt of an Application requesting a use defined in this Final Development Plan and Design Standards, the Developer or Builder shall conform to the following procedures:

- a. Conformance Review Process - (Follows the existing Site Plan Review process and procedures)
 - The Applicant must attend with their design representatives a “Pre-Submittal” meeting with the Administrator prior to submittal of the Conformance Review to the City.
 - A Plan Review Meeting will be set up by the Administrators with the Applicant upon determination by the City that the application is complete. Refer to the following Submittal and Conformance Review Sections a, b and c for details regarding the application. *Conformance Review* will be by the staff and reviewing agencies.
 - The Applicant will submit Improvement Drawings and reports in accordance with the Final Development Plan Design Standards. These improvement drawings and reports will be the same as those required for a Tentative Map submittal, including a house fit plan. The initial submittal for each Development Parcel will include all phases of that particular development parcel, or establish a single conformance review process for the entire development parcel.
 - The Administrators and reviewing agencies will review the application submitted for conformance with this Final Development Plan, Design Standards and Regulations, City Code, the Development Agreement, and Nevada Revised Statutes.
 - A Conformance Review Letter will be issued specifying any additional information or changes necessary to be incorporated into the Final Map submittal. A Final Map submittal shall be submitted within two (2) years after the date of the Conformance Review approval. The Final Map submittal and review process shall comply with NRS 278.360 - 278.460, inclusive. If not recorded within two (2) years from the date of the Conformance Review approval, then the Conformance Review shall be

terminated and the approval is null and void. The Applicant may appeal any decision made by the Administrator.

Pre-Submittal Meeting



Conformance Review by Administrators and reviewing agencies - (Follow Tentative Map Submittal requirements.)



Issuance of Conformance Review Approval Letter



OK

Final Map Submittal



Final Map Review Process



OK

Record

The time line for submittals and appeals will be in accordance with the current City of Sparks' Standards and Guidelines at the time of submittals for Conformance Review and Final Map approval.

- b. Upon receipt of an application requesting a use that is different from the use defined in this Final Development Plan and Design Standards, a Conformance Review will be required. The different use must be in general conformance with the Final Development Plan and Design Standards but may utilize a different design concept or unit configuration. The Administrator shall determine if the difference can be found to be in substantial compliance, or if an amendment to the Development Plan, Design Standards and Regulations is required following the procedures in SMC 20.18 and NRS 278A.550.

Conformance Review Process

Single Family Detached / Single Family Attached / Multi-Family Residential Development Requiring Individual Lots / Units.

Preliminary Map

After the pre-application meeting conference, the Applicant shall prepare and submit a preliminary map submittal, containing at a minimum the following items:

- A. A site plan (minimum scale = 1 inch = 40 feet) indicating the proposed platting of the lots (including the proposed building setbacks);
- B. A site plan (minimum scale = 1 inch = 40 feet) indicating proposed locations of utilities; and
- C. A site plan (minimum scale = 1 inch = 40 feet) indicating preliminary grading illustrating existing and proposed contours at one-foot intervals, proposed spot grades, proposed finish floor elevations, and proposed drainage patterns;
- D. A site plan (minimum scale = 1 inch = 40 feet) indicating street landscaping and project entry landscaping / monument locations and details (including proposed building materials and colors); and
- E. Preliminary architectural building elevations of all four (4) sides of the proposed single family detached / attached / multi-family model(s) (including proposed building materials and colors).

The preliminary map submittal shall only be delivered to the City for review on the same dates as the City of Sparks Tentative Subdivision Map submittal deadline dates.

The Applicant shall provide sufficient numbers of the preliminary map submittal to the City to ensure that City staff shall distribute these copies to the City staff charged with reviewing tentative subdivision maps and those agencies as set forth in Nevada Revised Statutes 278.335.

The Applicant, City staff and other pertinent reviewing local and / or state agencies shall convene at a prescribed time in a scheduled Plan Review meeting to review the project and determine if the application is in conformance with the approved standards in the Foothills Planned Development Standards Handbook.

If at the Plan Review meeting the proposed preliminary map submittal is determined to be in compliance with the Foothills Planned Development Standards Handbook, then the preliminary map approval shall follow the standards as stated in Nevada Revised Statutes 278.360 in regard to presentation of a final map or series of final maps, extensions of time and termination of the preliminary map approval.

If at the Plan Review meeting the preliminary plan is determined to not be in compliance with the Foothills Planned Development Standards Handbook, then the Administrator shall notify the Applicant in writing as to the manner in which the application has been deemed not in compliance with the Foothills Planned Development Standards Handbook. The Applicant can appeal the decision of the Administrator to the Planning Commission or re-submit at the next available tentative map submittal date.

Final Map

Once a preliminary map has been deemed in compliance with the Foothills Planned Development Standards Handbook, then the Applicant can submit to the City a final map application to process for review and approval through the manner outlined in Nevada Revised Statutes 278.360 - 278.460, inclusive. Lot numbering for the final maps shall reflect the Foothills' Unit number and the unit's lot number (ex. Foothills Unit 10, lot 45 shall be designated Lot 1045 on the Unit 10 final map).

Multi-Family Residential (Single Lot) / Non-residential Development

Conformance Review:

Conformance review for multi-family residential (single lot) and non-residential developments shall comply with the Site Plan Review process as defined in the Sparks Municipal Code 20.31. After the pre-application meeting conference, the Applicant shall prepare and submit a Site Plan Review in accordance with City of Sparks requirements and containing at a minimum the following items:

- A. A site plan (minimum scale = 1 inch = 40 feet) indicating the proposed platting of the lots (including the proposed building setbacks)
- B. A site plan (minimum scale = 1 inch = 40 feet) indicating proposed locations of utilities; and
- C. A site plan (minimum scale = 1 inch = 40 feet) indicating preliminary grading illustrating existing and proposed contours at one-foot intervals, proposed spot grades, proposed finish floor elevations, and proposed drainage patterns;
- D. A site plan (minimum scale = 1 inch = 40 feet) indicating street landscaping, site landscaping and project entry landscaping / monument locations and details (including proposed building materials and colors); and
- E. Preliminary architectural building elevations of all sides of the proposed single family detached / attached / multi-family model(s) (including proposed building materials and colors).

As the Site Plan Review process is an administrative review, if the application is found in conformance with the Foothills Planned Development Standards Handbook, then upon receipt of the written confirmation of compliance, the Applicant can submit a building permit for the project to the City. Once approved, the Site Plan Review shall follow standards as outlined in Sparks Municipal Code 12.31, including modifications, amendments, extensions of time and expirations of Site Plan Review permits.

As with the Site Plan Review process in the Sparks Municipal Code, an approved use cannot be initiated until the Site Plan Review conditions of approval have been fulfilled and the Site Plan Review Permit certificate has been issued.

If found not in conformance, the Administrator shall then notify the Applicant in writing as to the manner in which the application has been deemed not in compliance with the Foothills Planned Development Standards Handbook. The Applicant can appeal the decision of the Administrator to the Planning Commission or re-submit at the next available Site Plan Review submittal deadline date.

Other Types of Review

Special Use Permit

All uses requiring review and approval by a Special Use Permit shall follow the processes as outlined in Sparks Municipal Code 20.13 and Nevada Revised Statutes 278.315.

Site Plan Reviews

All new construction requiring review and approval through the Site Plan Review process shall follow the methods as outlined in Sparks Municipal Code 20.31.

Flexibility

The Master Plan and Development Standards contained herein are intended to depict the general nature of the residential, non-residential and open space at the Foothills. Sufficient flexibility shall be allowed to permit detailed planning and design at the time of actual development. There can be some shifting around of density within the development due to site constraints as long as it is not a significant amount (5% of subdivision) and the shift does not conflict with the approved plan significantly nor exceed the maximum number of units for the Foothills. The Administrator shall determine compliance with the Development Standards Handbook and the need for an amendment to the Development Standards Handbook.

Omissions

When issues arise that are not covered in this Development Standards Handbook, the provisions and definitions of the City of Sparks Municipal Code and Subdivision Regulations per NRS in effect at the time of submission to the City for entitlement shall apply.

Amendments to Final Development Plans

Minor Deviations

The Administrator shall have the ability to allow for minor deviations as outlined in Sparks Municipal Code 20.07.020 and shall be subject to the receipt of written approval of the affected surrounding property owners by the Administrator along with the minor deviation request. All requests shall be made and approved by the Administrator in writing and must be received prior to submittal of a building permit for the proposed deviation.

Major Amendments

Major deviations will be defined as any deviation that changes the intent of the approved Final Development Plan and Design Standards, such as zoning changes, deviations greater than twenty percent (20%) to the established development standards and / or movement of land use classifications, which are not in conformance with the development standards described within this Final Development Plan and Design Standards. Major deviations shall be handled as amendments to this Final Development Plan and Design Standards and shall be reviewed and approved through the tentative and final approval processes as outlined in Nevada Revised Statutes 278A.440 - 278A.590, inclusive and Sparks Municipal Code 20.18.

Appeals

The Applicant may appeal any decision, comments or recommendations of the Administrator to the City Council. The City Council shall hear the appeal and either affirm, modify or reverse the determination of the Administrator. Such decision of the City Council may be appealed as provided by applicable law.

EXISTING CONDITIONS

SITE OVERVIEW

The property that makes up the 690 acres of the Foothills stretches from the boundary line of Section 18 held by the BLM to La Posada to the North (See Figures 3A and 3B). The property resembles the State of Idaho in configuration with the “pan handle” to the North. The property takes in the entire area of Section 7 and parts of Section 6. On the west the property is bordered by Wingfield Springs and Cimarron Development. On the east toward La Posada it is adjacent to Countryside Development. As the property stretches south and east in Section 7, it borders BLM property.

EXISTING OWNERSHIP

The Foothills is the owner of the subject property having acquired the property from Tim Tucker and the Estate of Scott Tucker. The property consists of 750 acres, 690 acres of which are located in Sections 6 and 7 and are the subject of the Development Agreement and Development Agreement Handbook.

TOPOGRAPHY

NORTHERN SECTION

The portion of the parcel in Section 6 is an approximate 100-acre irregularly shaped parcel that is bordered on the north by La Posada Road; on the west by the Cimarron Units 2 and 5 residential development; on the east by the Wyndham Hill (Cimarron East) Phases 2, 3, and 4 residential development; and on the south by the undeveloped land of the southern section of the subject property. Access to the northern section is from La Posada Drive on the north. The section is fenced on the northern, western, and eastern boundaries. There are existing overhead power lines along La Posada Drive and the western edge of the section. There are also two Washoe County Utility water well pump stations located near the western boundary of the northern section. Power line and water line utilities are present within the northern section for both of these wells.

The northern section slopes to the west at approximately 2 to 3 percent. Drainage across the northern section is by sheet flow and small channels flowing to the west. A large, natural drainage approximately 4 feet in depth is present draining to the west approximately 3,700 feet south of La Posada Drive. A culvert along the western edge of the section collects runoff from the northern section. Total relief on the northern section is approximately 20 to 30 feet. Vegetation on the northern section is predominately grasses and sagebrush 1 to 3 feet in height with a low density in the north and increasing vegetation density in the southern portion of the section.

SOUTHERN SECTION

The portion of the parcel in Section 7 is an approximate 590 acre square shaped parcel that is bordered on the north by undeveloped land of the northern section of the subject property and by Wyndham Hill (Cimarron East) Phases 2, 3, and 4 residential developments; to the west by Wingfield Springs residential developments; and to the east and south by undeveloped land. Access to the southern section is from an

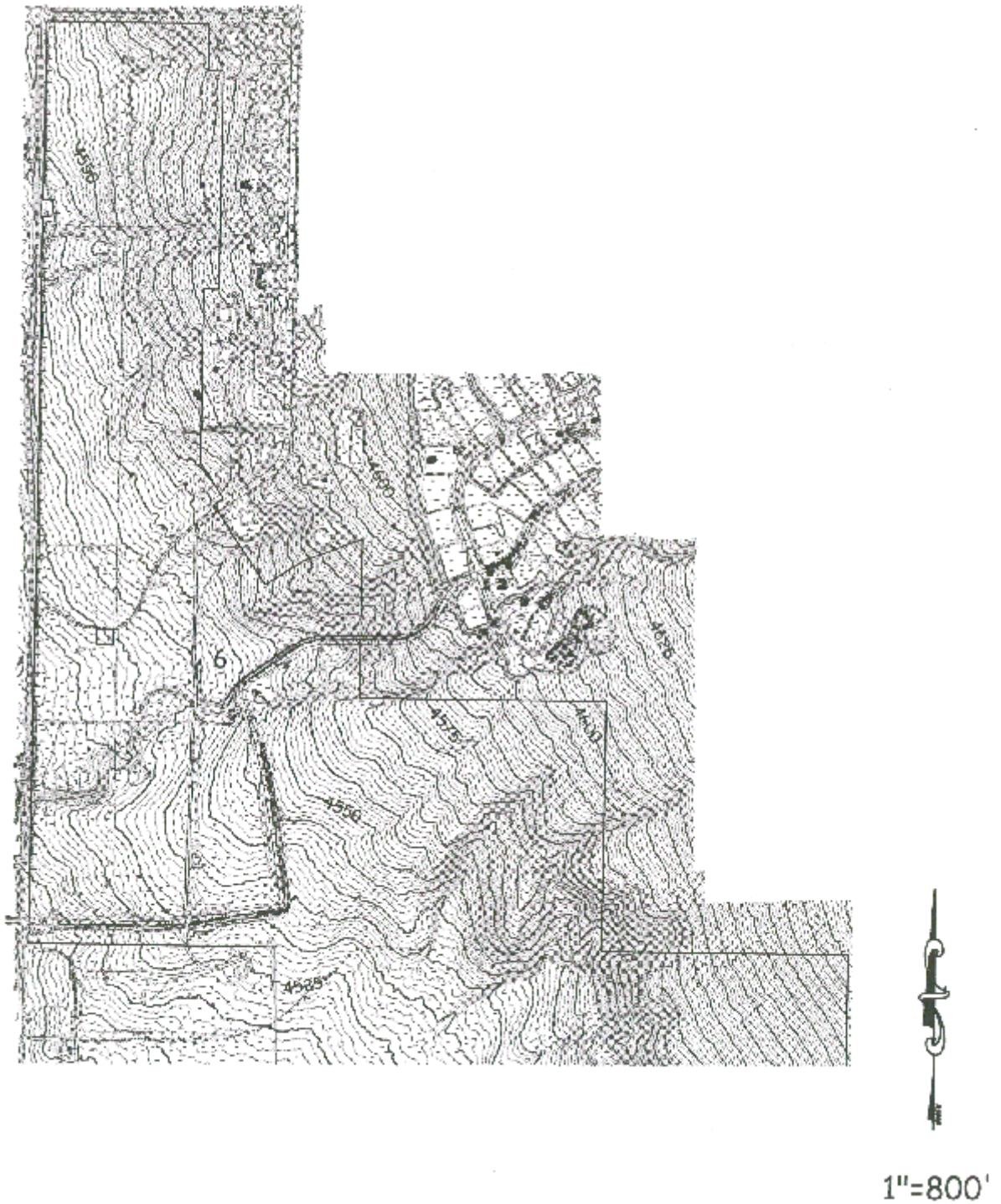


FIGURE 3A: TOPOGRAPHIC MAP

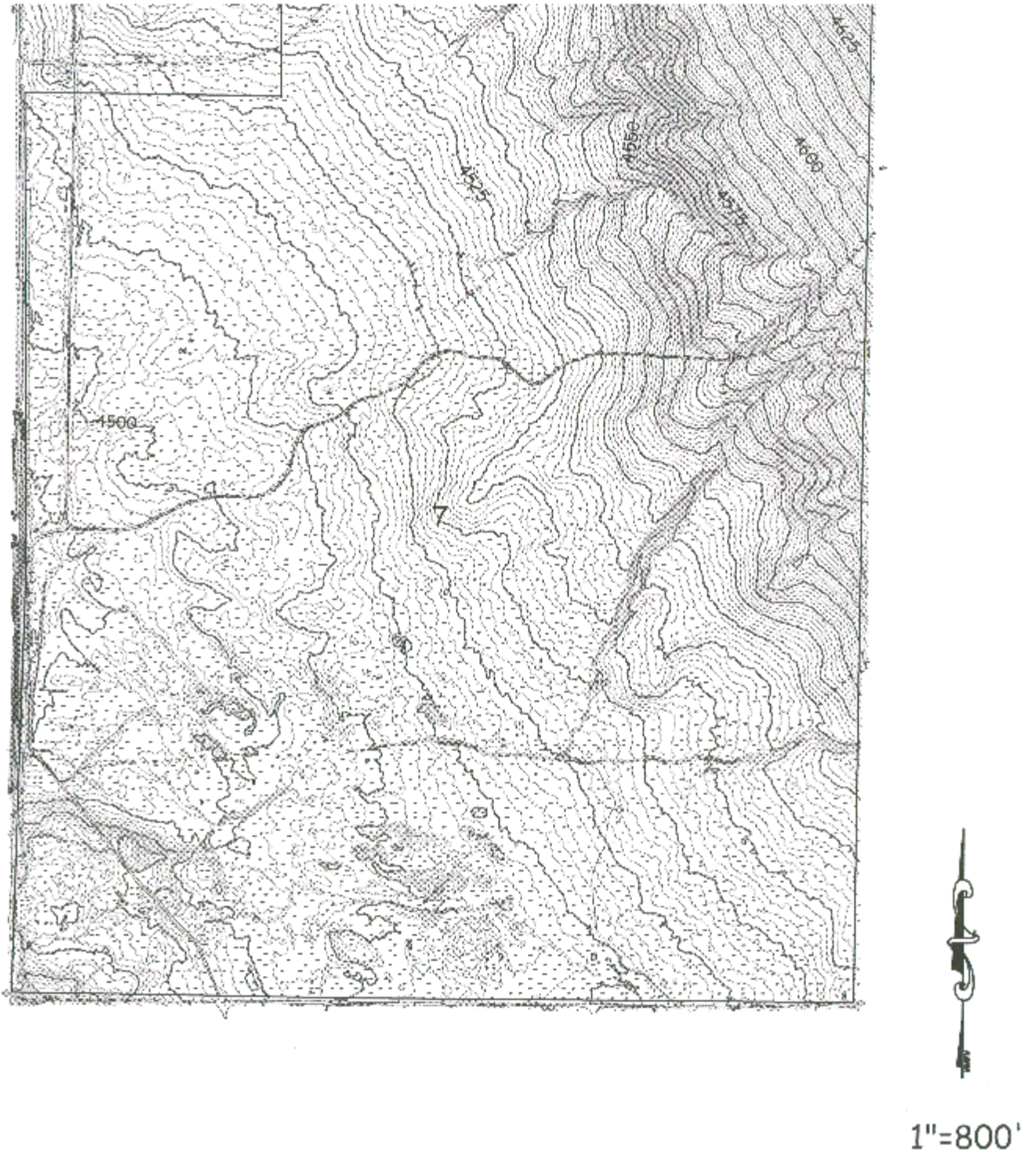


FIGURE 3B: TOPOGRAPHIC MAP

unimproved road extension of Vista Boulevard from the southwest corner of the section. The section is fenced along the western edge. Section 7 contains a 20-acre parcel owned by others in the northwest corner that is not a part of the project. There are existing overhead power lines along the southern boundary of the section. There is also a Washoe County Utilities water well pump station adjacent to the northwest corner of the section. Power line and water line utilities are present for this well. An underground Tuscarora natural gas line is present along the eastern edge of the parcel, however it is not on the subject property.

The southern section contains a fault-truncated alluvial fan in the northeast corner and gently sloping topography in the remainder of the section. The alluvial fan surface slopes to the southwest at approximately 2 to 4 percent and up to 50 to 60 percent along the truncated edges. Total relief in the northwest corner is approximately 120 feet. The remainder of the section slopes to the southwest at approximately 2 to 3 percent. Drainage across the southern section is by sheet flow and several drainage channels. Vegetation in the northwest corner of the section on the alluvial fan surface consists of grasses and sparse sagebrush. Vegetation in the remainder of the section consists of dense sagebrush and grasses of 1 to 3 feet in height.

HYDROLOGY

Storm drainage planning and design for the Foothills will be in accordance with the Spanish Springs Storm water management plan and the City of Sparks HEC-1 models for the Spanish Springs Valley. The City of Sparks HEC-1 model shall be amended with a Drainage Plan Master Study relative to this site and the Spanish Springs Valley prior to the commencement of any construction activity. This Drainage Master Plan Study should outline developed drainage patterns, flows, volumes and major facility sizing in accordance with the development master plan contained within the Foothills Development Standards Handbook.

The site shall be developed with open space corridors located along existing and proposed drainage way paths. Off site flows from the project's east boundary will pass through these corridors in its existing defined drainage pattern to the Vista Boulevard extension, which bisects the project site from north to south. This design method shall be used to provide for a storm water management plan which will integrate into existing land form while providing logical discharge points for collected flows from within the residential villages and roadway sections located east of the Vista Boulevard extension. Once the offsite and collected flows generated east of the Vista Boulevard extension reach the roadway they will be perpetuated through an urban storm water management system consisting of pipes and improved channels. These improvements will carry flows from the Vista Boulevard extension to the projects west boundary. There will be three ultimate collection points along the project west boundary each of which will be defined by a regional detention facility. These regional detention facilities will be sized to provide for the necessary detention of peak flow and volume to insure no adverse impact to downstream facilities.

The goal of the storm water management plan for this development will be to provide for a method of collecting off site and on site flows along existing defined drainage corridors, which will be located within open space providing an opportunity to create areas of passive recreation. These drainage ways shall be left in their native condition where possible. Where improvements are required to existing drainage ways methods of stabilization and erosion control should be employed which will minimize the visual impact of the improvement while meeting the necessary design requirements. These methods will

consist of the use of soil-reinforcing fabrics and re-vegetation where possible and the grading of channels in a sinuous, rather than linear, form. The urban storm water management system shall be located and employ design techniques, which will minimize the visual impact to residential units. The three regional detention facilities shall be designed to integrate into the existing topography when possible.

Through the phased construction of this development, permanent and temporary storm water management facilities shall be constructed to provide for runoff mitigation. The facilities will be designed to handle flow as well as volume. In addition, precaution will be taken to mitigate silt migration off the project. The maintenance of these temporary and permanent facilities shall be ongoing to insure that facilities perform as designed. All grading and revegetation of the construction areas and storm water facilities shall comply with Nevada Department of Environmental Protection standards for storm water discharge in conjunction with the projects storm water discharge permit

VEGETATION

Vegetation on the site consists mainly of sagebrush, black greasewood, bud and wild rye, shadscale, rabbit brush, caric sedge, Indian rice grass, white sage and other grasses.

GEOLOGIC CONDITIONS

Preliminary geotechnical studies were completed by Black Eagle Consulting.

The site lies on broad alluvial fans of the Pah Rah Range within the Spanish Springs Valley in a area mapped by the Nevada Bureau of Mines and Geology (NBMG) (Bell and Bonham, 1987; Garside and Nials, 1998) as Quaternary Age alluvial fan deposits of the Pah Rah Range, alluvium, and older alluvial fan deposits. The Quaternary alluvial fan deposits are described by the NBMG as *gray to brown silty sand and pebbly medium sand*, the alluvium as *unconsolidated, predominately arkosic, sand and gravelly sand*, and the older alluvium deposits as *primarily consisting of semi-consolidated pebbly to bouldery arkosic sand*. Soil conditions encountered during the geotechnical exploration generally corresponded to those mapped by the NBMG. The site generally consists of silty sand with gravel and poorly graded sand with silt and gravel to the depths explored with thin near-surface clayey sand present in the northern half of the northern section and most of the southern section. Near-surface clay soils are covered by a thin veneer of aeolian (wind-blown) sand. Clayey sand was present from approximately 5 feet below the ground surface to the depths explored in the area adjacent to La Posada Drive. The clayey sands were described as moist, medium dense to very dense, and as exhibiting medium plasticity. These clayey sands contained between 35 percent and 45 percent medium plasticity fines. Silty sand soils encountered during our exploration in most of the site were typically moderately to highly cemented. These cemented soils ranged from 1 to 1-½ feet to over 8 feet in thickness with an average of 7 feet. Excavation into these cemented soils was very difficult using a Case 580E rubber-tired backhoe.

Ground water was not encountered during exploration and is expected to lie at a depth well below that which would affect construction.

ARCHAEOLOGICAL RESOURCES

In December 2002 Robert Kautz of Kautz Environmental Consultants, Inc. of Reno, Nevada (Kautz Environmental Consultants) was contracted to conduct a cultural resource investigation of a block of 690 acres for the Foothills.

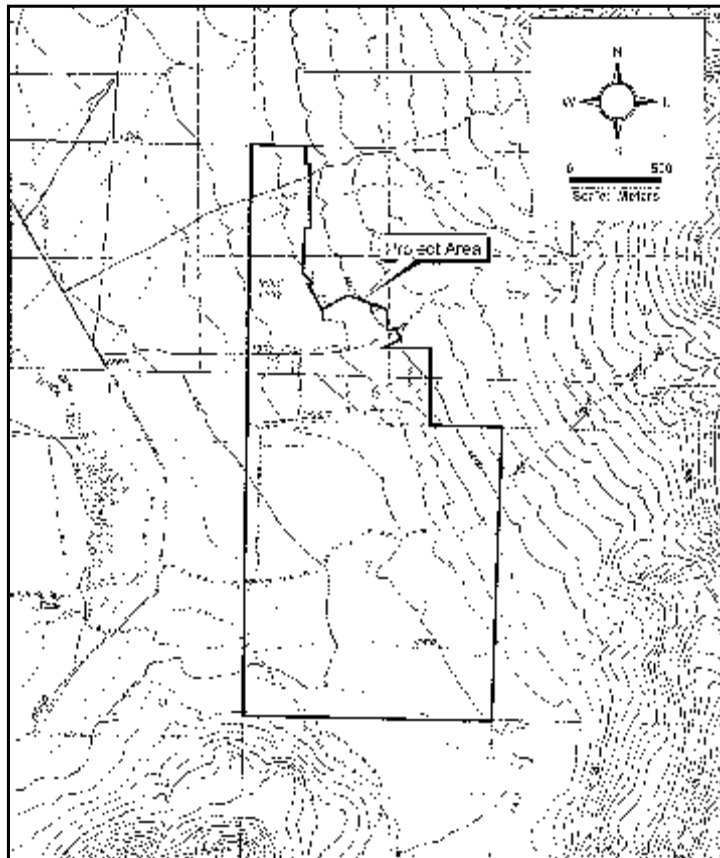
A pedestrian inventory and a rigorous testing procedure (trenching and excavation) was conducted between January 2 and February 27, 2003. Over-all project management was under the supervision of Robert Kautz, Ph.D., while field work survey and testing phases were directly supervised by Kautz Environmental Consultants staff archaeologists Teri H. Christenson, BA., Monique Kimball, M.A., and William “Jerry” Jerremms, M.S. Archeological crew technicians included Renee Babcock, B.A., Langdon Plaster, B.A., Heidi Ogle, B.A., Danielle Cozart, B.A., and Andrew R. Musyopf, B.A. Project geomorphologist was Stephen Metzger, Ph.D. while Jerry Jerremms additionally provided analysis of project soils.

The report was completed in May and forwarded to the City of Sparks and the State of Nevada for review.

The report has received final state approval. The following measures will be taken consistent with such approval:

Project Area Map. Base maps, Vista, Nev. (1975, Photorevised 1982) and Griffith Canyon, Nev. (1980), 7.5' Topographic Quadrangles, U.S.G.S., T.20N., R.21E.

1. Prior to development, an approved Mitigation Plan and Emergency Discovery Plan shall be implemented.
2. Should any prehistoric or historic material be discovered outside the context of an approved mitigation activity, all work shall stop within 25 feet of the discovery and the project archaeologist shall be notified within 24 hours. Given the lack of fragile structures on the property, Dr. Kautz, the project archaeologist, recommends this distance as adequate.
3. The project archaeologist will inspect the find and if it is deemed a new and important discovery, will immediately notify a representative of the Nevada Division of Historic Preservation and Archaeology.



AIR QUALITY

The Foothills is located within an air quality attainment area. However, the Regional Planning Governing Board has adopted regulations for the Spanish Springs Sphere of Influence on June 16, 1993. Only stoves on the low emitting list or decorative gas appliances shall be installed in the development.

Prior to the commencement of construction of each phase or partial phase of this project, a dust control plan shall be submitted to the Air Quality Management Division of the Washoe County District Health Department for review and approval. All construction shall be conducted in accordance with the condition placed upon the applicable approved dust control plan, as described in Section 040.030(A) of the Washoe County District Board of Health Air Quality Control Regulations.

MASTER PLAN

THE MASTER PLAN

The Master Plan was developed consistent with the physical characteristics of the site allowing the creation of open space corridors, trails and maintain the drainage flow through the southern portion of the property. Streets, land use patterns and densities in the project have been planned to be in accordance with the NSSOI.

The Master Plan proposes a mix of residential villages with a range of lot sizes, and densities similar to Wingfield Springs. The project anticipates the development of an eight acre village commercial site. Extensive pedestrian / bicycle trail and open space will link the Foothills with the Wingfield and Cimarron communities.

A depiction of the Master Plan is contained in Figures 6A and 6B. The Lot and Acreage Summaries are contained on page III-10.

COMPATIBILITY WITH SURROUNDING PROPERTIES

Surrounding properties to the south and east of the Foothills are undeveloped and held by the Bureau of Land Management. The northeast portion of the property borders Countryside development in the County. On the west side of the Foothills, the Wingfield and Cimarron communities are fully developed. There is an outparcel consisting of 20 acres on the west border adjacent to Campello Drive extended.

The Master Plan has been developed with sensitivity to the existing uses, as well as planned land use designation identified in the NSSOI. The relationship between the existing communities of Wingfield Springs and Cimarron requires that the proposed Foothills development match zoning along the north, northeast and northwest end of the project as it approaches La Posada. Lot sizes will increase to one acre along Eagle's Nest on the north east side of the development.

A fifty foot buffer is planned along the west side of the property and also along the east and west sides bordering the BLM Land. These "buffer" areas will be landscaped multi-purpose trails. The Foothills will be requesting the abandonment of 65 feet of right-of-way along the west side of Wingfield that is no longer needed with the relocation of Vista Boulevard proposed with this development. The 65 feet will become a common area trail. The Foothills will have a networked trail system that will tie each of the villages together. A regional trail will be constructed on the west side of the Foothills south to Vista Boulevard and East to La Posada. The Foothills is also willing to work with neighboring property owners who wish to construct an equestrian easement, as further discussed in The Pedestrian and Recreational Circulation System of Section IV of this handbook.

PHASING STRATEGY

Initial phases of construction will involve master grading, and construction of the extension of Vista Boulevard from Wingfield Parkway. In addition, grading and detention facilities will be constructed on the northern end of the subject property to accommodate drainage and access agreements with The Highlands at Cimarron East by Reynen and Bardis.

The project is proposed to be developed in three phases, with development occurring on the southern end and off of Campello Drive in the first phase (See Figures 4A, 4B, 4C as well as Figure 5). Vista Boulevard will be extended to the Village Commercial area four lanes wide in the first phase and be completed to Campello Drive, two lanes wide, in the second phase. The northern end of the development will be completed in the third phase, also with two lanes.

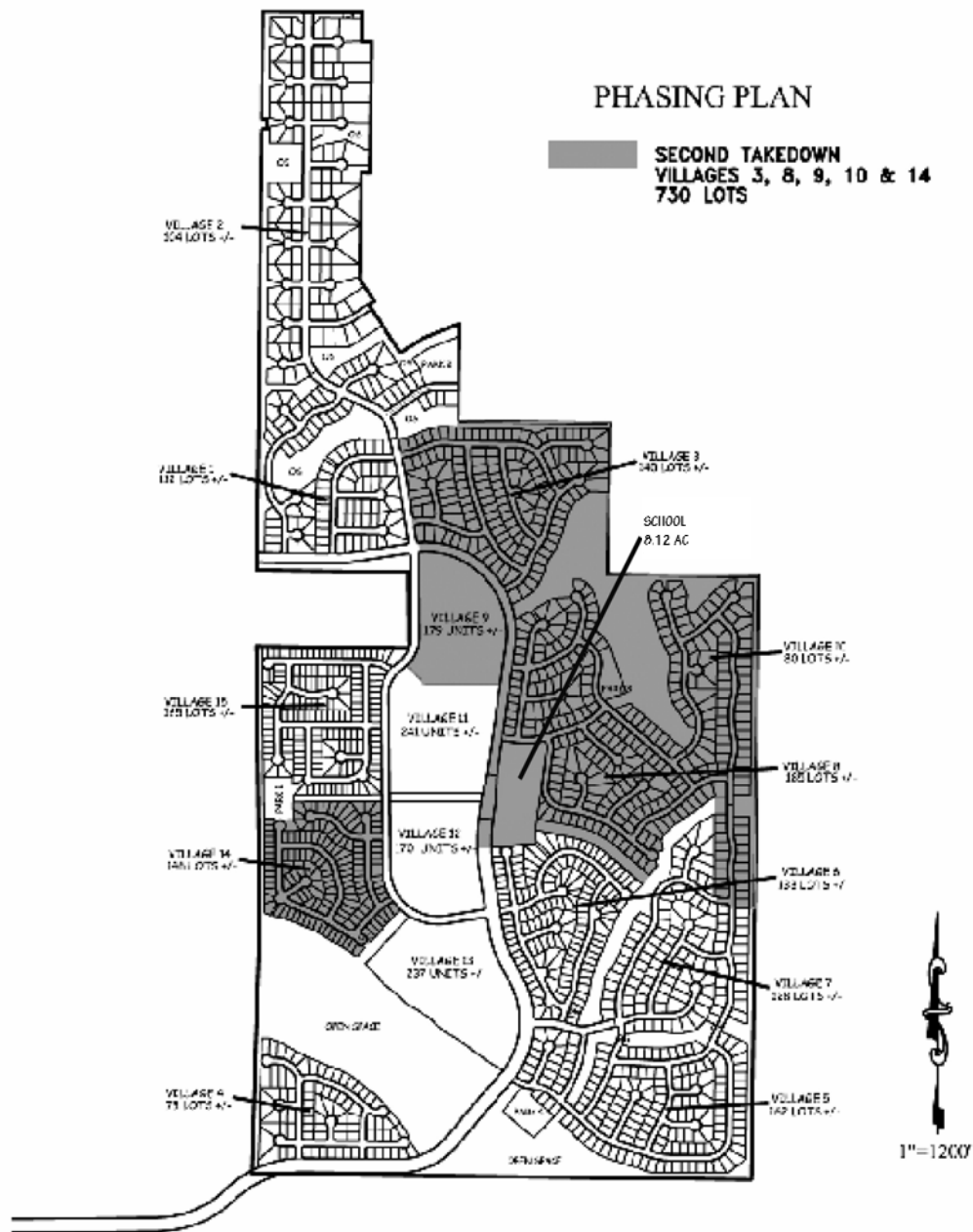
As indicated above, four travel lanes will be constructed in the first phase of Vista Boulevard. A collector street will connect Vista Boulevard to La Posada to the Village Commercial Center and then transition to two lanes as it heads north in the second phase. The new alignment of Vista Boulevard will be the main utility corridor. Other utilities will be placed in the portion of the existing Vista Boulevard as well as the abandoned right-of-way along Wingfield Springs. 65 feet of right-of-way was dedicated for Vista Boulevard originally, but with the internalization of Vista Boulevard, proposed herein, the right-of-way is no longer needed. This right-of-way will be requested to be abandoned in order to facilitate the development of 65' wide common area for trails and utilities. The Foothills will work with the Homeowner's Associations of Cimarron and Wingfield Springs in an attempt to consolidate the existing pathways on the west side of the Foothills into one Regional trail.

The actual time frames associated with build-out will depend on market forces, however it is estimated that the project take will between 7 to 10 years to build-out. A proposed project schedule is included in Figures 4A, 4B, 4C as well as Figure 5.

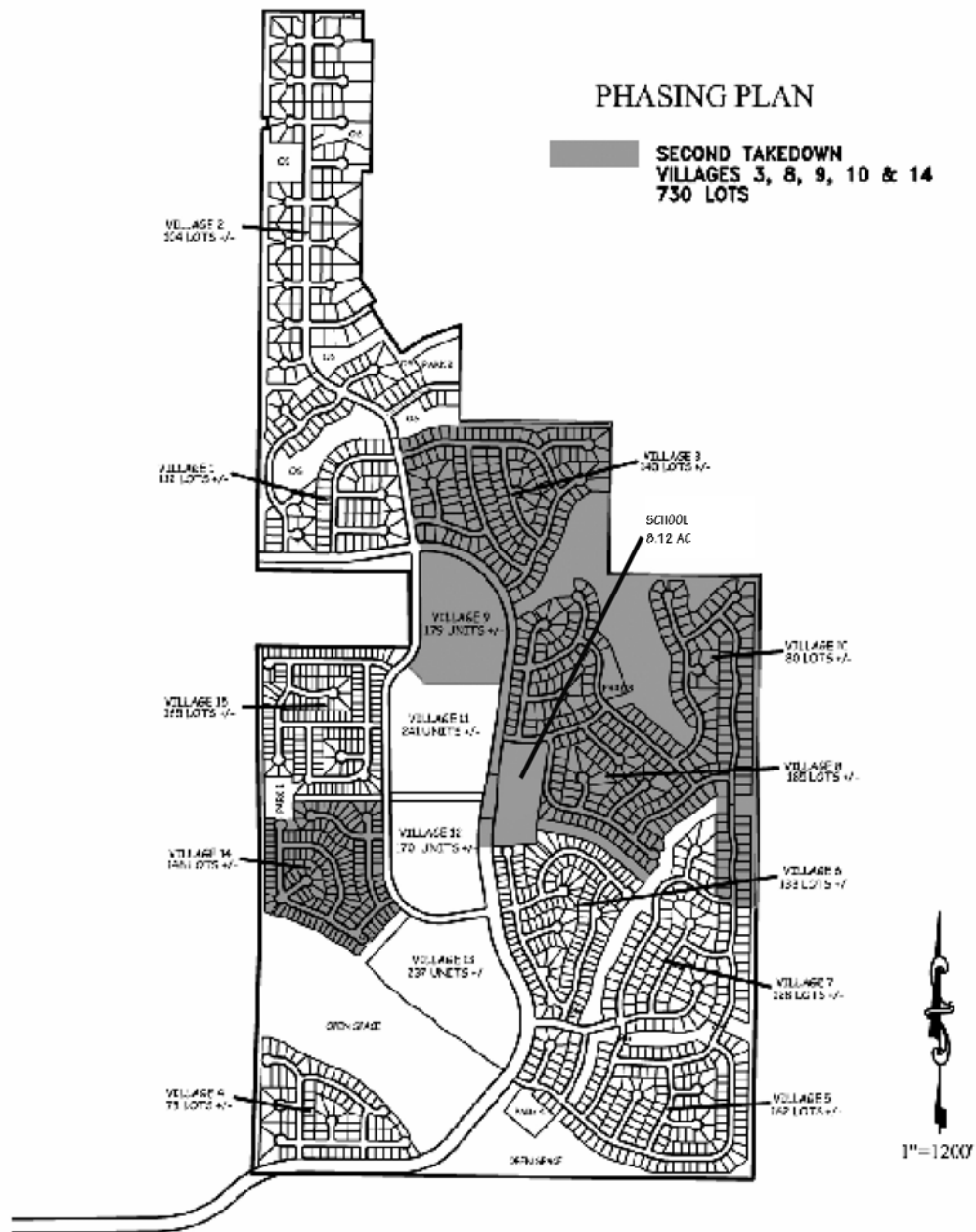
Residential amenities, including pedestrian and bicycle trails will be developed with construction of the adjacent individual villages and the backbone infrastructure. Completion of the various parks will be tied to completed unit count to ensure that the needs of the residents are met.

Residential construction tax revenue collected in the interim and credits against future revenues will be used by the developer to construct the parks in accordance with the City of Sparks' Recreation Department requirements. A residential park tax agreement will be completed with the City of Sparks that details timing on each park to be constructed. The construction of parks will be phased based on the number of homes constructed and taxes collected. Upon completion, the parks will be dedicated to the City of Sparks. A proposed park tax estimate and proposed park phasing plan is included in Exhibit 5.

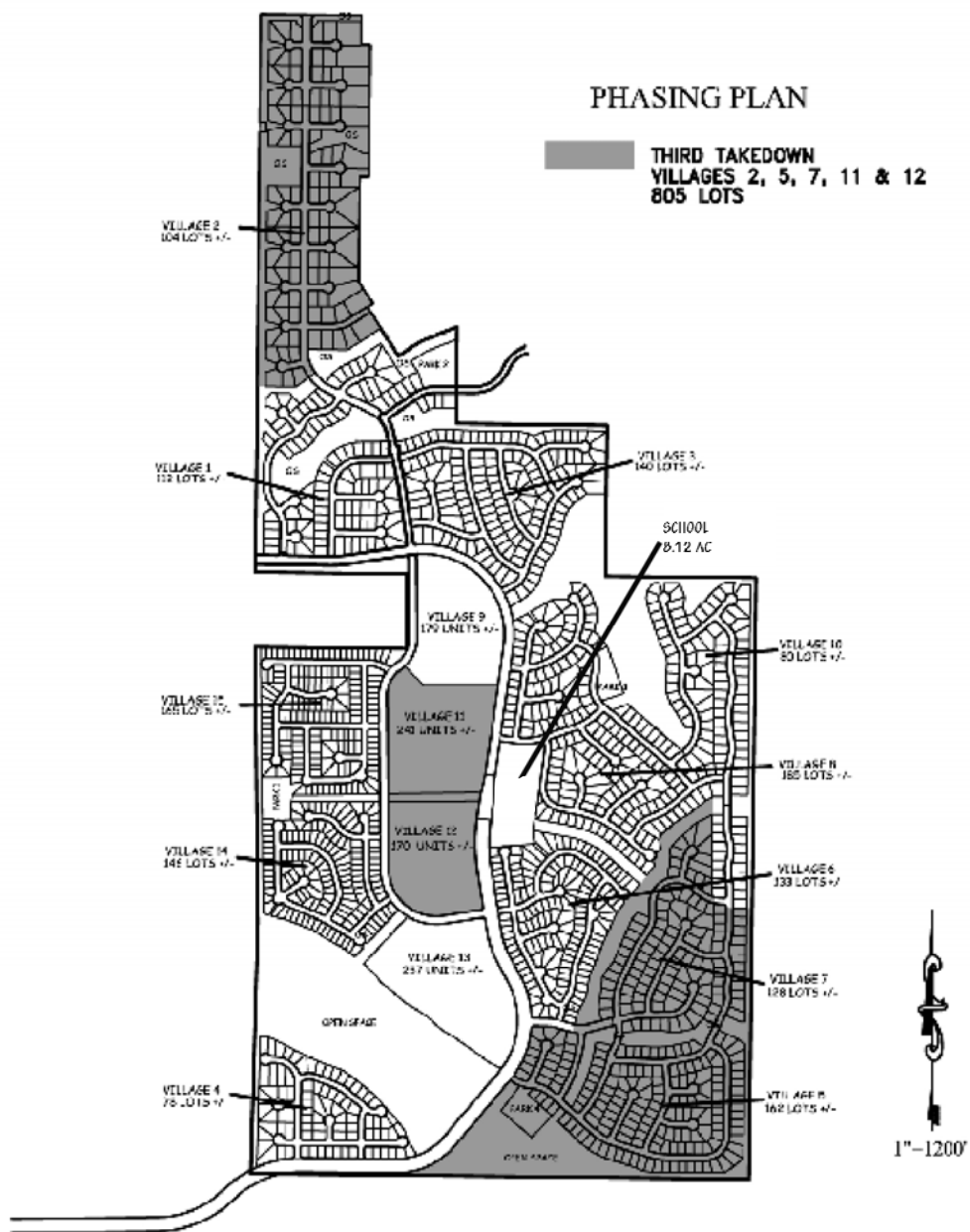
A site maintenance Agreement with the City of Sparks shall cover maintenance of drainage ways, trails, detention facilities and other improvements in the common areas. Common area improvements will be maintained by the homeowners association once the association is formed.



**FIGURE 4A: PROPOSED PROJECT SCHEDULE
FIRST TAKEDOWN**



**FIGURE 4B: PROPOSED PROJECT SCHEDULE
SECOND TAKEDOWN**



**FIGURE 4C: PROPOSED PROJECT SCHEDULE
THIRD TAKEDOWN**

The Foothills at Wingfield Lot Count & Park Phasing Plan

Village	Classification	Total Lots	Est. Fee	Fees	Phase I	Phase II	Phase III	Total
1	Builder Lot (BL)	112	\$1,000	\$112,000	\$112,000			\$112,000
2	Executive Lot (EL)	104	\$1,000	\$104,000			\$104,000	\$104,000
3	Amenity Lot (AL)	140	\$1,000	\$140,000		\$140,000		\$140,000
4	Builder Lot (BL)	78	\$1,000	\$78,000	\$78,000			\$78,000
5	Builder Lot (BL)	162	\$1,000	\$162,000			\$162,000	\$162,000
6	Patio Home (PH)	133	\$1,000	\$133,000	\$133,000			\$133,000
7	Amenity Lots (AL)	128	\$1,000	\$128,000			\$128,000	\$128,000
8	Builder Lot (BL)	185	\$1,000	\$185,000		\$185,000		\$185,000
9	Cottages (Cot)	179	\$750	\$134,250		\$134,250		\$134,250
10	Amenity Lot (AL)	80	\$1,000	\$80,000		\$80,000		\$80,000
11	Multi-Family (MF)	241	\$750	\$180,750			\$180,750	\$180,750
12	Cluster Courtyard (CC)	170	\$750	\$127,500			\$127,500	\$127,500
13	Cottages (Cot)	237	\$750	\$177,750	\$177,750			\$177,750
14	Patio Home (PH)	146	\$1,000	\$146,000		\$146,000		\$146,000
15	Patio Home (PH)	185	\$1,000	\$185,000	\$185,000			\$185,000
Totals		2,260	\$500	\$2,053,250	\$695,750	\$885,250	\$702,250	\$2,053,250

Park Phasing Plan	Park Ac.	Acres &	Est. Crst. Cost	Phase I	Phase II	Phase III	Total
Park I	2.24	25%	\$530,000	\$530,000			\$530,000
Park II	2.73	31%	\$645,000		\$645,000		\$645,000
Park III	1.60	18%	\$380,000			\$380,000	\$380,000
Park IV	2.11	24%	\$500,750			\$500,750	\$500,750
Totals	8.68	100%	\$2,055,750	\$530,000	\$645,000	\$880,750	\$2,055,750
<1>							
Park I	Bldg Permits=	583					
Park II	Bldg Permits=	1,293					
Park III	Bldg Permits=	1,712					
Park IV	Bldg Permits=	2,000					
<2>							

Note:

- <1> Park IV starts before the total build-out of 2,260 permits, which assumes the remaining 260 permits will be sold prior to park completion.
 <2> Final park budgets may require modification should the actual homes built not equal the 2,260 permitted units.

**FIGURE 5: PROPOSED PHASING PLAN
AND PARK TAX ESTIMATE**

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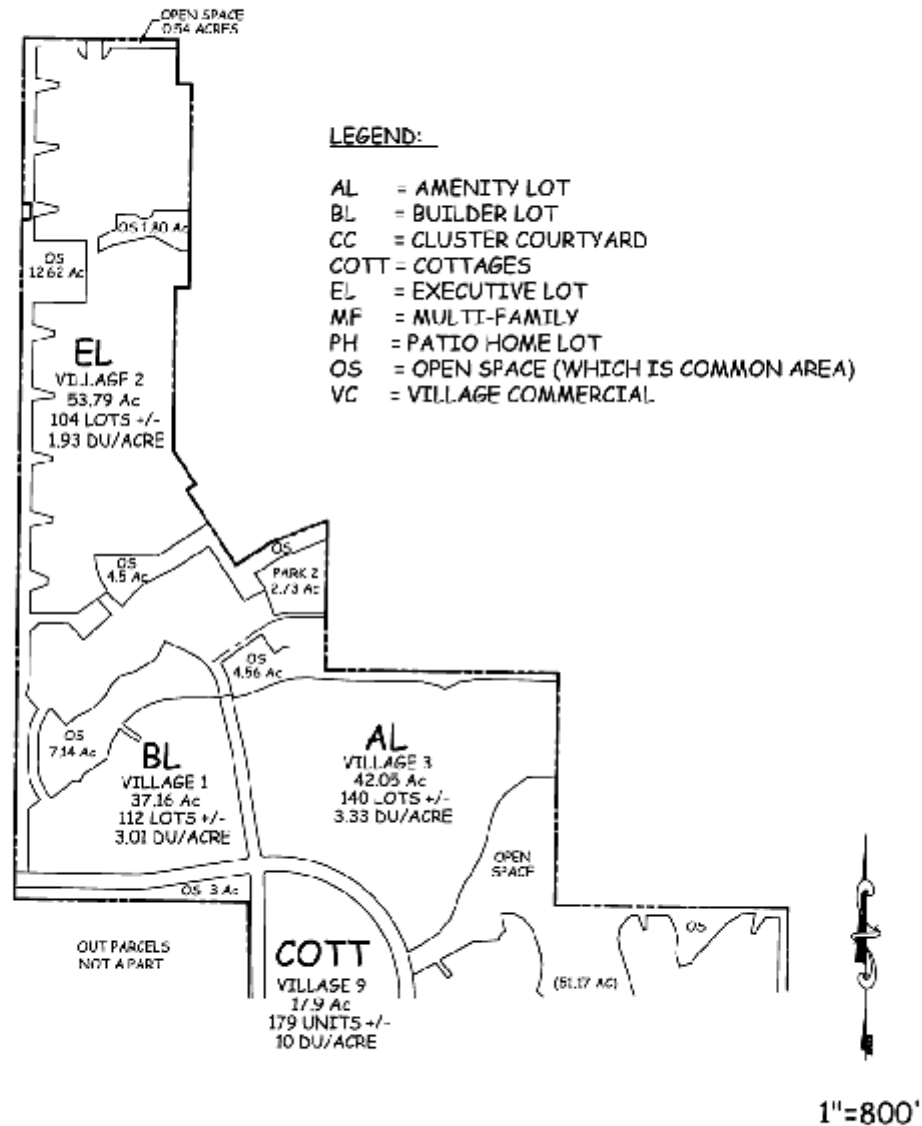


FIGURE 6A: MASTER PLAN

LEGEND:

AL = AMENITY LOT MF = MULTI-FAMILY
BL = BUILDER LOT PH = PATIO HOME LOT
CC = CLUSTER COURTYARD OS = OPEN SPACE (WHICH IS COMMON AREA)
COTT = COTTAGES VC = VILLAGE COMMERCIAL
EL = EXECUTIVE LOT

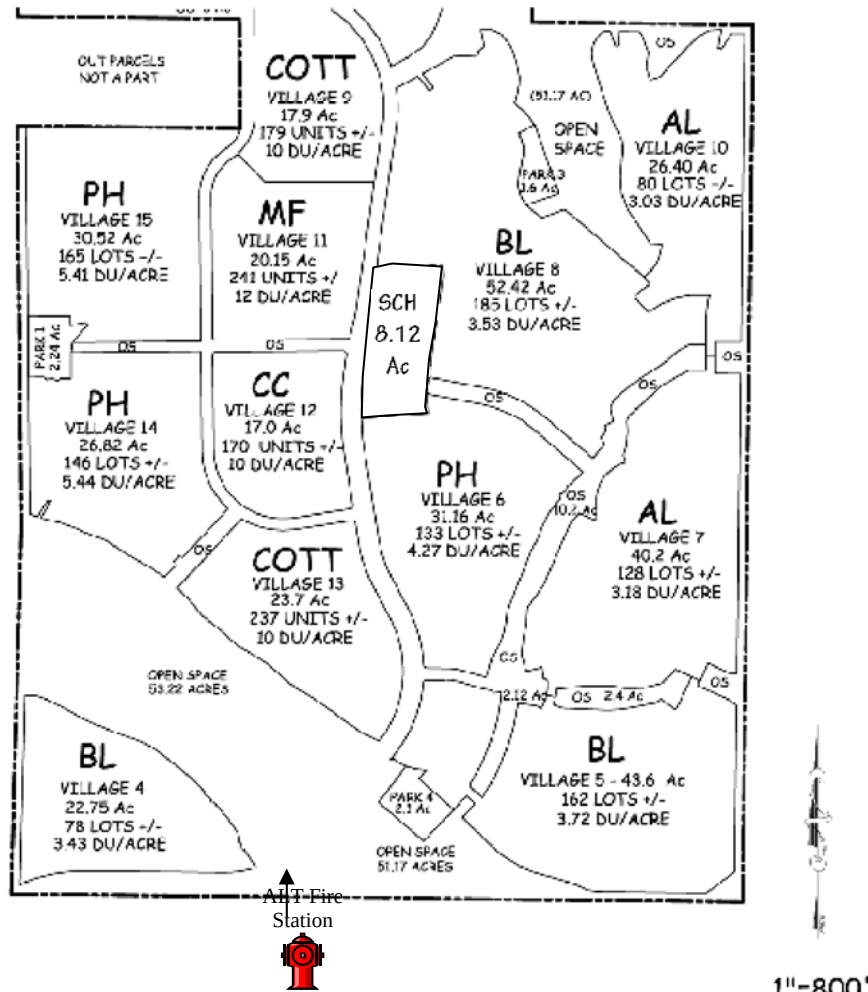


FIGURE 6B: MASTER PLAN

LOT & ACREAGE SUMMARY THE FOOTHILLS AT WINGFIELD SPRINGS

VILLAGE	CLASSIFICATION	ACREAGE	TOTAL LOTS
1	Builder Lot (BL)	37.16	112
2	Executive Lot (EL)	53.79	104
3	Amenity Lot (AL)	42.05	140
4	Builder Lot (BL)	22.75	78
5	Builder Lot (BL)	43.6	162
6	Patio Home (PH)	31.16	133
7	Amenity Lot (AL)	40.2	128
8	Builder Lot (BL)	52.42	185
9	Cottages (Cott)	17.9	179
10	Amenity Lot (AL)	26.4	80
11	Multi-Family (MF)	20.15	241
12	Cluster Courtyard(CC)	17.0	170
13	Cottages (Cott)	23.7	237
14	Patio Home (PH)	26.82	146
15	Patio Home (PH)	30.52	165
--	School (SCH)	8.12	--
--	Parks	8.68	--
--	* Open Space	173.05	--
	Streets	14.53	--
TOTALS		690	2,260

* Golf Course acreage in open space.

INFRASTRUCTURE & PUBLIC SERVICES

INFRASTRUCTURE AND PUBLIC SERVICES

ACCESS AND CIRCULATION

Traffic reports for the master plan of the Foothills including overall trip generation and distribution have been completed and submitted to the City of Sparks. In addition, an offsite analysis and on site analysis have been included with the technical supplement in the Appendix.

ACCESS

Access to the project is presently provided by Vista Boulevard from the south, La Posada Drive from the north and Campello Drive from the west.

Vista Boulevard has been extended to the project entry parkways located near the center of the southern parcel. This parkway will provide the entry statements into the communities and connect to the main collector roads of each village.

Upon development, several types of streets and pathway systems will provide access to and within the Foothills community. Pedestrian and bicycle pathways will be included within the street right-of-ways, as well as within interior portions of the project. It is anticipated that in the future, bus service will most likely be provided to the area. The developer will work with the RTC and the Washoe County School District to identify future bus routes and stops.

The access and circulation aspects of the roadway and pathway / trail systems are as follows:

ROADWAY SYSTEM

The roadway system hierarchy includes arterial, collector and local streets as shown in Figures 7A and 7B.

The proposed plan for Vista Boulevard is for the eventual build-out of a four lane moderate access arterial up to the Village Commercial Center in the Foothills. North of the Village Center the road will transition to two lanes and will connect to the current terminus of Campello Drive.

The final design of the street configurations and intersections shall be in general accordance with the layout presented in this Design Standards Handbook, subject to the approval of the City of Sparks.

Arterial Streets

The design sections for arterials (Figure 8A) include a median and a separated pathway on one side of the street. Utilities will be accommodated within the right-of-ways where possible. Where this is not feasible, Public Utility Easements (PUE's) shall be included adjacent to the right-of-way on each side of the street.

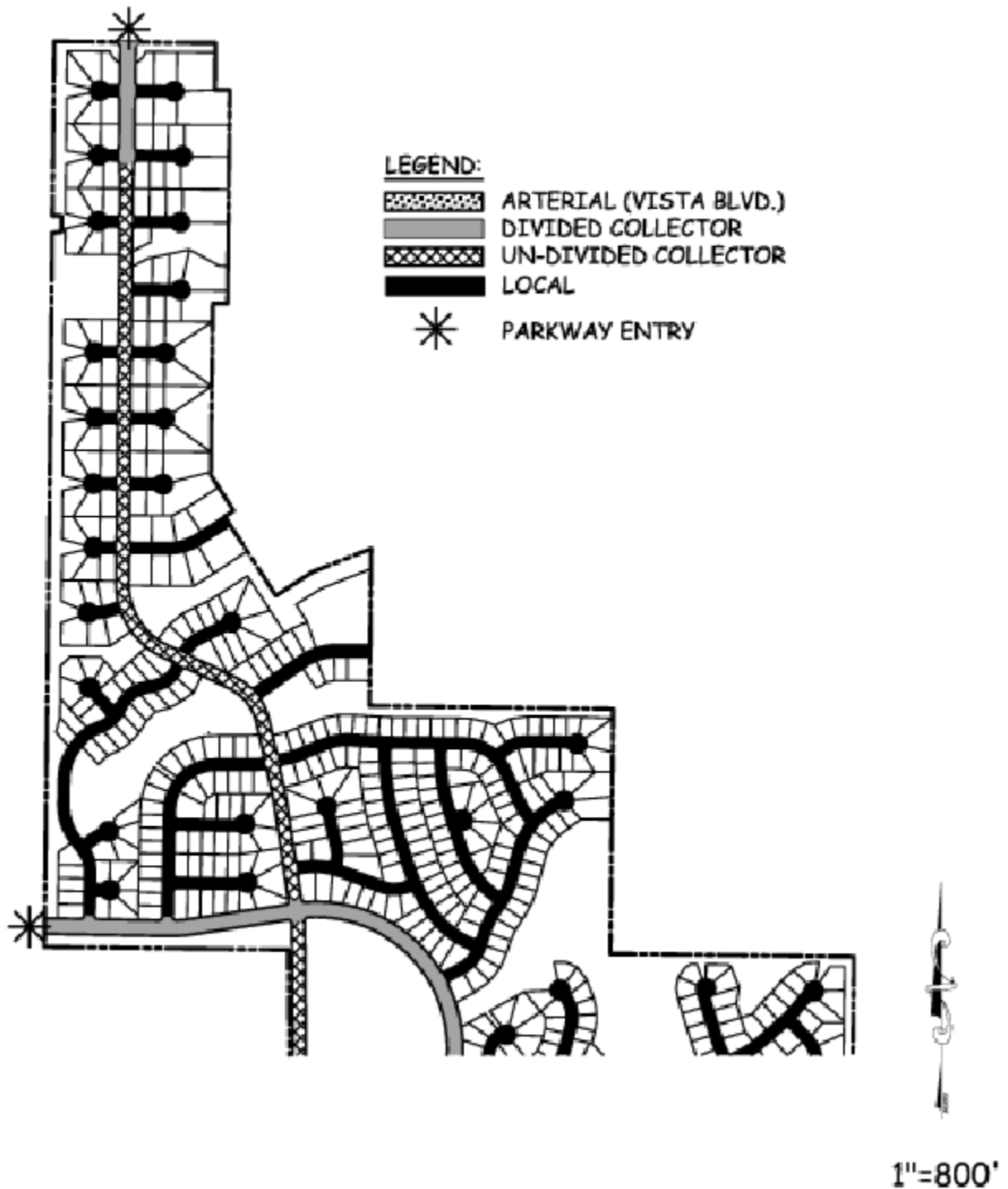


FIGURE 7A: VEHICULAR CIRCULATION PLAN

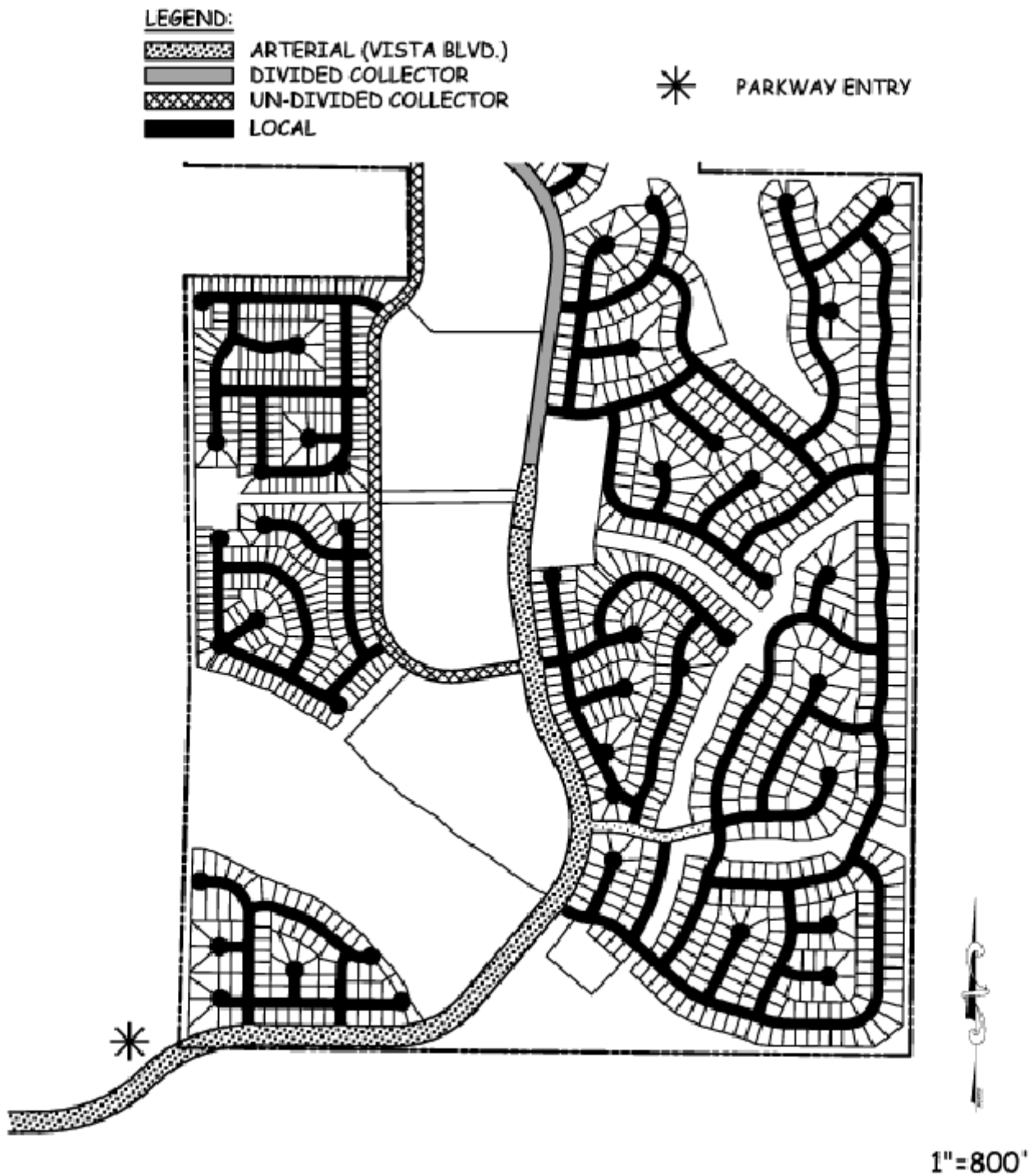


FIGURE 7B: VEHICULAR CIRCULATION PLAN

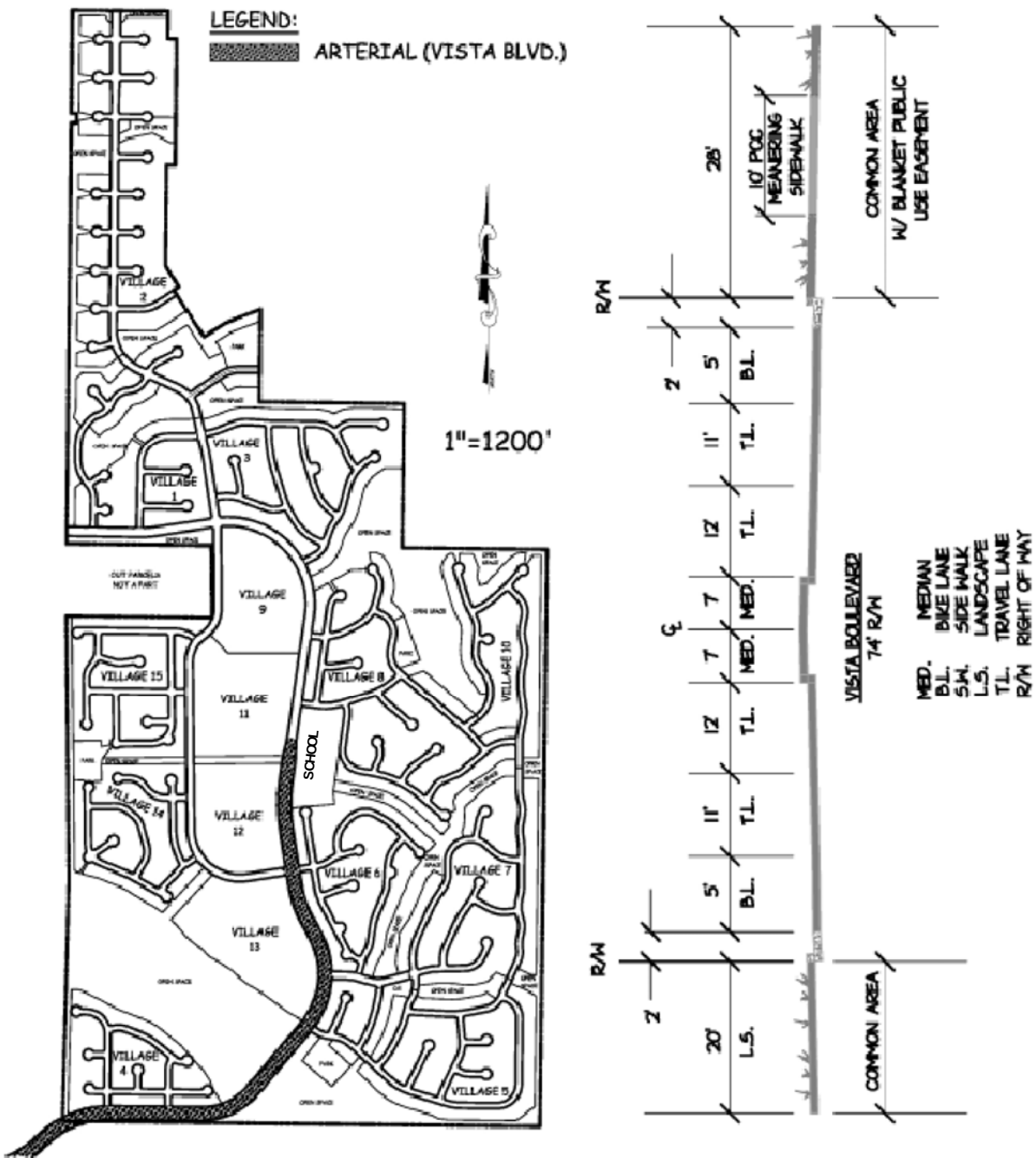


FIGURE 8A: ARTERIAL (VISTA BOULEVARD)

According to the Traffic Study, Vista Boulevard is the only arterial requiring more than two lanes into the project. (Figure 8A). The recommendations have been made in the Traffic Study to mitigate project traffic impacts and are included in Appendix F.

Entry Parkways

Entry parkways, north and south, will be developed as divided roadways connecting to interior collector streets. The right-of-way section for the parkways will vary with variation of the median widths with rights-of-way from 60 to 130 feet, the medians will be landscaped and maintained by the Foothills homeowners association. Two travel lanes will be provided in each direction on Vista Boulevard then transition to a single lane in each direction north of the Village Center. Pedestrian paths and bicycle lanes are also planned on the parkway segments.

1. The main entrance roads north and south into the project will be constructed as divided parkways, with two travel lanes in each direction that will accommodate acceleration, deceleration, and turning movements within a variable right-of-way from Vista Boulevard.
2. Where feasible, PUE's will be provided within the landscaped area of the right-of-way on each side of the street. Where this is not feasible, PUE's shall be included adjacent to the right-of-way on each side of the street (Refer to PUE widths under Local Streets section).
3. Access along these parkway streets shall be limited with no more than one shared direct access point to residential villages with limited parking permitted.

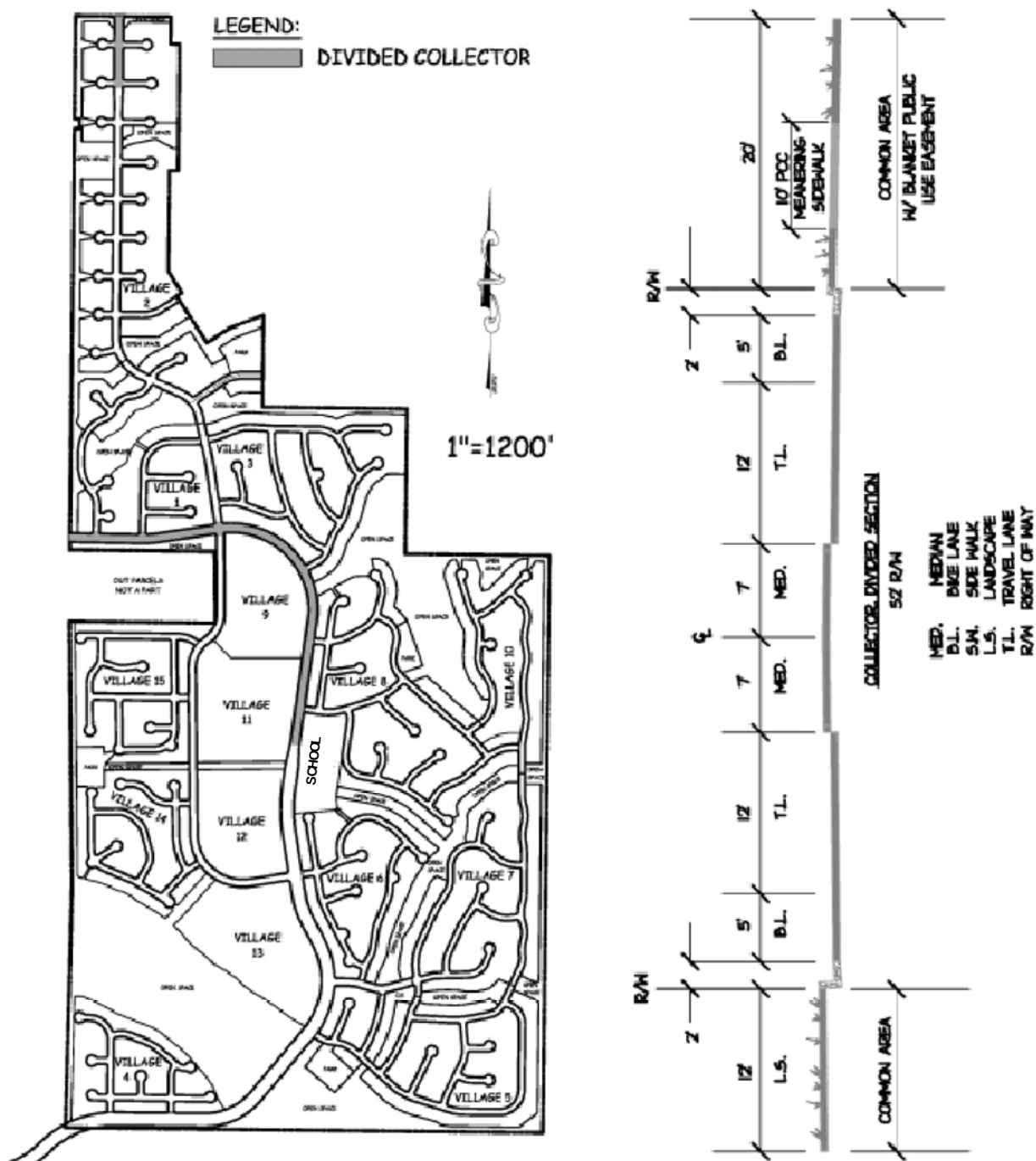
Collector Streets

Collector streets will provide access off of Vista Boulevard to the communities to the west. The central collector forms a loop paralleling Vista Boulevard (See Figure 8B). As Vista Boulevard turns into Campello Drive it becomes a collector that runs north to La Posada Drive. The section from the Village Center to La Posada Drive will be a divided collector to the intersection of Campello Drive. From that point north, it will be undivided up to the entry feature off of La Posada Drive.

The collector streets will be designed as two lane roadways per Figures 8B and C with limited access points, no lots backing directly onto the street, and no on-street parking. Bicycle lanes, additional landscaping and separate pathways on one side of the street are also planned. All right-of-way landscaping including landscape medians will be maintained by the Homeowners Association.

Typical street sections for the Collector Streets are provided in Figures 8B and 8C.

1. These collector streets shall be designed with limited access points and no on-street parking.
2. The streets will be developed with two travel lanes and a separate pedestrian / bicycle pathway.
3. The collector north of Campello will include at least two traffic calming devices most likely (roundabouts) due to the nature of the roadway, these devices shall be approved by the Director of Public Works and designed to accommodate emergency vehicles as approved by the Fire Chief.
4. Where feasible, PUE's will be provided within the landscaped area of the right-of-way.



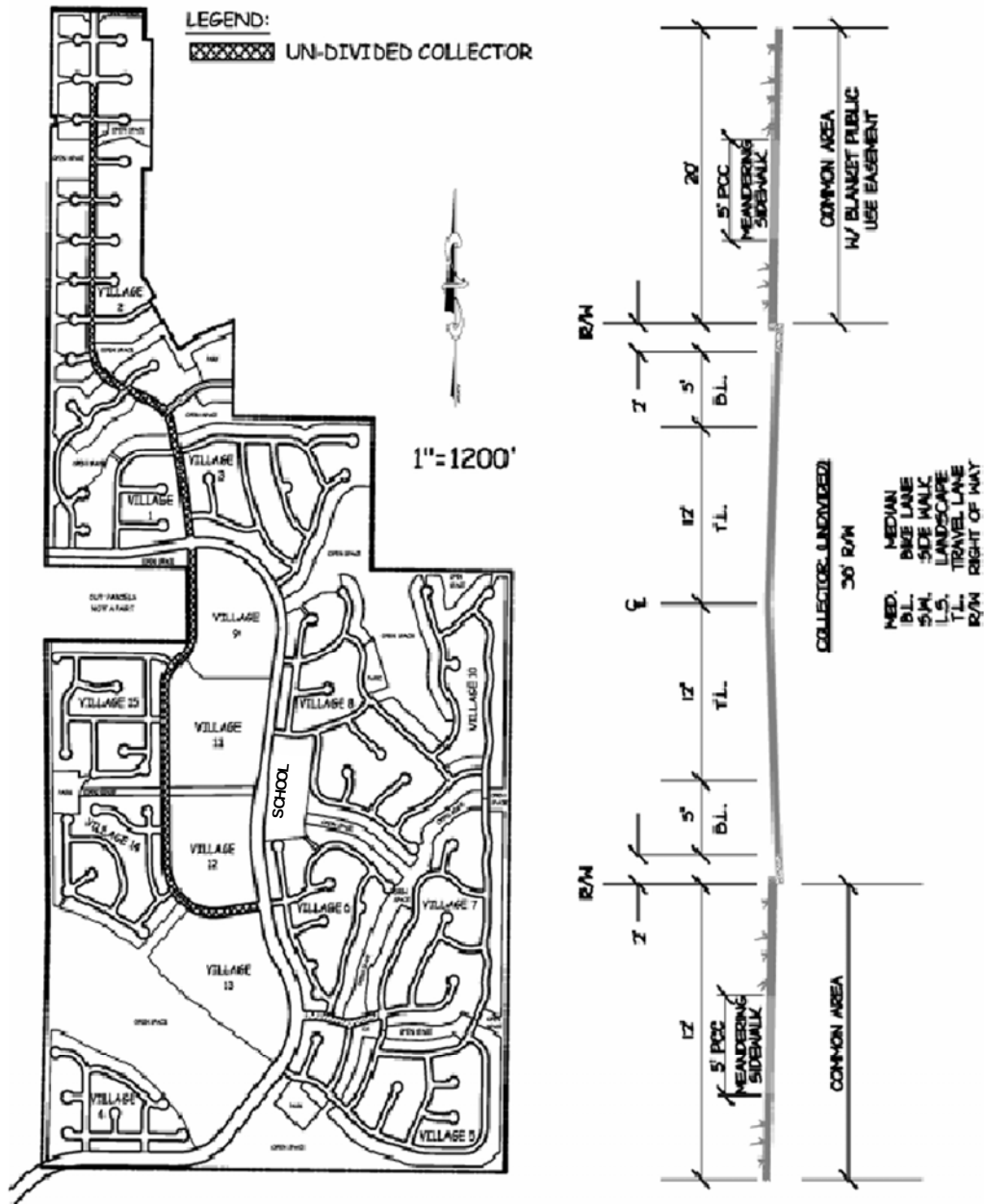


FIGURE 8C: UNDIVIDED COLLECTOR

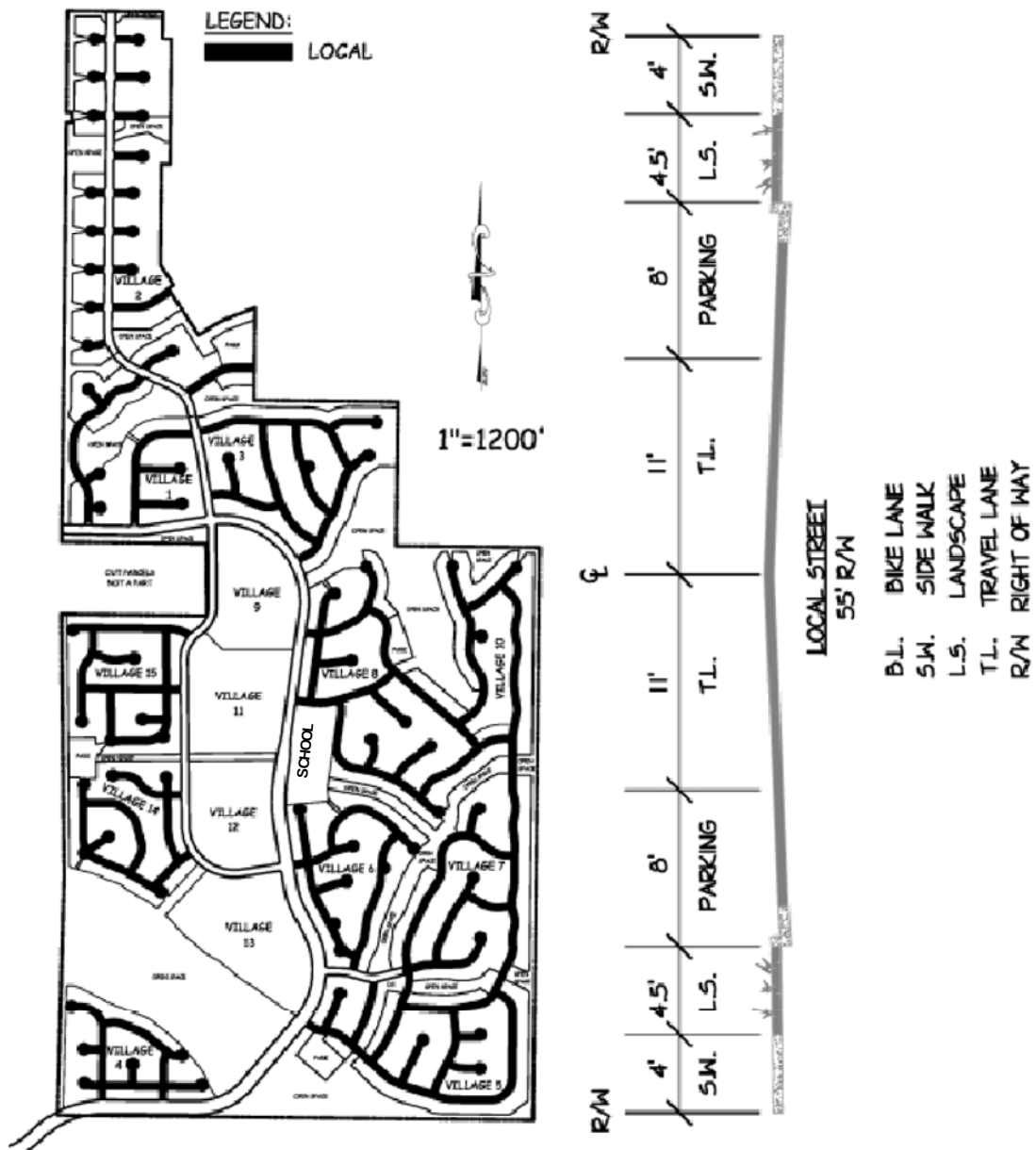


FIGURE 8D: LOCAL STREET

Local Streets

Due to the location and amenities associated with the Foothills, the residential villages are intended to portray a unique, high quality image beyond the standard urban subdivision appearance. The image will be created in part by the housing designs, lot sizes, fencing, setbacks, but also by the street sections. In terms of the local streets within the residential villages, the design will include one travel lane in each direction and landscape areas and separate sidewalks on each side of the street. Local streets serving Executive, Amenity, Builder Lots or Patio Homes shall provide on-street parking on both sides of the street. These street sections are shown in Figure 8D.

In a very few instances local streets within villages have been designed with cul-de-sacs having one direct access point. The purpose for such a design is either to create an exclusive setting or to limit street crossing disruptions. In these situations where a second means of access is necessary, gated fire emergency access easements, with 29 feet of paved surface will be constructed.

No landscaping will be permitted in the center cul-de-sacs. All landscaping in the street right-of-ways and medians shall be maintained by the Homeowners Association.

Public Utility Easements (PUE) on lots are as follows:

10' along front and exterior side property line
5' on each side property line
5' along rear property line.

Private streets may be used by builders in certain villages (9, 11, 12 and 13). Street widths, adequate visitor parking and pedestrian access shall be addressed with each project.

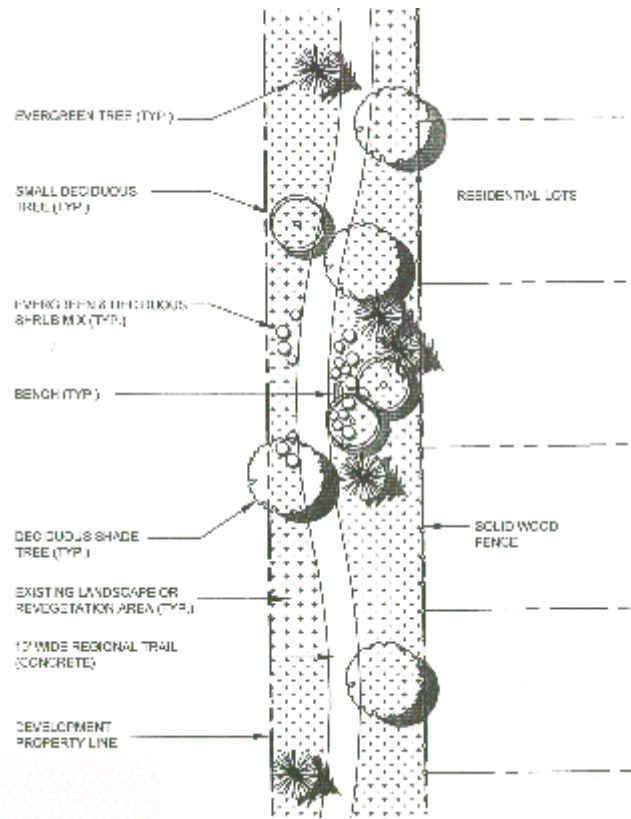
PEDESTRIAN AND RECREATIONAL CIRCULATION SYSTEM

The pedestrian and recreational circulation system includes a regional trail, multi-use paths and pedestrian paths. The multi-use paths and some pedestrian pathways (those that run along roadways) are generally located within right-of-ways.

These three types of pathways shall be developed in accordance with the pedestrian circulation system as depicted Figures 9A and 9B. Sections for each type of pathway are found in Figure 10. Multi-use and pedestrian pathways are also depicted in the previously discussed in Figures 8A through 8D. Given the above, it is understood that as the project develops path and trail locations may require modification to fit terrain. Path and trails may also include appropriate exterior lighting and will be reviewed by the City of Sparks with each subsequent Development Plan application.

Regional Trail

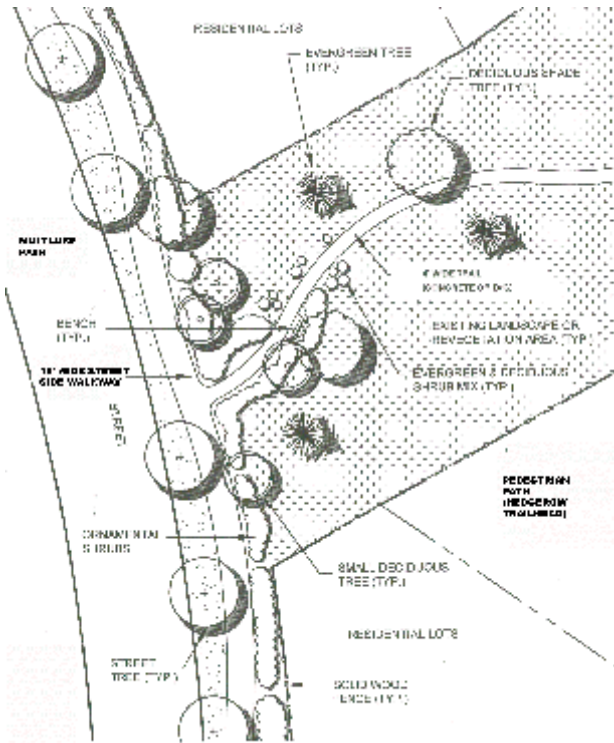
1. A regional trail will be located along the property's western property line as it borders the Cimarron and Wingfield Springs planned developments, as depicted in Figures 9A and 9B.
2. The project plans to work with the City of Sparks Recreation Department in order to have this path be classified as part of the city's regional path network. If approved by the City, this 10' wide path will be constructed of 4" concrete over a 4" compacted base, or the current city standards for a path of this type, as further specified in Figure 10.
3. If this regional trail is not accepted by the City, the developer retains the option of building the trail using the noted alternate material, 6" compacted decomposed granite, instead of the 4" concrete over 4" base trail noted herein.



Regional Trail - Typical Illustration

Multi-Use Path

1. The multi-use path is located along Vista Boulevard as it enters the southwestern corner of the property and will continue easterly across the project's wash and then in a generally northerly direction past the project's commercial site until Vista Boulevard reaches Campello Drive, as depicted in Figures 8A and 8B.
2. This 10' wide concrete path will meander along one-side of Vista Boulevard and is classified as "multi-purpose" since it will be suitable for both pedestrian and bicycle traffic.
3. As further specified in Figure 10, this 10' wide multi-use path will be constructed of 4" concrete over 4" compacted base, or current city standard for paths of this type.



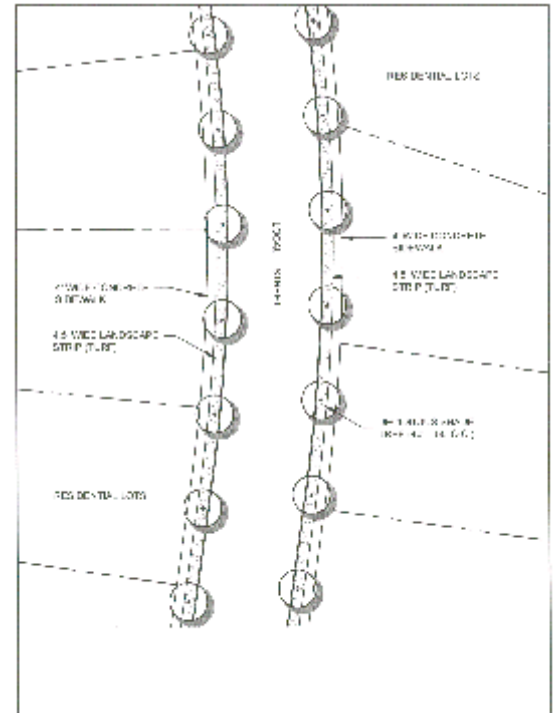
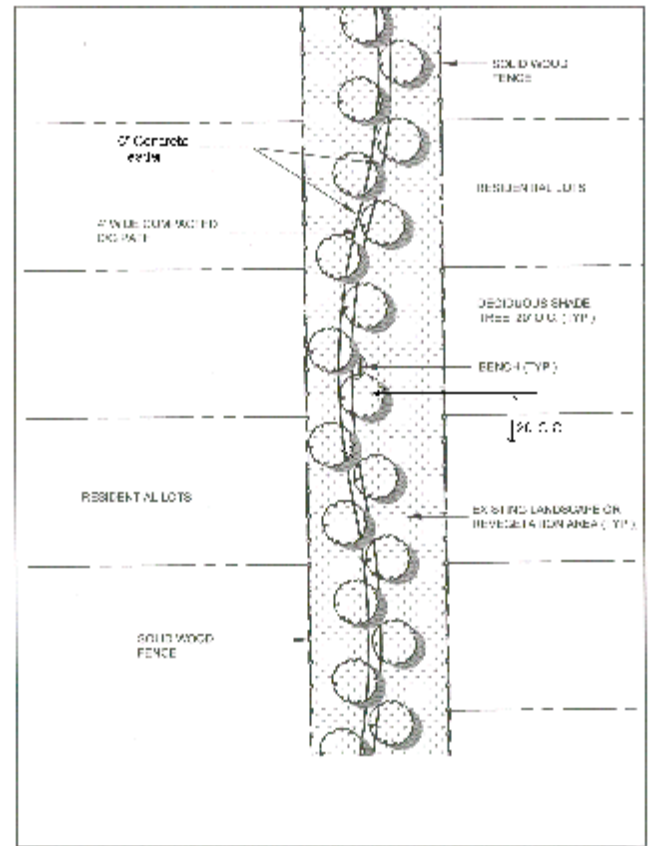
**Multi-Use & Pedestrian Path
Typical Illustrations**

Pedestrian Trail

1. The pedestrian trail is located along western boundary of Village 2 from Campello Drive to La Posada Drive, as depicted in Figures 9A.
2. This 6' wide concrete path will meander along one-side of Vista Boulevard and is classified as "multi-purpose" since it will be suitable for both pedestrian and bicycle traffic.
3. As further specified in Figure 10, this 6' wide pedestrian path will be constructed of 4" concrete over 4" compacted base, or current city standard for paths of this type.

Pedestrian Path

1. Pedestrian paths will be of two types at the project, (i) concrete roadway paths and (ii) decomposed granite hedgerow paths. The concrete roadway paths will be located along both sides of the remaining roadways in the project, while hedgerow paths will be located within the community village network itself.
2. Concrete roadway paths will be constructed in two sizes, 5 feet and 4 feet wide, both of which will be constructed on 4 inches of decomposed granite.
3. As noted above, 5 foot concrete roadway paths will be located along undivided collector streets, as further depicted in Figure 8C.
4. 4 foot concrete roadway paths will be located along local streets, as further depicted in Figure 8D.
5. Hedgerows will be constructed of decomposed granite retained by 6 inch concrete headers on each side.
6. Similar to the design of Wingfield Springs interior paths, the Foothills hedgerows will include deciduous tree planting every 20 feet along this path type. When selecting street trees, care must be taken to consider species already selected for adjacent hedgerows. Ideally, a monoculture of trees within a planned development is to be avoided. While all of these species on a continuous hedgerow should be the same, a change in species for different hedgerows is encouraged.
7. Deciduous trees will be at least 2" caliper, and will be a consistent species throughout the



Pedestrian Path, Concrete Roadway Path Illustrations

- community. Tree stakes (8 inch agricultural t-posts (green with white tops)) or guy wires with hose will be used to properly support each tree.
8. At least 2 inches of wood mulch will be placed over the root ball of each tree. Planting soil will be used as needed to augment existing soil conditions, and cover / encase the tree.
 9. Drip irrigation will be used for all trees located along the hedgerow paths.

Equestrian Easement

Foothills agrees to dedicate 10 feet of the eastern edge of Section 7 to a 501 (c) (3) organization for purposes of an equestrian easement. Such dedication shall take place upon approval by the City of Sparks and Washoe County Parks department of a trail system for equestrian uses, which utilizes such dedication for the prescribed uses.

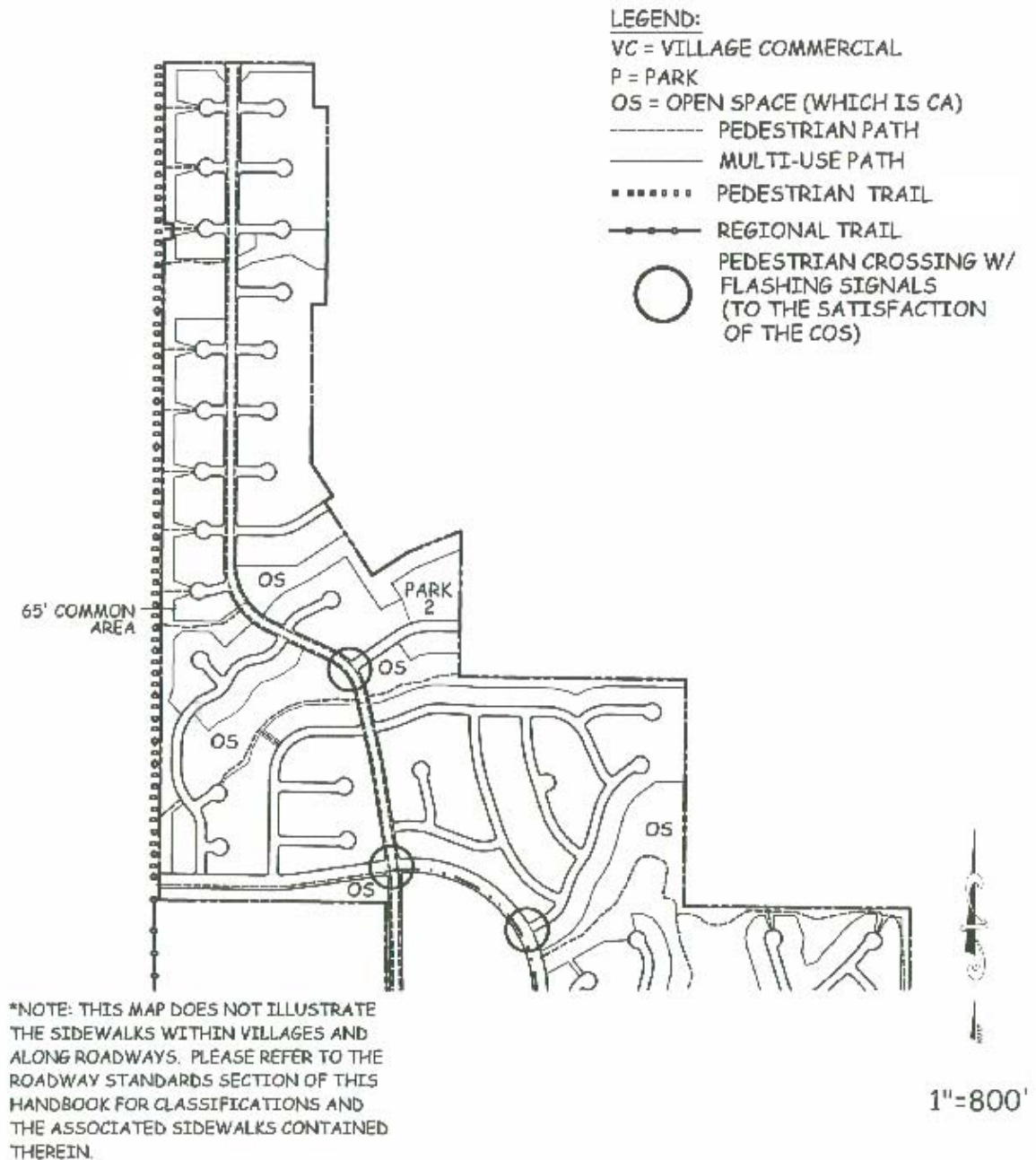
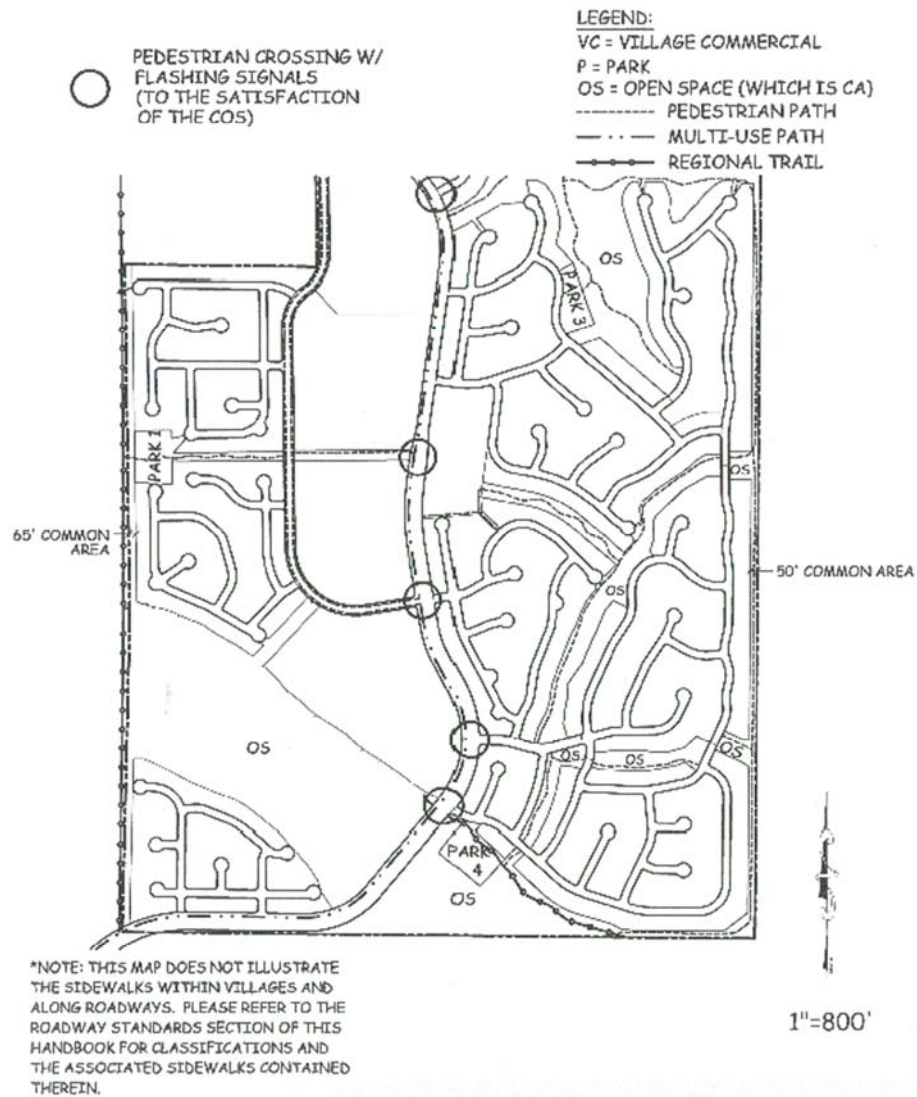


FIGURE 9A: PEDESTRIAN CIRCULATION PLAN



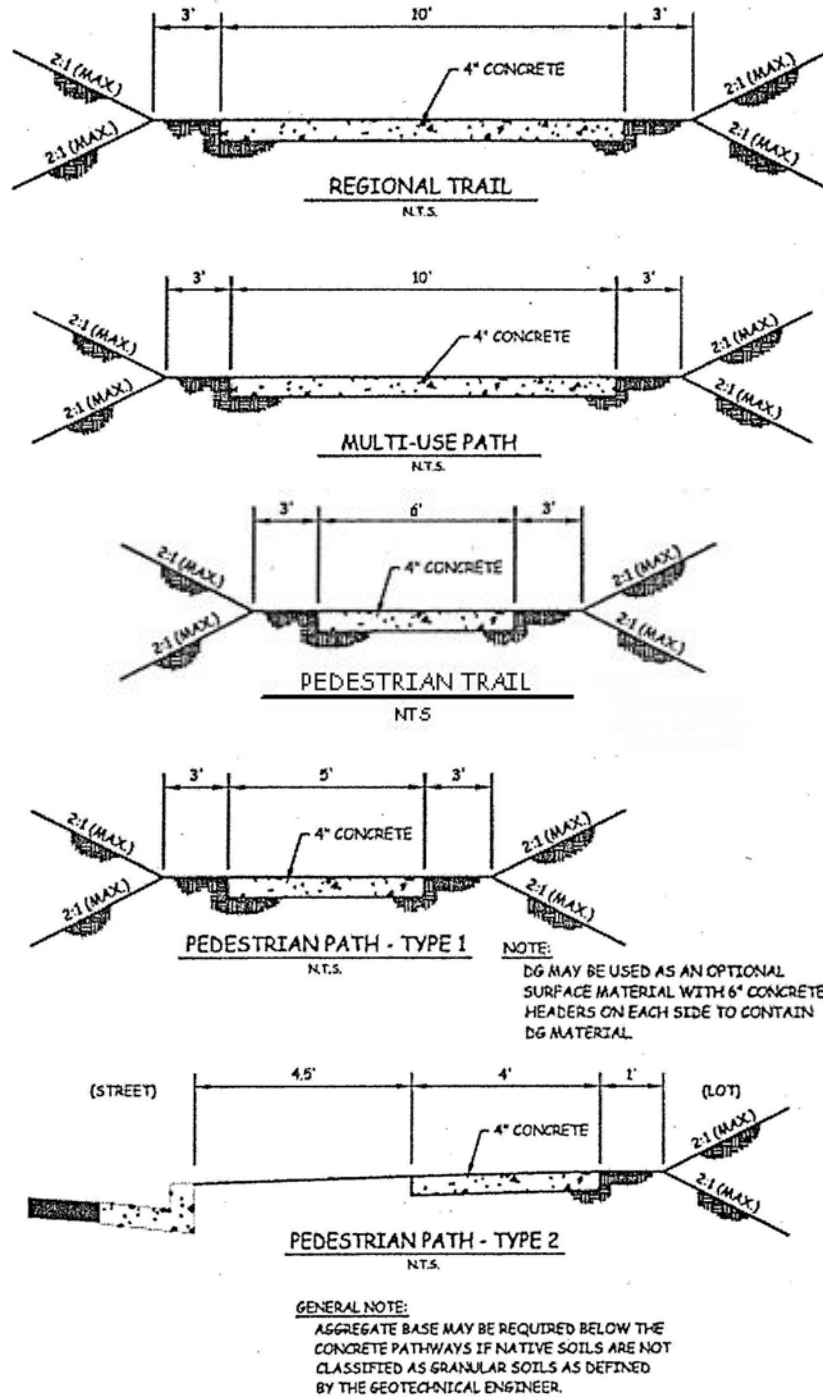


FIGURE 10: PATH SECTIONS

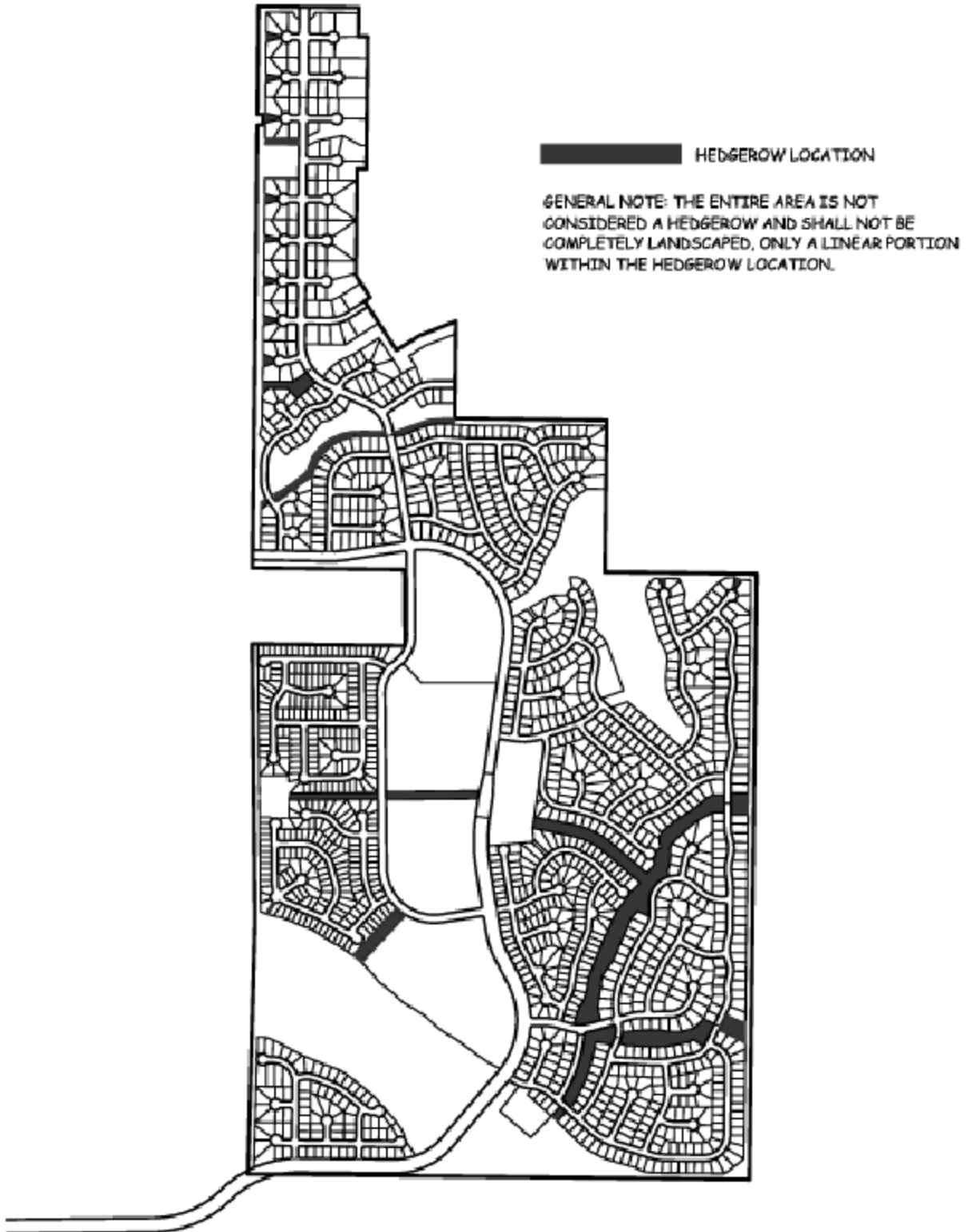


FIGURE 11: HEDGEROW LOCATIONS

UTILITIES

WATER SERVICE

The provider for water service for the Foothills project will be Truckee Meadows Water Authority (TMWA) the franchise provider for the City of Sparks. This project is currently within both the Expansion Area and Wholesale Area of TMWA (see attached “Truckee Meadows Water Authority Service Territory map). Section 7, the southern portion of The Foothills is within the Expansion Area of TMWA and will be required to be annexed into the Service Area. Section 6, the northern portion of the Foothills is within the service area of Washoe County and will be subject to a wholesale agreement with TMWA (Please refer to Figure 11).

The infrastructure will require the extension of the water main in Vista Boulevard from North Wingfield Parkway to the project site. The design of the water system to and within the southern portion of the project (Section 7) will be designed by the project engineer and reviewed by Truckee Meadows Water Authority and District Health Department. The facilities will be owned by TMWA. The northern portion of the project (Section 6) will be owned and operated by Washoe County Utilities. The project engineer will design the water system with review by Washoe County Utilities and District Health Department.

Estimated Water Demand

Through an agreement with Mr. Tim Tucker and Sierra Pacific Power Company and agreed to by Truckee Meadows Water Authority, a prepayment of 1,000 equivalent residential units (ERU’s) has been completed. Additional ERU’s will have to be purchased for the remaining lots. The estimated water demand and subsequent dedication of water rights for residential and commercial uses for the project is approximately 1,000 acre feet per year. Demand for parks and open space are not included in the above estimates. Final calculations will be made with each phase of development and will utilize the latest demand sheets from TMWA and Washoe County along with latest hookup fees.

SANITARY SEWER SERVICE

The estimated sewerage flows for the Foothills project are estimated to be 776,964 gallons per day, which is equivalent to 2,200 ERU’s. The following table describes the sewerage generation broken into zoning groups.

**Estimated Sewerage Generation
(Average Daily Demand)**

Single Family Residential (350 gal/day/lot)	1849 lots	647,150	gal
Multi Family Residential (250 gal/day/lot)	411 units	102,750	gal
Commercial (3,333 gal/acre)	8.12 acres	27,064	gal
Total Estimated Flow		776,964	gal/day

There are currently two existing sanitary sewer lines stubbed to the project boundary. The northern sewer main (BH Line) is an 8" PVC sewer main located at the north end of Unit 9C in Wingfield Springs. The southern sewer main (T Line) is a 12" PVC sewer main located in Unit 8A and 8B in Wingfield Springs. Both lines were constructed as a part of the "Spanish Springs Interceptor, Phase 1, Northeast Sanitary Sewer Interceptor Plans", prepared by Roy H. Hibdon and Pyramid Engineers and Land Surveyors. Both the north and south lines have capacity to carry the anticipated sewerage generation to the interceptor line located in Spanish Springs Road. Refer to the Preliminary Sanitary Sewer Report for the Foothills prepared by Wood Rodgers for additional information as set forth in Appendix G.

The north line has capacity to carry 290 units of the Foothills and the entire Cimarron East project. There are a total of 283 units proposed for the Foothills project to be contributing to the northern connection. If more than 290 units are to be sewerred to the northern connection point, improvements will be required to improve the existing line. The south line has the capacity to carry the anticipated sewerage generation to the interceptor line located in Spanish Springs Road.

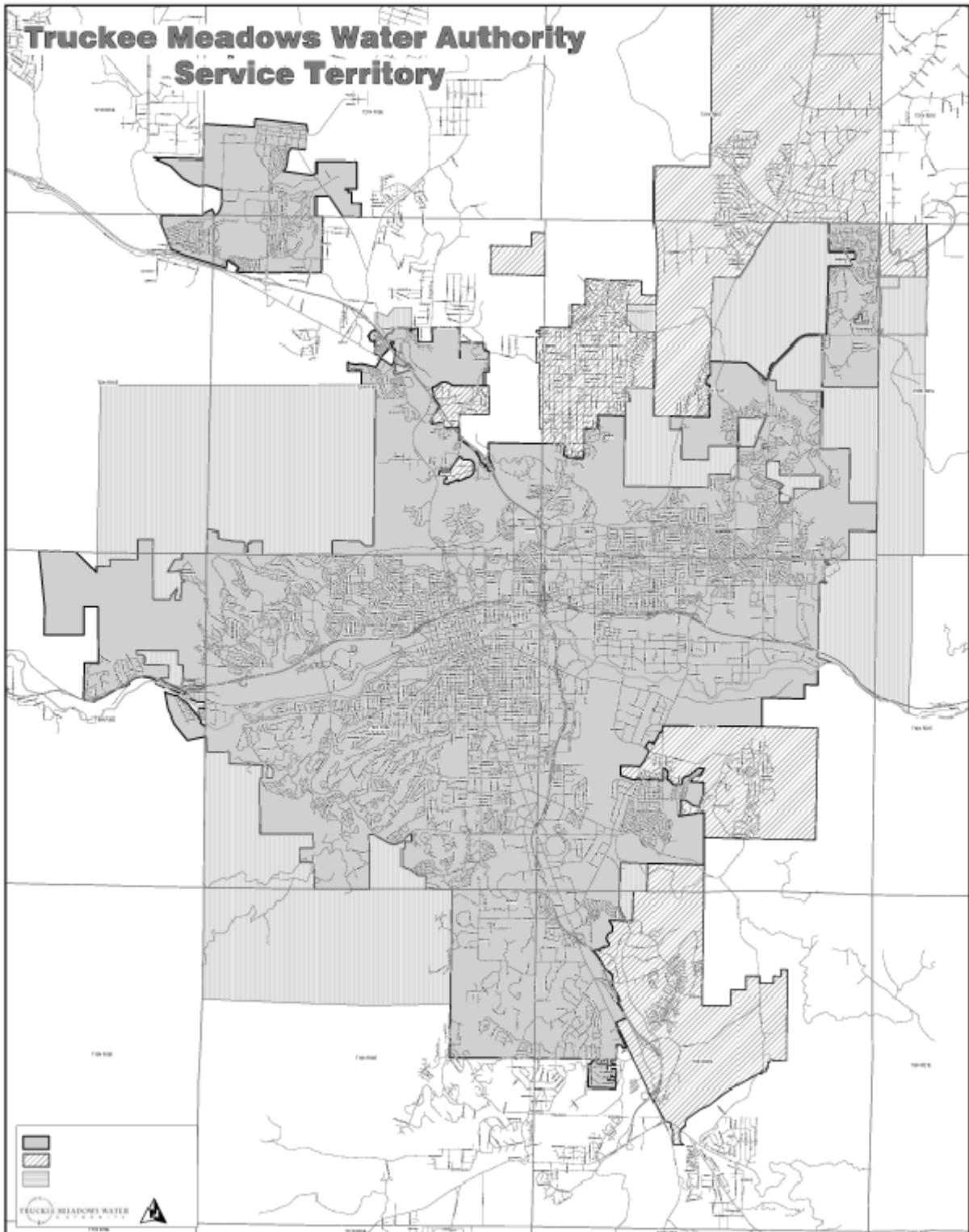


FIGURE 11: TMWA SERVICE TERRITORY

STORM DRAINAGE

Storm Drainage planning and design for the Foothills will be in accordance with the Spanish Springs Storm water management plan and the City of Sparks HEC-1 models for the Spanish Springs Valley. The City of Sparks HEC-1 model shall be amended with a Drainage Plan Master Study relative to this site and the Spanish Springs Valley prior to the commencement of any construction activity. This Drainage Master Plan Study outlines drainage patterns, flows, volumes and major facility sizing in accordance with the development master plan contained within the Foothills Development Standards Handbook.

The site shall be developed with open space corridors located along existing and proposed drainage way paths. Off site flows from the projects east boundary will pass through these corridors in its existing defined drainage pattern to the Vista Boulevard extension, which bisects the project site from north to south. This design method shall be used to provide for a storm water management plan which will integrate into the existing land form while providing logical discharge points for collected flows from within the residential villages and roadway sections located east of the Vista Boulevard extension. Once the off site and collected flows generated east of the Vista Boulevard extension reach the roadway they will be perpetuated through an urban storm water management system consisting of pipes and improved channels. These improvements will carry flows from the Vista Boulevard extension to the projects west boundary. There will be three ultimate collection points along the projects west boundary each of which will be defined by a regional detention facility. These regional detention facilities will be sized to provide for the necessary detention of peak flow and volume to insure no adverse impact to downstream facilities.

The goal of the storm water management plan for this development will be to provide for a method of collecting off site and on site flows along existing defined drainage corridors, which will be located within open space providing an opportunity to create areas of passive recreation. These drainage ways shall be left in their native condition where possible. Where improvements are required to existing drainage ways methods of stabilization and erosion control should be employed which will minimize the visual impact of the improvement while meeting the necessary design requirements. These methods should consist of the use of soil reinforcing fabrics and re-vegetation where possible and the grading of channels in a sinuous, rather than linear, form. The urban storm water management system located within the western half of the project shall be located and employ design techniques, which will minimize the visual impact to residential units. The three regional detention facilities shall be designed to integrate into the existing topography when possible. The grading / revegetation of the detention basins will comply with the standards set forth by the Nevada Department of Environmental Protection with respect to the requirements for general storm water discharge permits.

Through the phased construction of this development permanganate and temporary storm water management facilities shall be constructed to provide for runoff mitigation of flow and volume as well as provide for mitigation of silt migration from the project site. The maintenance of these temporary and permanent facilities shall be ongoing to insure that facilities perform as designed. Once established, permanent facilities will be maintained by the Homeowner's Association.

NATURAL GAS

Natural gas within the Foothills project will be provided by Sierra Pacific Power Company. A gas main on the east side of Wingfield Springs has been extended to provide service to the Foothills. The ultimate natural gas distribution system outside of and within the project will be designed by Sierra Pacific Power Company. Natural gas shall be provided to every residential property.

ELECTRICAL SERVICE

Electrical service to the Foothills will be provided off a main overhead distribution line that runs parallel to the east side of Cimarron and Wingfield Springs. Underground distribution feeders will then be installed within each individual project. The ultimate electrical distribution system outside as well as inside the project will be provided by Sierra Pacific Power Company.

FIRE PROTECTION AND EMERGENCY SERVICES

Currently the Foothills is outside of the 6 minute response time of the Fire Department. Consequently, an alternative site is being proposed by the Master Developer that would be located in the Foothills on Vista Boulevard. The Master Developer would construct the station and enter into a Construction Credit Agreement with the City of Sparks. If the fire station is not built in the Foothills, the station will be built at the old Wingfield School site. The nearest fire station is Sparks Station Number 4 at the intersection of Disc Drive and Vista Boulevard.

The City of Sparks and The Foothills have negotiated an agreement to build Fire Station Number 5 at The Foothills. As part of this agreement the Fire Department has agreed that the fire sprinkler requirement would be waived once the agreement is executed between the City and The Foothills, stating that Fire Station Number 5 will be constructed according to the negotiated agreement.

Fire prevention measures with the project shall require Class A roofing, excluding wood shake shingles. Sprinklers in commercial buildings (where required by local codes) and emergency access roads to provide for secondary access. It should also be noted that extensive trail and open space networks will act as firebreaks. For example, there is a 50 foot buffer and trail on the eastern and southern edge of the project.

POLICE PROTECTION

Sparks Police Department will provide police protection to the Foothills.

SCHOOLS

The Foothills residents may be served by Edward Van Gorder Elementary School or a new elementary school within The Foothills and Spanish Springs High School. A new middle school will be built adjacent to Spanish Springs High School. It is anticipated that the Foothills middle school student will attend this school. However, the final zoning decisions for student will be made by the Washoe County School District.

PARKS

Parks shall be designed to meet City standards including the irrigation system and the tie-in for remote irrigation sensing systems. The Foothills has an extensive trail system and 4 neighborhood parks averaging 2.2 acres each. Parks will be constructed by the developer per the Master Plan locations through a residential park tax agreement maintained by the City once accepted and dedicated to the City. The Park Construction Schedule is located in Figure 5.

DEVELOPMENT STANDARDS

DEVELOPMENT STANDARDS

INTRODUCTION

The Foothills Master Plan identifies a series of residential and non-residential development parcels. The configuration of development parcels and phases may be altered from those shown on the master plan or phasing strategy to accommodate detailed site conditions and revisions to the project's implementation strategy, providing that the reconfiguration does not conflict with the general intent or specific conditions of the Development Agreement and this Development Standards Handbook.

The following development standards are intended to direct the nature and intensity of residential and non-residential uses at the Foothills. These standards shall be used by the Administrator in determining the acceptability of individual final development plans submitted for each phase of development. Where issues arise that are not covered by these standards, the City of Sparks Municipal Code and Land Use Controls shall apply. The development standards contained in the Development Agreement and the Development Standards Handbook may be amended at any time by mutual consent of the Foothills, its representatives and assigns and the City of Sparks.

Executive Lots (EL) - Village 2

Description:

Executive Lots are large lots located on the north end of the Foothills that range from 12,000 square feet to an acre in size. These lots are anticipated to be sold to individuals or builders.

Permitted Uses:

- Single Family dwellings of a permanent nature.
- Recreational facilities (for the sole use of the residents of the immediate neighborhood).
- Temporary subdivision sales offices and model homes per criteria in Appendix.
- In-home child care for the number of children one care giver may care for in accordance with the city's rules and regulations for childcare facilities.
- Accessory structures per Sparks Municipal Code.
- Accessory apartment per Sparks Municipal Code and as defined in the glossary in the Appendix as a secondary dwelling unit located in, attached to, or in a separate accessory structure on the same lot as the main dwelling for use as a complete independent living facility.
- Home occupations.

Uses Requiring a Site Plan Review:

- Public utility structures under 6-feet in height.
- Pump stations, well houses, or other similar housed utility structures.

Uses Requiring a Special Use Permit:

- Public utility structures over 6-feet in height.

Lot Characteristics:

Minimum Lot Size: 12,000 square feet. Along the eastern boundary adjoining Eagles Nest, lots shall be a minimum of one (1) acre.

Minimum Lot Depth: 120 feet

Minimum Lot Width: 100 feet

Minimum Lot Frontage: 35 feet

Front Yard and Exterior Setback: 20 feet

Side Yard Setbacks: 10 feet minimum, each side

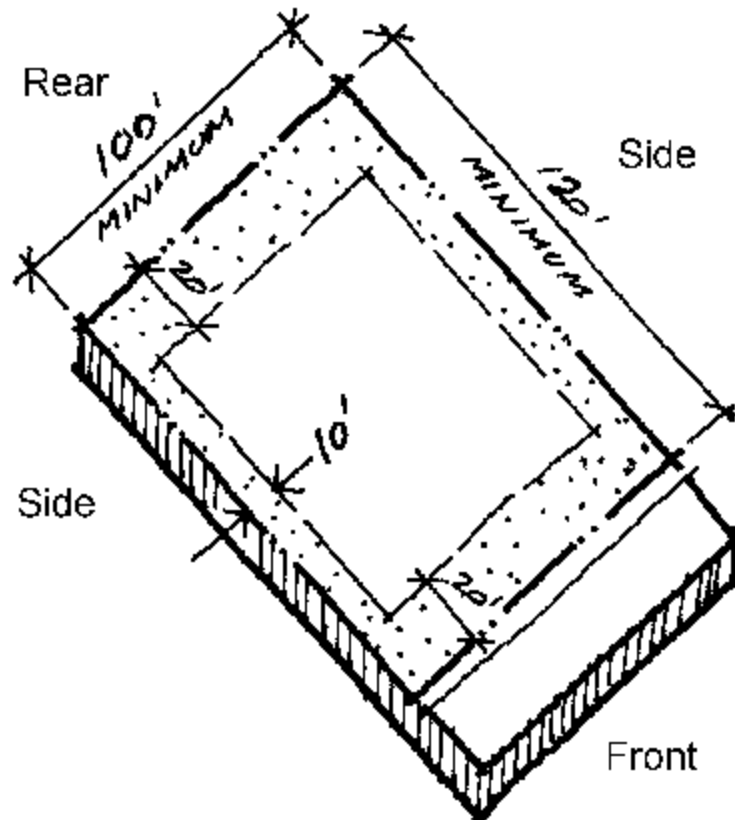
Rear Yard Setback: 20 feet, 30 feet on shared rear property line with county parcels (Eagles Nest)

Max. Building Height: 30 feet

Minimum Size of Residence: 2,000 square feet

Special Conditions:

- Executive lots shall have a building envelope to control the siting of structures on the lot when the lot abuts open space, park or landscaped trail wider than 30 feet.
- Corner lots shall be a minimum of 100 feet wide.
- Driveways shall provide sufficient area to accommodate a minimum of 2 additional visiting vehicles.
- All 11 executive lots backing to Eagle's Nest shall be one-acre minimum.
- Design Standards in Section VI shall be followed.



30' rear yard setback if adjoining Eagle's Nest Lots

TYPICAL LOT

Amenity Lots (AL) - Villages 3, 7 & 10

Description:

Amenity lots are large lots, many of which are oriented to site amenities such as the open space, parks and trails.

Permitted Uses:

- Single Family dwellings of a permanent nature.
- Temporary subdivision sales offices and model homes per criteria in Appendix.
- In-home child care for the number of children one care giver may care for in accordance with the City and County rules and regulations for childcare facilities.
- Accessory structures per Sparks Municipal Code.
- Home occupations.

Uses Requiring a Site Plan Review:

- Public utility structures under 6-feet in height.
- Pump stations, well houses, or other similar housed utility structures.

Uses Requiring a Special Use Permit:

- Public utility structures over 6-feet in height.

Lot Characteristics:

Minimum Lot Size: 8,000 square feet

Minimum Lot Depth: 100 feet with the exception of corner lots which shall have a minimum of 90 feet width.

Minimum Lot Width: 80 feet with the exception of corner lots which shall have a minimum lot width of 90 feet.

Minimum Lot Frontage: 35 feet

Front and Exterior Yard Setback: 20 feet

Side Yard Setbacks: 10 feet

Rear Yard Setback: 20 feet (the rear yard setback may be reduced to a minimum 10 feet with approval of administrator taking into consideration the recommendation of the Design Review Committee, the placement of the house on the lot and the type of amenity shared (at the rear property line)

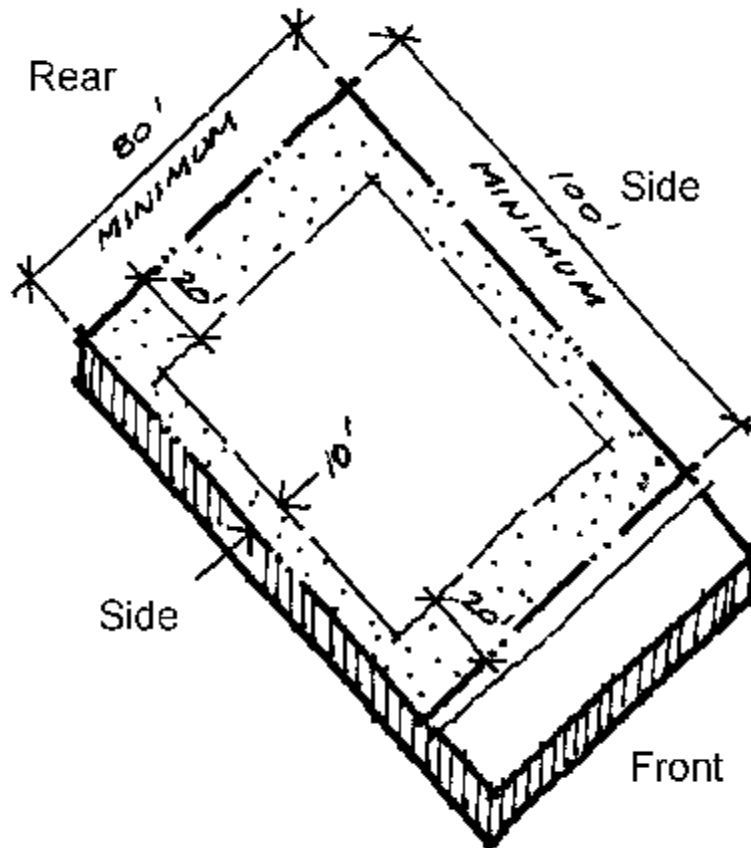
Max. Building Height: 30 feet

Minimum Size of Residence: 1,600 square feet

Corner lots shall be a minimum of 90 feet wide.

Special Conditions:

- Houses and other structures must be sited to minimize excessive grading and shall be compatible with existing topography as approved on Tentative Development Plan.
- Amenity lots of 120' or greater width shall have side or rear entry garages. Side or rear entry garage doors shall not directly face the street.
- Driveways shall provide sufficient area to accommodate a minimum of 2 visiting vehicles.
- Design Standards in Section VI shall be followed.



TYPICAL LOT

Builder Lots (BL) - Villages 1, 4, 5 & 8

Description:

Builder Lots are medium sized lots anticipated to be sold to builders in parcels for their development.

Permitted Uses:

- Single Family dwellings of a permanent nature.
- Temporary subdivision sales offices and model homes. (Criteria in Appendix)
- In-home child care for the number of children one car giver may care for in accordance with the City and County rules and regulations for childcare facilities.
- Accessory structures per Sparks Municipal Code.
- Home occupations.

Uses Requiring a Site Plan Review:

- Public utility structures under 6-feet in height.
- Pump stations, well houses, or other similar housed utility structures.

Uses Requiring a Special Use Permit:

- Public utility structures over 6-feet in height.

Lot Characteristics:

Minimum Lot Size: 6,000 square feet

Minimum Lot Depth: 100 feet

Minimum Lot Width: 60 feet

Minimum Lot Frontage: 35 feet minimum

Front Yard Setback: 20 feet. If residence has an attached side load garage then the setback is 15 feet.

Side Yard Setbacks: 7.5 feet minimum with no less than 15 feet of separation between buildings.

Exterior Side Yard Setback: 15 feet

Rear Yard Setback: 20 feet

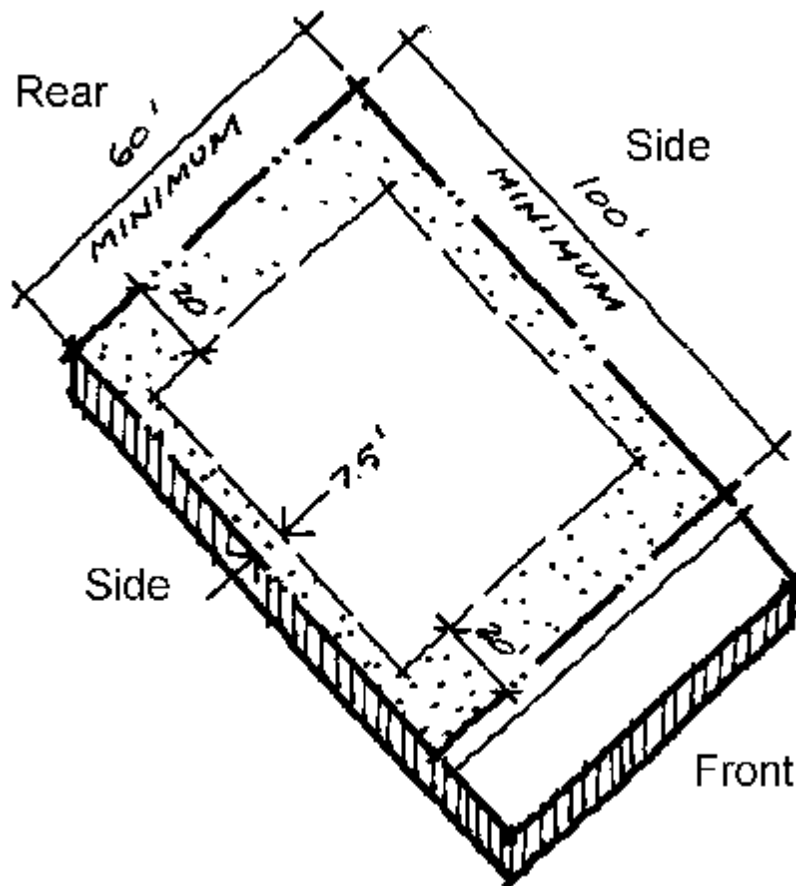
Max. Building Height: 30 feet

Minimum Size of Residence: 1,400 square feet

Corner lots shall be a minimum of 70 feet wide

Special Conditions:

- Houses and other structures should be sited to minimize excessive grading and shall be compatible with existing topography.
- Garage doors shall have architectural detailing to help minimize their impact on the street frontage.
- Front yard setbacks shall be staggered with variations of front and side load garages.
- Front and rear yard setbacks for houses backing onto collector and arterial streets shall be staggered a minimum of 2 feet unless the street design provides for articulation of the setbacks.
- Design Standards in Section VI shall be followed.



TYPICAL LOT

Patio Homes (PH) - Villages 6, 14 & 15

Description:

Patio Homes are small individual lots which encourage unit clustering.

Permitted Uses:

- Single Family dwellings of a permanent nature.
- Recreational facilities (for the sole use of the residents of the associated development).
- Temporary subdivision sales offices and model homes (per criteria in Appendix)
- In-home child care for the number of children one care giver may care for in accordance with the City and County rules and regulations for childcare facilities.
- Home occupations.

Uses Requiring a Site Plan Review:

- Public utility structures under 6-feet in height.
- Pump stations, well houses, or other similar housed utility structures.

Uses Requiring a Special Use Permit:

- Public utility structures over 6-feet in height.

Prohibited Uses:

- Accessory Structures

Lot Characteristics:

Minimum Lot Size: 4,000 square feet

Minimum Lot Depth: 75 feet

Minimum Lot Width: 50 feet

Minimum Lot Frontage: 35 feet

Front Yard Setback: 15 feet from attached living area, 20 feet from front load garage, 10 feet from side load garage.

The side load garage width may not exceed 50% of the lot.

Side Yard Setbacks: (5 feet, 7 ½ feet); or 12 ½ feet between structures

Rear Yard Setback: 10 feet

Max. Building Height: 30 feet

Minimum Size of Residence: 1,250 square feet

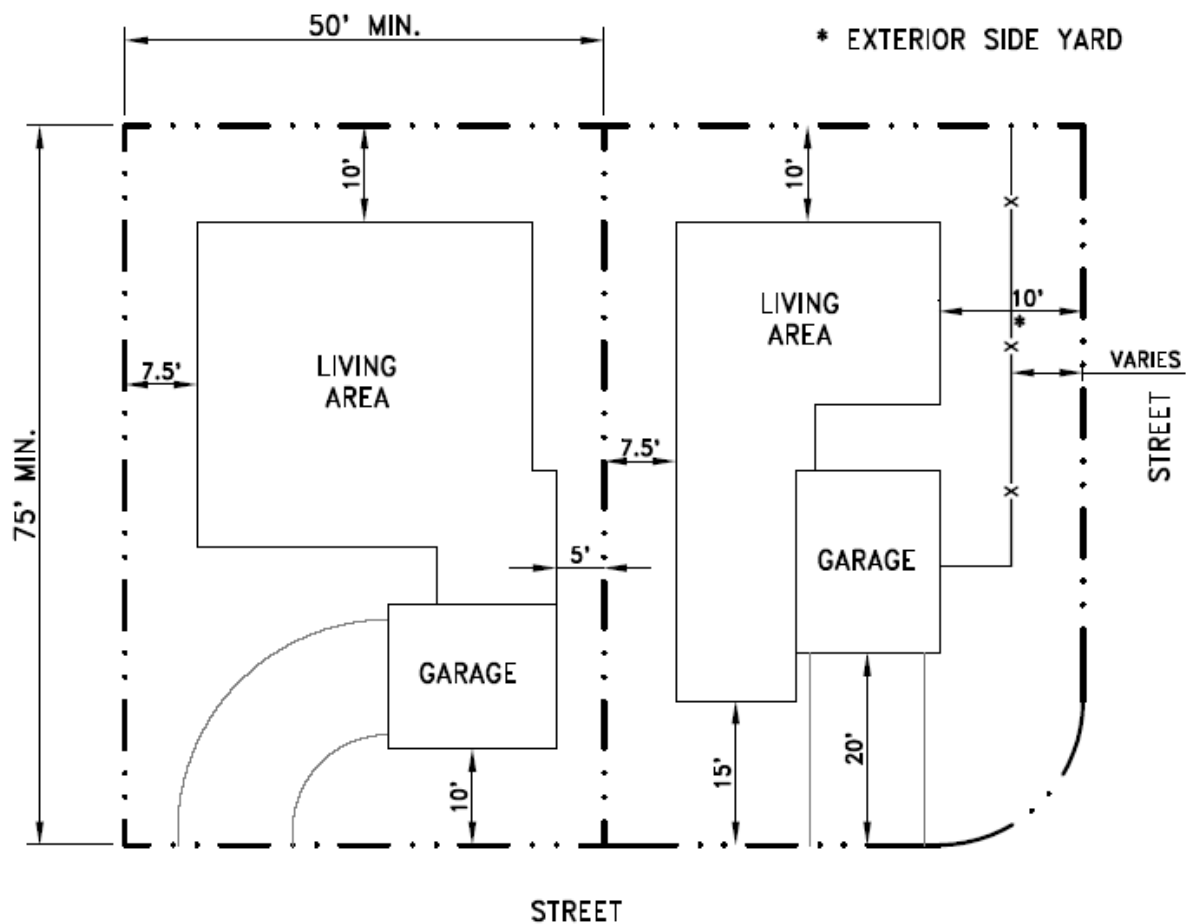
Exterior Side Yard Setback: 10 feet

Max building coverage: 50%

Corner lots shall be a minimum of 55 feet wide.

Special Conditions:

- Design Standards in Section VI shall be followed.
- Fencing may be located at the property line and shall maintain the visibility triangle (to the approval of the Administrator via the building permit process).



TYPICAL LOT FORMATION

Cottages (COTT) Villages 9 & 13

Description:

Cottages are attached or detached townhouse or condominium units. It is anticipated that the cottages will be constructed by a single developer.

Permitted Uses:

- Single or multiple family dwellings of a permanent nature.
- Recreational facilities (for the sole use of the residents of the associated development).
- Temporary sales offices and model homes. (Per Criteria in Appendix).
- Timeshare or interval ownership units.
- Home occupations.

Uses Requiring a Site Plan Review:

- Public utility structures under 6-feet in height.
- Pump stations, well houses, or other similar housed utility structures.

Uses Requiring a Special Use Permit:

- Public utility structures over 6-feet in height.

Prohibited Uses:

- Accessory structures.

Unit Characteristics:

Maximum Density: 12 du/ac. or 2800 square feet per single family dwelling unit

Maximum Building Coverage: 70% (project wide)

Front Setback: 15 feet to living area / 20 feet to front load garage, 15 feet to side load garage.

Exterior Project Side Setback: 10 feet (Fencing shall be set on the property line.)

Exterior Side: 10 feet or 5 feet if adjacent to common area (fencing shall be set on property line).

Side Setbacks: 0, 5 or 10 feet between buildings

Rear Setback: 15 feet (may be reduced to 13-feet when adjacent to common area or golf course)

Maximum Building Height: 30 feet

Maximum Units Per Building: 12

Parking: one space per bedroom (minimum 1 per unit) and 0.5 spaces per unit of guest parking. Guest

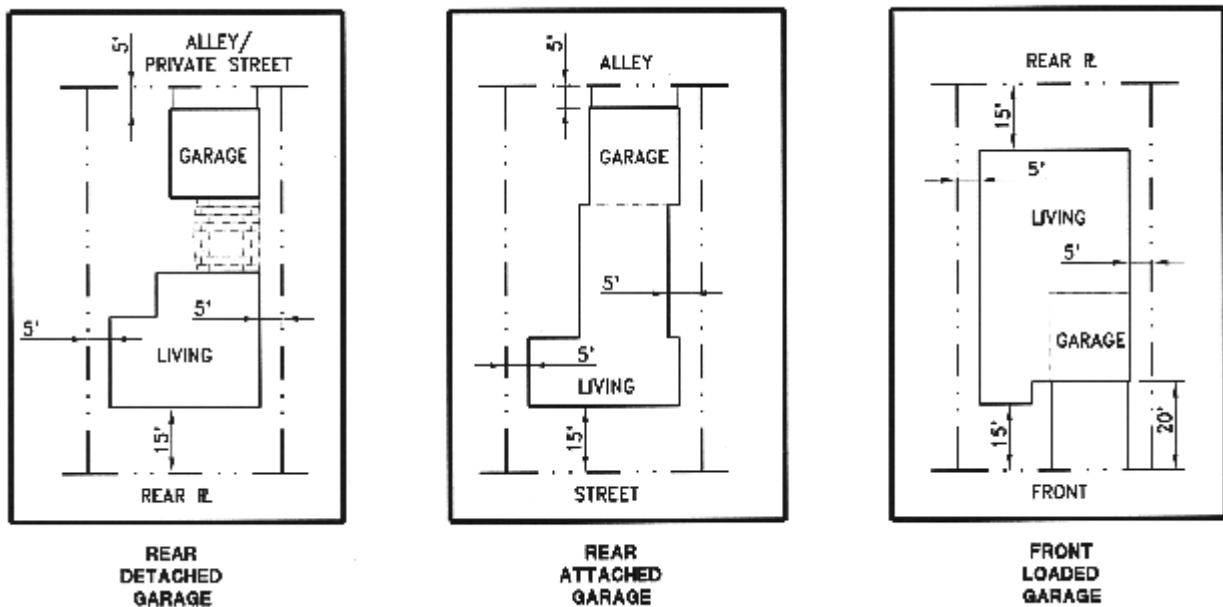
parking to be located on street or in remote designated areas within the village.

Private Streets / Alley:

Five (5) foot driveways are allowed in conjunction with private streets / alleys with parking to City of Sparks review and approval.

Special Conditions:

- Units shall have patios to provide a private outdoor space with a minimum size of 36 square feet.
- Access shall meet the requirements of the Public Works Director and Fire Department.
- There shall be a community directory sign.
- Design standards in Section VI shall be followed.
- Fencing may be located at the property line and shall maintain the visibility triangle (to the approval of the Administrator via the building permit process).



TYPICAL LOT FORMATION

Cluster Court Homes (CC) - Village 12

Description:

Cluster Court Homes are smaller individual lots which encourage unit clustering. Cluster Court Homes parcels will form more compact neighborhoods where innovative siting techniques are encouraged.

Permitted Uses:

- Single family dwellings of a permanent nature.
- Recreational facilities (for the sole use of the residents of the associated development).
- Temporary subdivision sales offices and model homes per criteria in Appendix.

Prohibited Uses:

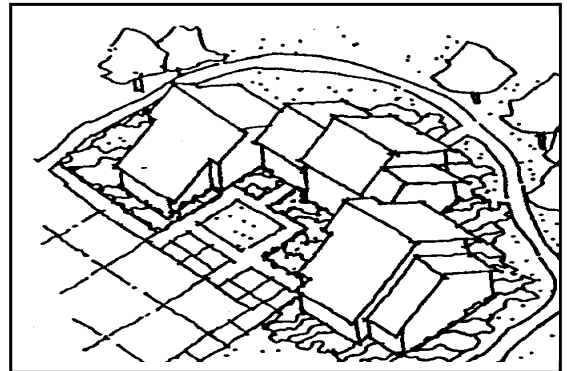
- Accessory structures.

Uses Requiring a Site Plan Review:

- Public utility structures under 6-feet in height.
- Pump stations, well houses, or other similar housed utility structures.

Uses Requiring a Special Use Permit:

- Public utility structures over 6-feet in height.



Cluster Court Homes

Lot Characteristics:

Minimum Lot Size: 2,650 square feet

Minimum Lot Depth: 53 feet

Minimum Lot Width: 30 feet

Minimum Lot Frontage: 35 feet on public streets and 21 feet on a private drive or court.

Front Yard Setback:

~Adjoining public (perimeter) street: 10 feet (to house), 8 feet (to porch)

~Adjoining private drive or court: 8 feet (to house), 6 feet (to porch)

Side Yard Setbacks: 5 feet, 10 feet between structures

Rear Yard Setback: 14 feet - house 10 feet - fireplace/TV

Garage Setback: Apron at court entry = 4 feet

drive at court = 18 feet drive at perimeter street = 18 feet

Maximum Building Height: 30 feet

Maximum Building Coverage: 50% of lot area

Minimum Size of Residence: 1,100 square feet

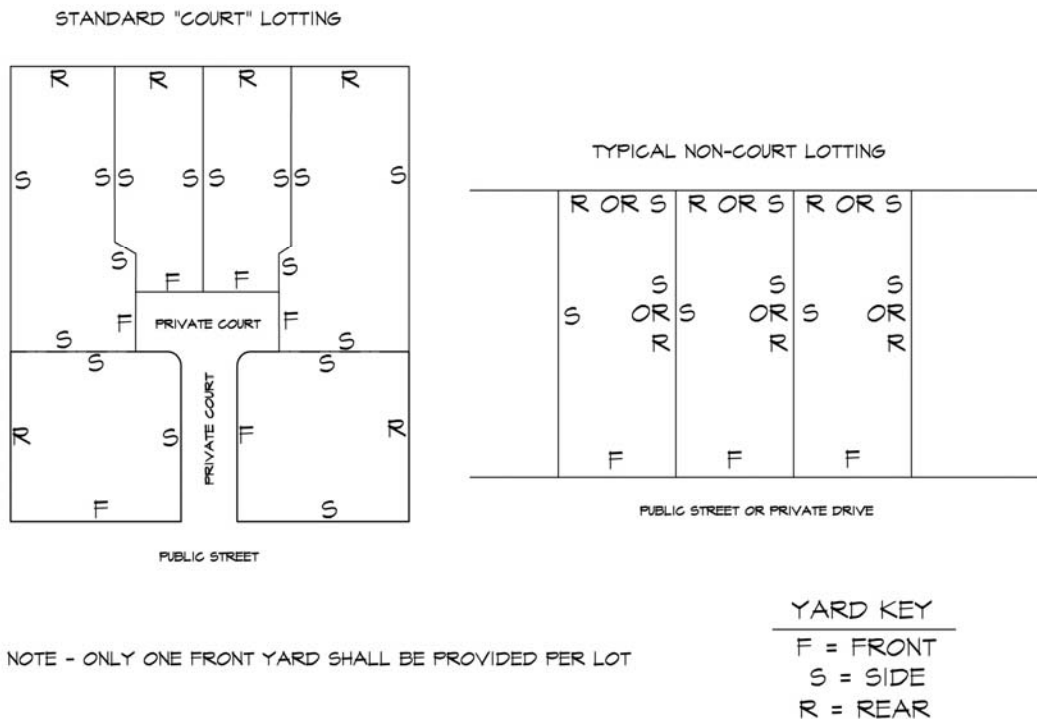
Corner lots shall be a minimum of 41 feet wide.

Parking: 1 space per bedroom. 0.5 guest parking space per unit shall be provided in marked spaces outside travel lanes, not in common courts. There shall be no parking within common courts except within driveways and dedicated parking pockets.

Special Conditions:

- Village perimeters shall adjoin or back up to either a landscape common area or a hedgerow of not less than twelve feet in width.
- Fencing shall be consistent with the Foothills design guidelines except that side fencing may contain an extension of up to two feet in front of windows to provide privacy opportunities.
- There shall be a community directory sign.
- All units required by the Fire Chief shall have residential monitored Fire sprinkler systems.
- Design Standards in Section VI shall be followed.

TYPICAL LOT FORMATION



Multi-Family ~ Apartments / Townhomes (MF) - Village 11

Description:

Multi-family dwellings in 12 unit buildings with access to both private and shared public open space.

Permitted Uses:

- Multi-family (attached) dwellings of a permanent nature.
- Recreational facilities (for the sole use by the residents of the associated development).
- Temporary sales and rental offices and model homes per criteria in Appendix.
- Single Family Dwellings (detached) of a permanent nature. *(See Detached Unit Special Conditions)

Uses Requiring a Site Plan Review:

- Public utility structures under 6-feet in height.
- Pump stations, well houses, or other similar housed utility structures.

Uses Requiring a Special Use Permit:

- Public utility structures over 6-feet in height.

Attached Unit Characteristics:

Maximum Density: 12 du/ac

Maximum Building Coverage: 70% plus 10% for covered parking, garages, separate storage space, etc.

Minimum Landscape Requirement: 20%

Front Setback: 10 feet, 10 feet from parking lot

Side Setbacks: 20 feet between buildings, 10 feet from parking lot

Rear Setback: 10 feet, 10 feet from parking lot

Maximum Building Height: 40 feet

Maximum Units per Building: 12

Parking: 2.25 spaces per unit plus 1 guest space per unit

Attached Unit Special Conditions:

- Ground floor units should have patios to provide a private outdoor space. Upper floor units should have porches or balconies. (Minimum of 36 square feet)
- Garages incorporated into the building massing are encouraged.
- The minimum amenities shall be at least 5 facilities of the following list: tot lot, pool, spa, common barbeques, picnic areas with tables, basketball courts, volleyball courts, fitness center, community building.
- There shall be common barbeque areas provided and no individual barbeques on balconies.
- There shall be a community directory sign.
- All buildings shall install residential fire sprinkler systems.
- Design Standards in Section VI shall be followed.
- There shall be a site plan review process for new construction as outlined in Sparks Municipal Code.

Detached Unit Characteristics:

Maximum Density: 12 du/ac. or 2800 square feet per single family dwelling unit

Maximum Building Coverage: 70% (project wide)

Front Setback: 15 feet to living area, 18 feet to front load garage, 10 feet to side load garage.

Exterior Project Side Setback: 10 feet (Fencing shall be set on the property line.)

Exterior Side: 10 feet or 5 feet if adjacent to common area (fencing shall be set on property line)

Side Setbacks: 0, 5 or 10 feet between buildings

Rear Setback: 10 feet

Maximum Building Height: 30 feet

Maximum Units Per Building: 12

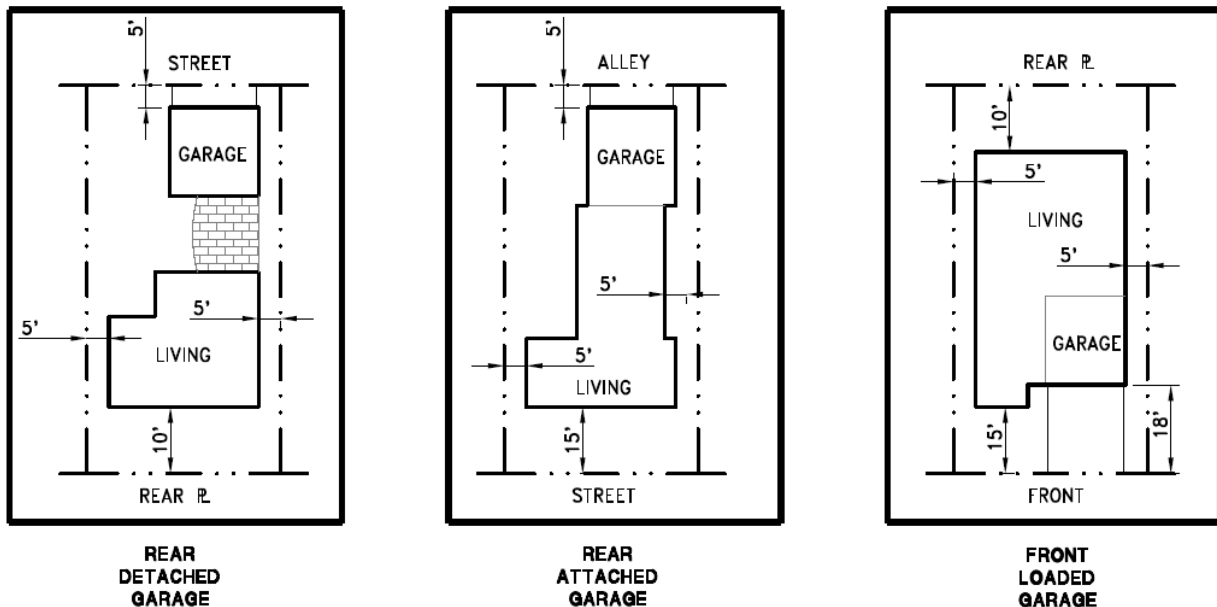
Parking: one space per bedroom (minimum 1 per unit) and 0.5 spaces per unit of guest parking. Guest parking to be located on street or in remote designated areas within the village.

Detached Units: Private Streets / Alley:

Five (5) foot driveways are allowed in conjunction with private streets / alleys with parking to City of Sparks review and approval.

Detached Unit Special Conditions:

- Units shall have patios to provide a private outdoor space with a minimum size of 36 square feet.
- Access shall meet the requirements of the Public Works Director and Fire Department.
- There shall be a community directory sign.
- Design standards in Section VI shall be followed.
- The applicant of a Detached Unit project within Village 11 shall provide (at the time of Conformance Review) a letter from a real estate professional justifying the elimination of multi-family housing in the village.
- Fencing may be located at the property line and shall maintain the visibility triangle (to the approval of the Administrator via the building permit process).



DETACHED UNIT: TYPICAL LOT FORMATION

School

Description:

The School site is centrally located within the Foothills at Wingfield to provide convenient access for both pedestrians and vehicles. Main access to the school site will be from Vista Boulevard with alternative secondary access point provided from local streets.

Permitted Uses:

- Recreational facilities including play fields/tot lots, tennis courts, basketball courts, etc., and recreation buildings less than 500 s.f.
- Accessory structures subordinate to the primary use (less than 500 s.f.).

Permitted Uses requiring a Site Plan Review:

- Schools (primary, secondary, college/university)
- Charter Schools
- Day Care
- Public utility structures under 6-feet in height
- Pump stations, well houses, or other similar housed utility structures

Permitted Uses requiring a Special Use Permit:

- Public Utility structures over 6-feet in height

Parcel Characteristics:

Minimum landscape requirements: 20%

Front Setback: 10 feet

Side Setback: 5 feet

Rear Setback: 10 feet

Maximum Building Height: 40 feet

Building Separation: 20 feet between buildings

Parking: 1 space per classroom, plus 4 spaces per 1,000 square feet of office space. Plus 1 bicycle parking spaces per 10 students.

Special Conditions:

- Building massing and style shall be consistent with Washoe County School District prototype at time of building (refer to section VI for further description of the Washoe County School District prototypical school).
- Signs shall meet Sparks City Code for Public Facilities.
- Design Standards in Section VI shall be followed.
- Minimum Landscape requirements for parking areas shall be consistent with Sparks Municipal Code.

Park & Open Space (Park or OS)

Description:

Areas within the project which are designated for parks and open space are intended to provide passive and active recreational opportunities for project residents. Parks and open space facilities include neighborhood parks, trail system, and natural open space areas.

Permitted Uses:

- Trails (pedestrian, bike, equestrian).
- Recreational facilities including play fields/tot lots, tennis courts, swimming pools, basketball courts, etc.
- Restroom facilities, park structures, gazebos and pavilions.
- Accessory structures.

Permitted Uses requiring a Site Plan Review:

- Public Facilities
- Utility structures
- Golf Course

Parcel Characteristics:

Setback for Buildings / Play Equipment: 20 feet

Maximum Building Height: 25 feet

Parking: (none required)

Special Conditions:

- Trails and play fields should be sited with respect to existing drainage patterns, solar orientation and prevailing winds.
- Service and maintenance facilities shall be completely screened from adjacent uses.
- Site lighting should be low intensity and utilize cut-off luminaries to minimize glare and impacts to surrounding residential areas.
- Neighborhood parks shall be sited adjacent to a local public street as indicated on the Master Plan.
- The design of neighborhood parks shall be done in conjunction with neighborhood meetings prior to the submission to the Sparks Parks and Recreation Commission.

DESIGN STANDARDS

RESIDENTIAL

INTRODUCTION

The Foothills development plan proposes home sites with a divergent character, ranging from large executive lots to patio homes.

The following standards will control the development process in five key areas including:

- Site Development
- Architecture
- Landscape Design
- Construction Practices
- Design Review

In addition to these design standards, a Master Declaration of Covenants, Conditions and Restrictions and Reservation of Easements for The Foothills at Wingfield Community Association ("CC&R's") have been established to provide legal control of community elements and operations. Further, the applicable City zoning ordinances, building codes and other applicable laws and regulations should be carefully followed. Please be sure to refer to these as they will be helpful in informing you of the ultimate checks and balances that are in place to ensure that City and community objectives are met. Additional controls and/or restrictions may be added by supplemental declarations for all or part of the Foothills, and such additional controls and/or restrictions, if any, should be carefully reviewed and addressed. Attached as an Appendix to this Handbook is a Builder Guide ("Guide"). The Guide will not control the activities of any Builder in the Foothills unless the requirements of the Guide are more stringent than the adopted Standards contained herein.

DESIGN REVIEW PROCEDURES

This section provides a "road map" that will guide Builders and Homeowners (hereinafter "Builders") through the design review process at the Foothills. The process involves a series of meetings between the Builders, their design team and the Foothills at Wingfield Design Review Committee ("FAWDRC"). The FAWDRC may include one member from the City of Sparks, appointed by the City Manager. FAWDRC responsibilities will include the review of site plans, building plans, elevations, materials, colors, fencing, signage, lighting, landscaping and parking arrangements prior to permit submittal to the City of Sparks. It begins with an informal introductory meeting and concludes with the completion of construction. Along the way are a series of meetings, or check points, designed to ensure a smooth and efficient review of new home design or improvements to an existing home. The FAWDRC is committed to assisting Builders through the design review process and expediting all submittals. The FAWDRC will make every effort to review and process all complete submission packages within ten working days. As opposed to a "regulatory review agency," the FAWDRC should be thought of as a member of the Builder's design team.

After completion of the FAWDRC Design Review Process, the builder shall submit for any entitlements necessary to the City of Sparks.

DESIGN REVIEW

Improvement plans will be carefully reviewed by the FAWDRC to ensure that the design is compatible with both the Foothills as a whole, and to the particular homesite. This design review process must be followed for any of the following improvements:

- Construction of all new buildings;
- The renovation, expansion or refinishing of existing buildings; and
- Major site and/or landscape improvements.

The following is exempted from the Design Review Process:

- Maintenance or upkeep of existing structures, including painting and/or refinishing if color and materials are the same or similar as previously approved finishes.
- Replacement of identical structures which have been previously approved due to damage and/or wear.

The FAWDRC and the City of Sparks evaluates all design proposals on the basis of these Design Standards.

The design review process takes place in four steps:

1. A Pre-Application Conference
 - Meet with FAWDRC Design Administrator to discuss intent and review Design Standards.
2. Preliminary Design Review
 - Submit preliminary design documents and fee
 - Stake building on site
 - FAWDRC Design Administrator review and/or FAWDRC meeting
3. Final Design Review
 - Submit final design documents and fee
 - FAWDRC Design Administrator review and/or FAWDRC meeting
4. Inspections
 - Construction Area inspection
 - Framing inspection
 - Completion inspection

Any improvement requiring design review as described above will require and be preceded by the submission of an application package accompanied by an application fee (to be established by the FAWDRC) and the required plans and specifications describing the proposed improvements. The Builder and its consultants should carefully review the Design Standards prior to commencing with the design review process.

The Builder will also have to meet all the submittal and approval requirements of City of Sparks. Precise submittal requirements may be obtained from the City of Sparks Community Development Department.

STEP ONE - PRE-APPLICATION CONFERENCE

The Builder shall discuss with the FAWDRC Design Administrator the overall regulations, restrictions and/or special considerations for the particular homesite. In addition, this discussion will ensure that the Builder understands the requirements, fees, and schedule of the design review process. This discussion will review:

- Property boundaries on the site;
- Easements and utilities;
- Grading and drainage;
- Special restrictions on the site;
- Site location and landscape zone;
- Architectural theme and special design considerations;
- Viewshed issues;
- Building program and design rationale; and
- Site diagram of homes on lots.

This informal review is to offer guidance prior to initiating preliminary design, and is a very important step in the process.

STEP TWO - PRELIMINARY DESIGN REVIEW SUBMITTAL

After the pre-application meeting, the Applicant shall prepare and submit to the FAWDRC Design Administrator for review and approval a preliminary design review package and the applicable fee at least seven working days before the next regularly scheduled FAWDRC meeting. The FAWDRC Design Administrator may modify requirements for submittal documents. The package should adequately convey existing site conditions, constraints, building orientation and design, vehicular, and pedestrian access, the proposed use of exterior materials and colors and conceptual landscape design. The package shall include three full size copies and one reduction to 11" x 17" of the following drawings and/or materials:

a. Survey

A property survey (minimum scale: 1" =20'-0") prepared by a licensed surveyor indicating property boundaries, adjacent properties (to the extent they affect site and building design), the area of the property, all easements of record, building envelope, topography at two foot intervals and any significant natural features such as rock outcropping, drainage areas, and significant slopes.

b. Homesite Diagram

A completed homesite diagram indicating building envelope, building height, topography, views, landscaping area, scale, north direction and any other pertinent information the FAWDRC deems necessary.

c. Proposed Site Plan

A site plan (minimum scale 1"=20'-0"), indicating existing and proposed topography, property boundaries, the footprint(s) of buildings relative to the homesite area, driveway access with proposed limits of construction, scale and north direction.

d. Schematic Floor and Roof Plans

Building plans (minimum scale 1/8"=1'-0"), including floor plans for each level of building(s) and roof plan indicating elevations for each floor and the highest roof ridge. Overall building dimensions should be indicated.

e. Schematic Elevations

Elevations (minimum scale 1/8"=1'-0"), including roof heights, existing and finish grades, and notation of exterior materials.

f. Massing Model

(optional, min. scale 1/16"=1')

g. Viewshed Analysis (optional, min. scale 1"=20')

The FAWDRC may request a viewshed analysis for those sites that are highly visible from offsite and within the community.

h. Conceptual Landscape Plan

A conceptual plan at 1"=20' min. showing irrigated areas, areas of ornamental planting (non-native), areas of native planting, water features, revegetation areas, patios, decks, and any other significant proposed landscape structures.

i. Preliminary Design Review Application and Fee

Submit one copy of completed application and fee with drawings. Fee is based on current fee schedule.

PRELIMINARY DESIGN REVIEW STAKING

The builder will be responsible for staking the location of corners of the proposed buildings and all other major improvements upon submittal of preliminary design documents.

PRELIMINARY DESIGN REVIEW

Within ten days of receipt of a complete preliminary design review package and staking of the property, the FAWDRC Design Administrator will notify the Builder if the proposed design has been approved, disapproved or a FAWDRC meeting date to review the preliminary design documents has been scheduled.

In the event that the proposed design is disapproved, the FAWDRC Design Administrator shall provide the Builder with written comments documenting the reasons for disapproval. The Builder shall resubmit corrected materials a minimum of five working days prior to the next regularly scheduled FAWDRC meeting.

PRELIMINARY DESIGN REVIEW MEETING

In the event that a preliminary design review submission is to be reviewed at a FAWDRC meeting, the Builder and/or Consultant(s) must be present at the meeting, or the submittal will be postponed until the next meeting at which they are present. The FAWDRC will review and comment on the application at the meeting, allow time for discussion with the Builder and/or

Consultant(s), and subsequently provide the Builder with a written record from the meeting within seven working days.

A second review meeting may be necessary to review corrected and/or new materials. Corrected materials shall be provided to the FAWDRC a minimum of five working days prior to the next regularly scheduled meeting.

STEP THREE - FINAL PLAN REVIEW

Within one year of preliminary design review approval, the Owner may initiate the final design review process by submitting the FAWDRC Design Administrator the required final design documents and the applicable fee at least seven working days prior to the next regularly scheduled FAWDRC meeting.

The Applicant shall provide all information necessary to reflect the design of the proposed building(s), landscape or other features requiring the approval of the FAWDRC. The package shall include three full size copies and one reduction to 11" x 17" of the following drawings and/or materials:

a. Final Site Plan (minimum scale 1"=20'-0")

The final site plan shall indicate proposed building footprint(s) with finished floor grades, roof dripline, property boundaries and easements, scale and north direction, utility locations, existing vegetation, existing and proposed 2 foot contours, areas of cut and fill, drainage, limits of construction, proposed roads, driveways, sidewalks, decks, and any other proposed improvements. Proposed driveways should include spot elevations at all changes in slope.

b. Floor and Roof Plans (scale ¼"=1'-0")

Including all exterior door and window locations and sizes, and the location of all exterior mechanical systems.

c. Elevations (scale ¼"-1'-0")

Including roof heights, existing and finish grades, and notation of exterior materials.

d. Building Sections (scale ¼" or ½"=1'-0")

Indicate building walls, floors, interior relationships, finished exterior grades and any other information to clearly describe the interior/ exterior relationships of the building as well as the building's relationship to the site.

e. Details

Provide design details to sufficiently represent the visual expression of the building, exposed connections, and material interfaces. Include soffit/fascia details, window head and sill details, railing details, and any other information necessary to describe the project's exterior.

f. Sample Board - including:

- Roof materials and color
- Exterior wall materials and colors

- Exterior trim material and color
- Gutters and down spouts material and color
- Window material and color
- Exterior doors (including garage doors) materials and color
- Concrete color, if applicable
- Stone/ rock/ brick materials
- Wall materials
- Supporting manufacturer's details

g. Landscape Plans (minimum scale 1"=20'-0")

The proposed landscape plans shall include:

- Grading plan - Include existing and proposed contours at two foot intervals, spot elevations, drainage patterns, rim and invert elevations.
- Planting plan - Include plant material legend which lists common and botanical names, plant sizes and plant quantities which are keyed to locations on plan. Locate rock outcrops, decks or patios, service yards, driveways, and any other freestanding structures.
- Irrigation plan - Locate all temporary and permanent irrigation systems, including controllers and type and size of equipment.
- Lighting plan - Locate in detail all proposed outdoor lights and signs. Submit cutsheets of all proposed light fixtures and indicate the lighting control strategy.

h. Construction Schedule

Including starting and completion dates for both building and landscape construction. Completion of both the residence and landscape must occur within 18 months of the start of construction.

i. Final Design Review Application and Fee

Submit one copy of completed application and fee with drawings. Fee is to be set by the Design Review Committee.

FINAL DESIGN REVIEW

Within 10 days of receipt of the required documents, the FAWDRC Design Administrator will notify the Builder if the proposed design has been approved, disapproved or a FAWDRC meeting date to review the final design documents has been scheduled.

In the event that the proposed design is disapproved, the FAWDRC Design Administrator shall provide the Builder with written comments documenting the reasons for disapproval. The Builder shall resubmit corrected materials a minimum of five working days prior to the next regularly scheduled FAWDRC meeting.

FINAL DESIGN REVIEW MEETING

In the event that a final design review submission is to be reviewed at a FAWDRC meeting, the Builder and/or Consultant(s) must be present at the meeting, or the submittal will be postponed until the next meeting at which they are present. The FAWDRC will review and comment on the application at the meeting, allow time for discussion with the Builder and/or Consultant(s), and

subsequently provide the Builder with a written record from the meeting within seven working days.

A second review meeting may be necessary to review corrected and/or new materials. Corrected materials shall be provided to the FAWDRC a minimum of five working days prior to the next regularly scheduled meeting.

FINAL DESIGN APPROVAL

The FAWDRC will issue final design approval in writing within five working days after a positive vote for approval at a final design review meeting.

RESUBMITTAL OF PLANS

In the event that final submittals are not approved by the FAWDRC, the Builder will follow the same procedures for a resubmission as for original submittals. An additional design review fee must accompany each resubmission as required by the FAWDRC.

APPEALS PROCEDURE

The Builder has the right to appeal decisions made by the FAWDRC. The Builder can initiate such an appeal procedure by submitting in writing a document stating the reason for the appeal. The FAWDRC will set a meeting date to review the appeal and notify Builder of such date. The Builder or representative must be present at the meeting to review the appeal. The FAWDRC will render a decision at a scheduled meeting and provide the reasons for denying or approving the appeal in writing within 30 days.

CITY OF SPARKS PLAN REVIEW AND BUILDING PERMITS

City of Sparks plan review shall be completed pursuant to the requirements of Section I of this Development Standards Handbook.

SUBSEQUENT CHANGES

Additional construction, landscaping or other changes in the improvements that differ from the approved final design documents must be submitted in writing to the FAWDRC for review and approval prior to making changes.

INSPECTIONS

During construction, the FAWDRC will check construction to ensure compliance with approved final design documents. If changes or alterations have been found which have not been approved, the FAWDRC will issue a notice of non-compliance.

NOTICE TO COMPLY

When as a result of a construction inspection the FAWDRC finds changes and/or alterations which have not been approved, the FAWDRC will notify the Builder within three days of the

inspection describing the specific instances of noncompliance and will require the Builder to comply or resolve the discrepancies.

NOTICE OF COMPLETION

The Builder will provide the FAWDRC with a notice of completion of any improvement(s) which was given final design approval by the FAWDRC. The FAWDRC will make a completion inspection of the property within 10 days of the notification. The FAWDRC will issue in writing a Notice of Completion with 10 days of inspection. If it is found that the work was not done in compliance with the approved final design documents, the FAWDRC will issue a notice of non-compliance within three days of inspection.

RIGHT OF WAIVER

The FAWDRC recognizes that each homesite has its own characteristics and that each Builder has their own individual needs and desires. However, the FAWDRC cannot deviate from the Development Standards Handbook and the requirements of the City of Sparks without express written approval from the Administrator or the Sparks City Council, as the case may require.

DESIGN REVIEW SCHEDULE

The FAWDRC will make every effort to review and process all complete application packages within fourteen working days. The FAWDRC will not be liable for any delays under any circumstances. The FAWDRC will provide design review according to the following schedule:

a. Pre-Application Meeting

- Meeting scheduled within a minimum of five working days and a maximum of fourteen working days of receipt of written request.

b. Preliminary Design Review

- Submission of three copies of preliminary design review application documents and preliminary design review staking to be completed a minimum of seven working days prior to the next regularly scheduled FAWDRC meeting.
- Notification from FAWDRC Design Administrator of approval, disapproval or that a FAWDRC meeting date has been scheduled within 10 working days of receipt of complete application package.
- Written comments from FAWDRC meeting provided to Builder within seven working days.

c. Final Design Review

- Submission of three copies of final design review application documents to be submitted seven working days prior to the next regularly scheduled FAWDRC meeting, and within one year of preliminary design approval.
- Notification from FAWDRC Design Administrator of approval, disapproval or that FAWDRC meeting date has been scheduled, within 10 working days of receipt of complete application package.
- Written comments from FAWDRC meeting and/or written notice of final design approval provided to Builder within seven working days.

d. Building Permits

- Builder applies to City of Sparks for all applicable inspections and/or approvals to obtain building permit. FAWDRC approval must be obtained prior to the issuance of the City of Sparks building permit.

SITE DEVELOPMENT GUIDELINES

BUILDING SITING AND ORIENTATION

The home's orientation can improve energy efficiency, decrease building costs, improve views both inside and out, and even help to create a better streetscape in concert with your neighbors.

a. Cul De Sac

Cul de sacs present unique opportunities and design challenges. It will be important to set your home back from the street sufficiently to allow adequate space between you and your neighbors. Homes can be sited parallel to one property line, maximizing one side yard with the back yard. To be most effective this should be coordinated with placement of the neighboring homes. Driveways need to be carefully placed to line up with garage doors.

b. Corner Lots

Due to additional street frontage, corner lots are typically larger than other lots in the same neighborhood. Therefore, it is possible to take advantage of this extra space in siting your corner lot home. Both the side and rear yards can be combined to maximize usable outdoor space when constructing a fence.

c. 'T' Intersections

Across from 'T' intersections, care must be taken to orient homes to prevent intrusion of traffic noise and headlight glare. A 90 degree rotation of garages and drives can be coordinated to provide ideal protection from noise and headlights while also creating an enhanced streetscape.

d. Daylight Basements and Stepped Floor plans

Daylight basements and stepped floor plans may be desirable or necessary on some lots. If necessary, builders should take advantage of the changes in grade to develop a home with a stepped floor plan that closely follows the terrain. The objective is to position the different levels so that the overall massing of the home relates to the landform.

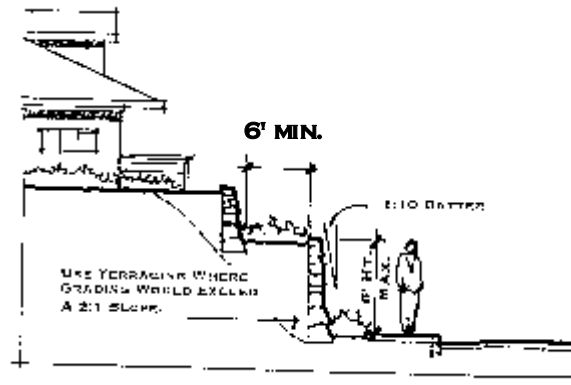
GRADING AND DRAINAGE

Rounded contours and rounded transitions in grade look much better and are easier to maintain than sharp angles cut into the land. Where large grade changes must occur (2:1 or greater) rockeries or structural retaining walls and terracing is required. The maximum height of rockeries is 6 feet and these walls should be battered 1:10. Where more than 6 feet of terracing is required, successive walls must be separated by at least 6 feet of planting.

Prior to beginning construction, lot pads should be graded to an elevation of approximately 1'-0" below the required finish grade for your lot.

Drainage should be maintained in as natural a state as is possible. Use natural forms for swales, and where a swale lining is required, it must be pervious and constructed using natural patterns of native

stone and grasses. Exposed drainage pipe is not permitted.



SLOPE STABILIZATION

All grading shall follow the City of Sparks requirements. Slopes of 3:1 or less are preferred with overall finish grades contoured and blending with natural land forms to the greatest extent possible. Slopes of 2:1 are permitted provided these slopes are re-vegetated with native seed mixes and erosions control matting (i.e. coconut matting or equal). 2:1 slopes shall also have temporary irrigation installed until native grasses/plants are substantially established. A minimum of 70% of the site must be vegetated. The Foothills Homeowners Association shall retain a maintenance easement across all 2:1 slopes to allow for repair and replanting in case of future erosion. The use of rockeries and landscaping to screen cut slopes and fill areas shall be used.

Individual site grading, as well as appropriate hillside adaptive construction, shall be provided on sloped lots and shall be reviewed and approved by the FAWDRC and the City of Sparks.

ROADWAYS AND DRIVEWAYS

Roadways are to be developed in accordance with the standards established in Section IV of this handbook. The neighborhood benefits most from an integrated plan of street trees and driveway locations, therefore driveway curb cuts are established when neighborhood streets are designed. These curb cuts are subject to FAWDRC and City of Sparks approval.

PEDESTRIAN FACILITIES

Sidewalks

Sidewalks are to be concrete and built to the widths established in Section IV of this handbook.

Sidewalks and pathways leading from driveways to front or side doors should be complementary to or of the same material, texture, and color as the driveway materials.

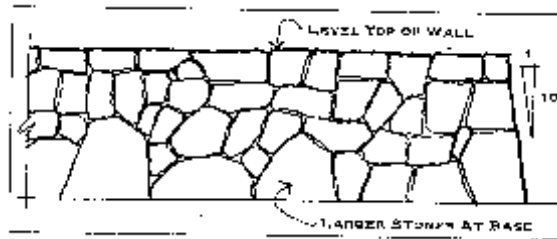
Paths and Trails

Paths and trails leading from one park to another through common space or along hedgerows are

to be constructed pursuant to the requirements of Section IV (See Figure 10).

WALLS AND FENCES

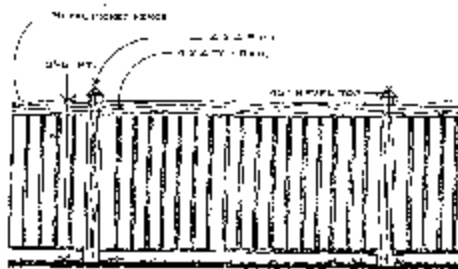
Walls should occur in only three situations at the Foothills. First extreme changes in grade can be managed through the use of terraced walls as described on page VI - 10, Grading and Drainage. Second, small retaining and privacy walls can be used to create space adjacent to the home. These walls are to be connected to the home and/or its accessory structures. Materials for these walls should be selected to blend with the materials and colors of the adjoining home or structure. Walls used for retaining slopes must be approved by the City of Sparks. Third, screen walls may be used on village exteriors for the purpose of screening homes from arterial and collector roadways.



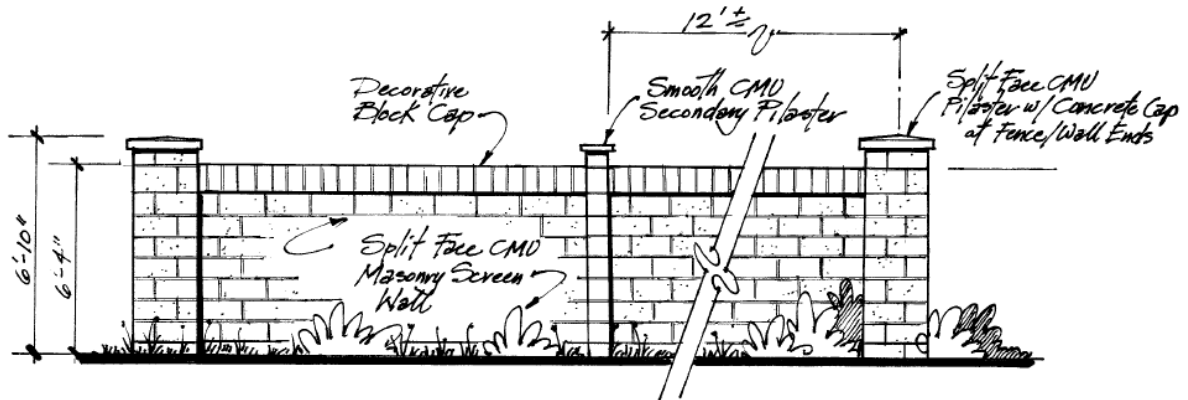
A palette of three fences will be used within the community. Their uses and locations have been carefully studied to establish and preserve the design character of the Foothills and to meet functional needs in particular situations.

Fences should be carefully located to preserve visibility triangles at all intersections and driveways. Merchant Builders shall produce a detailed Neighborhood Fencing Diagram for their parcel. The following diagram will illustrate where different types of fence are to be used and which fencing must be installed initially.

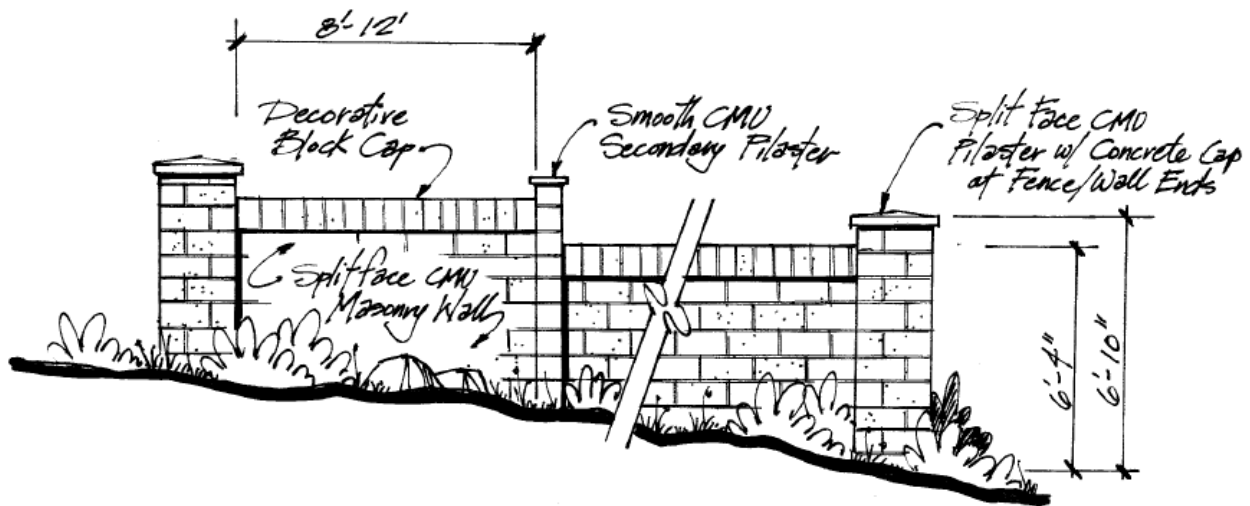
- An ornamental black metal picket fence with wood cap and wood posts (weathered natural finish) is to be used from the rear setback line for lots that back to a common area, open space or amenities. Variations in ornamental fence return depth along side lot lines may be required by the FAWDRC, at their discretion, to preserve views.



- A masonry screen fence (pilaster of field stone optional) is to be used to prevent views to and from adjacent lots and roadways (arterials and collector). (Alternative "A")

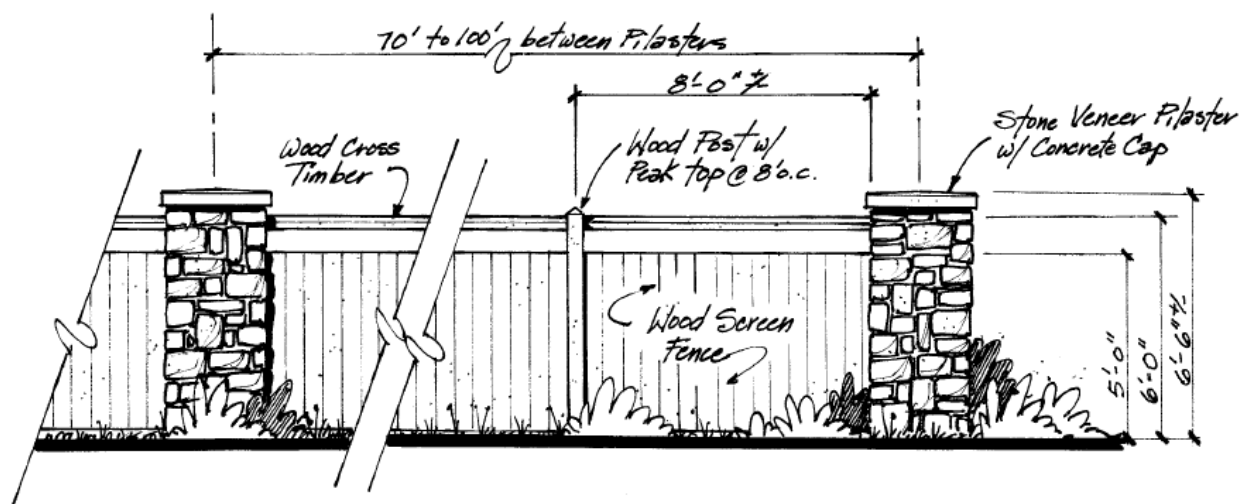


Conceptual Masonry Screen Fence

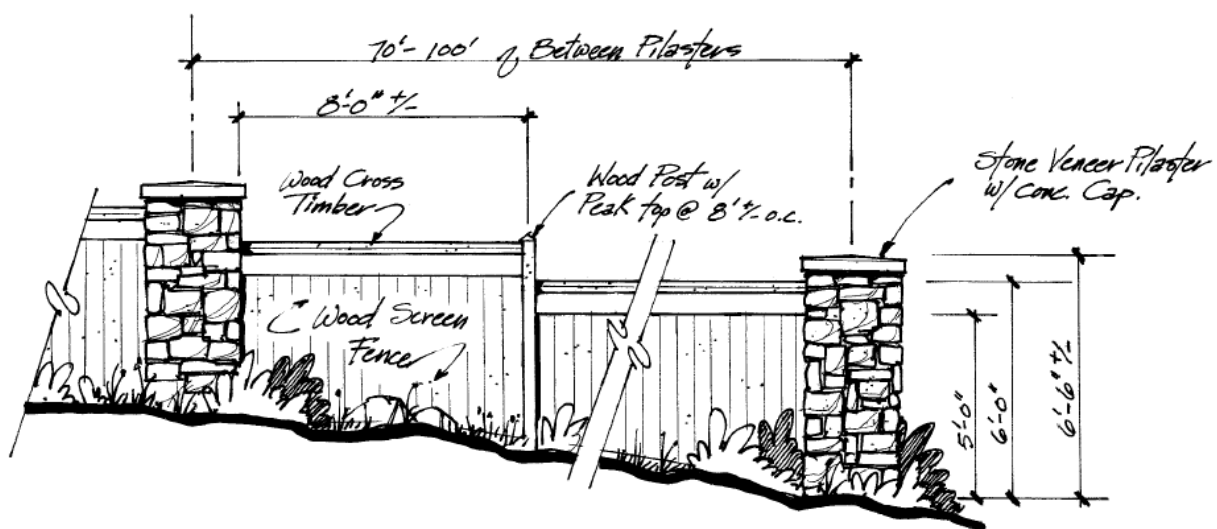


Conceptual Masonry Screen Fence – on slope

- A wooden screen fence (weathered natural finish, pilaster of field stone optional) with top rail is to be used to prevent views to and from adjacent lots and roadways (arterials and collector). (Alternative "B")

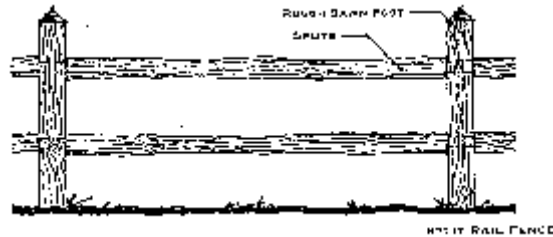


Conceptual Wood Fence with Pilaster of Field Stone (optional)



Conceptual Wood Fence with Pilaster of Field Stone (optional) – on slope

- A split rail fence (weathered natural fence) should be used as accent fencing to prevent access to pedestrian and vehicular areas, sensitive areas or neighborhood parks.



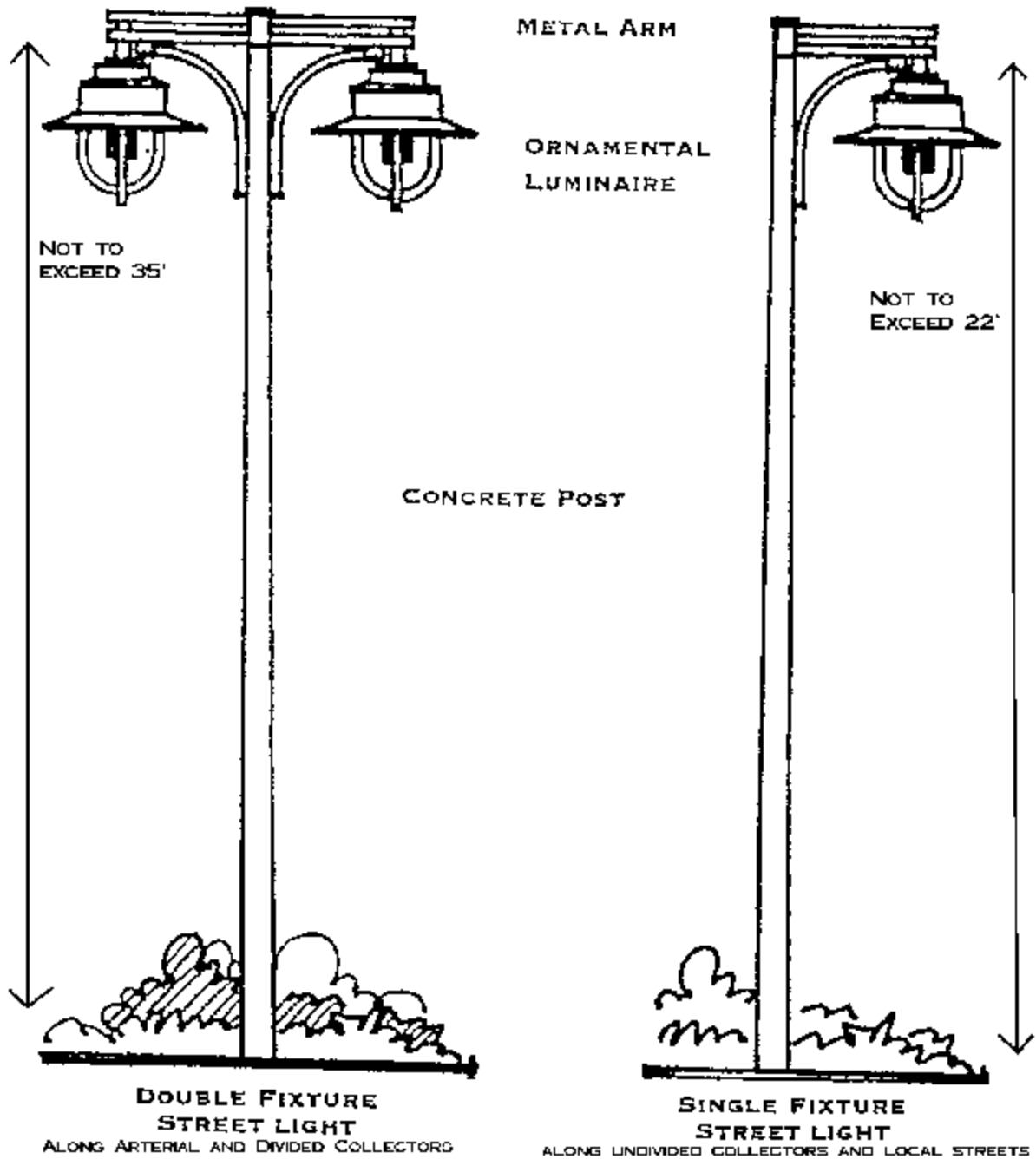
Note: Split rail fence height typically varies due to terrain and ground conditions, but average $\pm 42"$

- Fences connected to the side of the house must be recessed at least 4 feet from the front facade.
- Front yard and exterior side yard fences must be split rail within the front yard setback.
- All wood fence members shall remain either natural (untreated) or with a clear stain as approved by the FAWDRC.
- Fence samples and details are available upon request from the FAWDRC.

SITE LIGHTING

Lighting for the roadways and common areas has been carefully designed to uphold the community character. Further, the illumination rationale adheres to the principle that too much lighting will detract from the night time visual quality of the high-desert valley. Likewise, lighting for homesites should strive to be of a rural character as portrayed here. Sierra Pacific Power standard decorative lights as shown below shall be used.

- Light fixtures should provide a 'cut-off' type of pattern, preventing or minimizing direct views to bright light sources.
- For common areas or parks, where a high intensity discharge (H.I.D.) fixture may be required, the light source must be metal halide.
- H.I.D. lamps are not permitted on private lots.
- Color lenses or bulbs may not be used for landscape lighting.
- Uplighting and indirect accent lighting where the light source is hidden is preferred.



SITE FEATURES/SIGNAGE

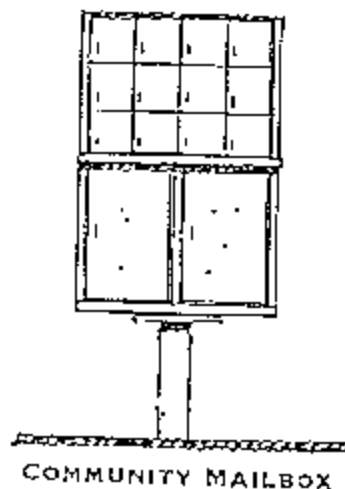
Certain site features, such as neighborhood entry monuments and signage have been selected to establish a consistent design theme for the Foothills. These site features must be constructed according to predetermined standards. More detailed designs for site features are available on request from the FAWDRC. Site features and signs shall be carefully located so they do not block visibility at intersections and driveways.

Mailboxes for single family homes are to be metal, cluster-style boxes with 8, 12 or 16 boxes per cluster mounted in custom black pedestal casing and post as generally shown below. The specific model to be used is Model 10550USP, as approved by the U.S. Postal Service.

Additional site features may be part of your home or neighborhood development. Please refer to the CC&R's for items that are allowed, controlled or prohibited. These include features, without limitation, such as satellite dish, antennas, flagpoles, basketball backboards or lawn ornamentation.

The Foothills will provide a builder/neighborhood directional signage system to direct home/lot buyers along major collector streets during the project's sales period. Signage by individual builders will therefore be limited to the parcel or lot within which they are building.

For a complete signage index, please refer to the attached document following page 43 of this section. All signs shall conform with City of Sparks Sign Ordinance.



MISCELLANEOUS IMPROVEMENTS

Pools and sport courts, pet enclosures or similar improvements are to be located within the designated building setbacks and effectively screened from view from off-site.

- Within the development, pools will be reviewed and approved on a home site by home site basis. Above ground pools will not be approved.
- Swimming pools, hot tubs, and spas shall be designed to be visually connected to the residence through the use of privacy fences and courtyards. All supporting equipment and safety fencing must be screened.
- Pools, hot tubs, and spas must be constructed and fenced according to all applicable State and local agency regulations.

EXTERIOR SERVICE AREAS/SATELLITE DISHES

Trash disposal, outdoor work areas and outside equipment, and satellite dishes are to be screened from off-site views by fencing, walls, or planting and integrated into the building design. Satellite dishes may not exceed 18 inches in diameter.

REAL ESTATE SIGNS

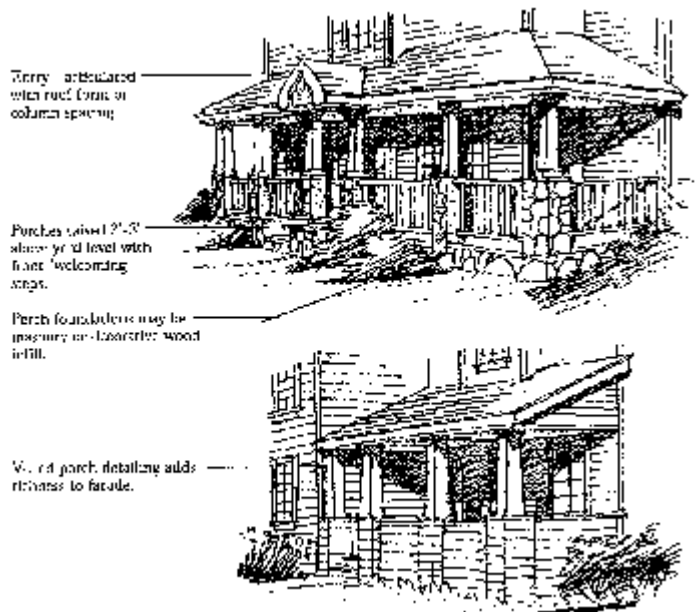
Real Estate signs shall be a standard H frame sign with an 18"x24" frame plate for the business name and a 6"x24" rider space plate. The signs shall be ivory aluminum with black text, as further detailed as an exhibit to this section.

ARCHITECTURAL GUIDELINES - SINGLE FAMILY DETACHED

BUILDING MASSING, FORM AND DETAILING

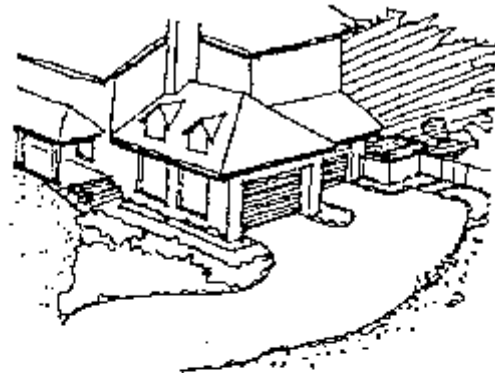
A variety of housing forms is important to establishing a diversified character at the Foothills. Elements which are consistent with this approach include, but are not limited to:

- The overall proportions of the building mass, and the relationships of sequential masses should be more horizontal than vertical, consistent with the ranch or prairie style vernacular.
- A stone or brick base for the main structure is encouraged as a means of creating appropriate massing and visual strength for the ground floor, elevating porches for views and breezes, and accommodating a certain degree of slope across the lot.
- Relationships of single story rooms and garages to two story main structures need to be carefully balanced.
- Windows should have simple shapes with small panes of glass in double hung or casement frames with window sills.
- Eave and post cornice detailing should be simple.
- Chimney massing should extend to the ground rather than 'floating' a few feet above grade.
- Roof lines should be simple gable or hip roofs, yet may include double pitched roofs that relate to porch overhangs or building extension.
- Roof dormers of shed or gable form are encouraged. Cupolas, finials, weather vanes and other roof ornaments may be permitted providing they are consistent in style and carefully integrated into the roof design.

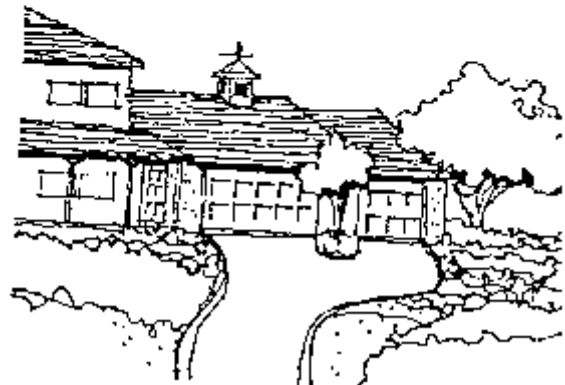


GARAGES

- Garages must be integrated with the overall proportions and styling of the main structure.
- Garage roof lines are to be carefully planned to harmoniously combine with the lines and details of the other building masses.
- Garage entrances are encouraged to be on the side or rear whenever possible.
- Side and rear entry garages can be accommodated in a number of ways:
 - Front projection or aligned with side entry.
 - Recessed garage with side entry.
 - Recessed or front aligned garage with rear entry.
 - Separate garage with side entry.
 - Corner lot with side or rear entry.
- When a three car garage facing the street is proposed, the garage facade must contain a plane break to reduce the visual span of the three car opening. A double wide door or two single garage entries can be on the same plane, however, three garage entries may not be on the same plane.
- The garage doors and windows within garage doors are to be detailed and constructed with the detailing of the other exterior facades. Materials and color schemes are to be consistently used to blend visually. Garage doors which face the street are to be recessed at least 10" to provide adequate relief to the facade.
- A separate side passage door will be required for all garages which face the street. This will help to discourage leaving the garage door open for pedestrian ingress and egress.
- All recreational vehicles to be parked or stored on lots must be kept in a fully enclosed roofed garage.



SIDE ENTRY GARAGE



SPLIT GARAGES

WINDOW RATIOS

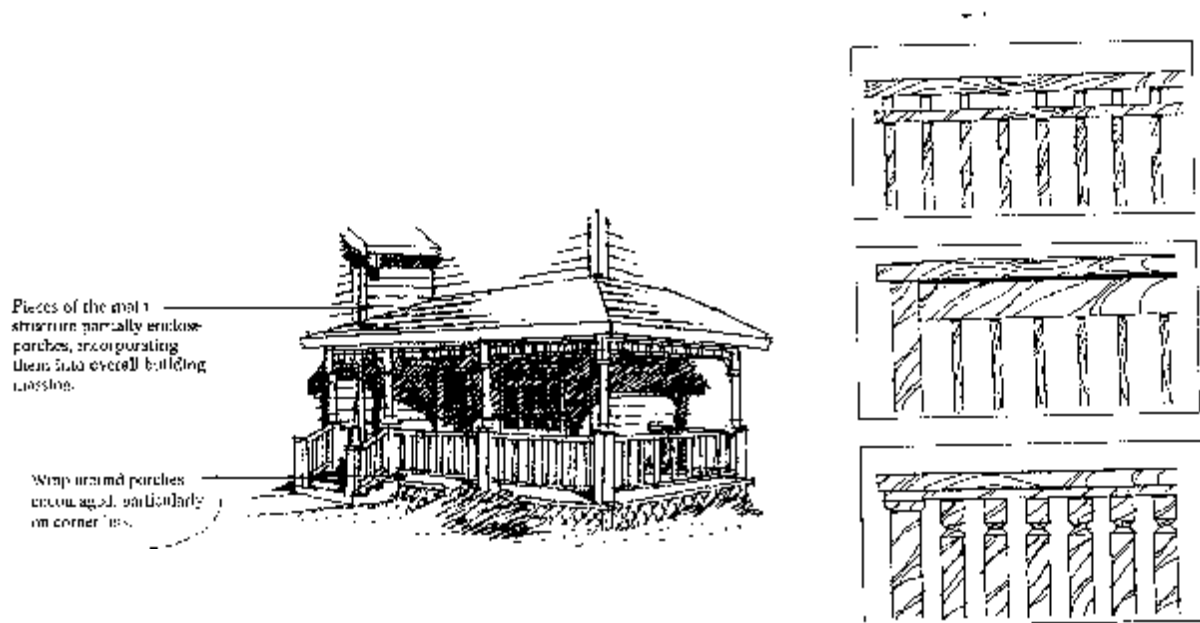
Window ratios and placement should be carefully developed to provide harmonious facades in concert with interior layouts. Avoid placing windows too close to corners or roof lines and uneven spacing of windows.

PORCHES

Porches are encouraged as a means of promoting interaction among neighbors, improving streetscape facades, mitigation of summer afternoon heat gain, and promoting the ranch style. Porches should be functional rather than a stylistic add-on and should encourage and enhance blending of indoor and outdoor space.

- Wherever possible, porches should wrap a corner to give added dimension to the indoor/outdoor sequence.

- Porches on two levels can be dramatic, yet require careful integration with facade and roof line design.
- A minimum depth of 6'-0" is required to allow a functional porch. A more generous depth of 8' or 10' allows much greater flexibility of use. A porch should be considered to function as an outdoor room.
- Railing style and materials should be consistent with detailing of the columns and facades. Elaborate wrought iron or aluminum railings are not acceptable. Spacing between railing pickets shall conform to adopted Building Code by the City of Sparks at time of construction.



Note: Examples of railing style consistent with the FAWDRC Guidelines.

ROOF DESIGN AND MATERIALS

Roof pitch must be consistent with the home's style and massing. Minimum and maximum (vertical to horizontal) pitches of 3:12 and 8:12 respectively are not to be exceeded.

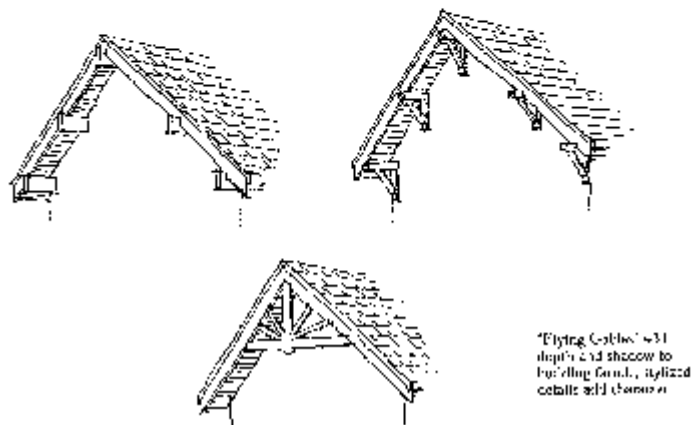
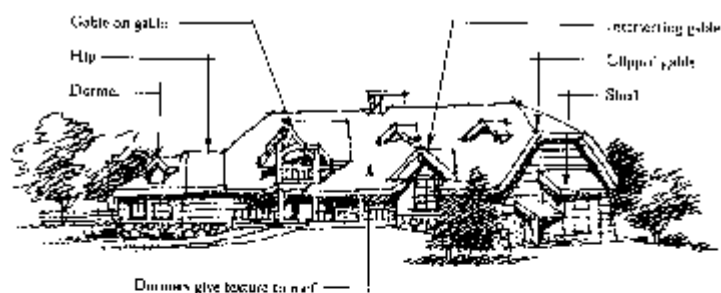
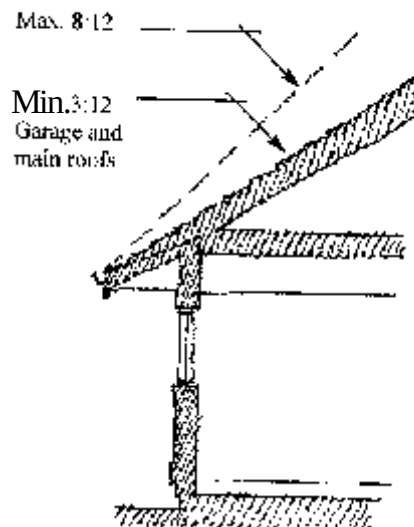
A 3:12 pitch is typically to be used for the lower portion of a double pitch roof. Otherwise a minimum pitch would be 5:12. Once a roof pitch is established, it should be used consistently throughout unless a double-pitch roof is proposed. Variations in roof pitch may be permitted for certain special design features of homes and on certain lot configurations, subject to FAWDRC approval.

Overhangs are to be proportional to the underlying facade and in keeping with the architectural style proposed. Generous overhangs are encouraged to provide shade and minimize heat gain during the hot summer months.

Any roof apertures or rooftop equipment must be confined to roof planes that are not visible from the street or common areas.

When utilized, rain gutters and down spouts should be integrated into the facade design and developed as a positive feature. Down spouts are either to be drained underground into a common storm drain network or, at a minimum, to an outfall carefully designed to prevent erosion. Exposed corrugated plastic pipe will not be permitted.

Roof vents, sandpipes and ornamental chimney caps are to be unobtrusive and of a color that matches the roof material color. Ornamental chimney caps will be required to assist in screening spark arresters.



Accepted roofing materials and color ranges are as follows:

- a. Tile or Flat Concrete Tile*
 - Slate grey
 - Earth Tones
 - * Barrel tile roofing will not be permitted.
- b. Standing Seam Metal
 - Natural metal (not polished)
 - Slate grey
 - Copper
 - Earth tones
- c. Architectural Grade Composition
 - Shingles (minimum 40 year)
 - Slate grey
 - Earth tones
- d. Alternate materials and colors may be allowed subject to FAWDRC approval.

EXTERIOR MATERIALS AND COLORS

Exterior facade materials and detailing are to be consistently applied throughout all facades of the home. In order to avoid the appearance of a false veneer, abrupt changes in materials are not permitted when visible from any common areas. When materials changes do occur, they should change at logical locations such as changes in building form or function.

Exterior reflective metal surfaces is to be painted or color coated to match or complement adjacent materials.

The use of substantial wood, stone or brick treatments are encouraged. When utilizing these materials be sure to use them in support of their function, such as for an entire base of major portions of a facade. Token or minor applications of stone and brick are not acceptable. All exterior materials and colors are to be submitted to the FAWDRC for review and approval. A sample of acceptable materials and color ranges include the following:

Siding (Horizontal, Board and Batten, Shingles, etc.)

- Natural wood tone or weather bleached wood.
 - White/Warm white
 - Pale Earth tones
 - Dark green (partial facade)
 - *Alternates may be allowed subject to FAWDRC approval.
- Stucco
 - White/Warm white
 - Light Pastels
 - Pale Earth tones
 - *Alternates may be allowed subject to FAWDRC approval
- Stone
 - Pale to medium Earth tones
 - (orange tones not accepted)
 - Grays
 - *Alternates may be allowed subject to FAWDRC approval.

- Brick
 - Pale Earth tones
 - Light browns
 - Muted reds
 - *Alternates may be allowed subject to FAWDRC approval.
 - *Accent colors for detailing, shutters, eaves, columns, doors and windows are subject to review and approval by the FAWDRC.
- Exterior materials which are not permitted are as follows:
 - Lap siding wider than an 8" module
 - Metal joints for lap siding
 - T-III or composition board siding.

BUILDING IDENTIFICATION AND LIGHTING

Building identification shall be easily viewed from the street to assist visitors, repair services, and emergency agencies in finding the residence. Fonts for text and numbers are to be simple, easily read, and not overly large, a maximum of 6" height.

Exterior building lighting is permitted at pathways, entrance doors and porches, but must have a 'cut-off' pattern preventing the light source from being visible from common areas and neighbors. In addition, spill-over lighting onto adjacent properties is not permitted.

Decorative fixtures consistent with the architectural style of the home are encouraged.

SCREENING

Mechanical equipment on roofs, above ground transformers, air conditioner condensers, utility equipment and loading, service and storage areas are to be screened, enclosed, or concealed from view from the streets, pathways, common areas, and adjacent lots by landscape planting or removable fencing.

ACCESSORY STRUCTURES

Accessory structures such as woodsheds, maintenance and storage buildings, mechanical, equipment, and trash enclosures, are to be designed in a style / surface / paint compatible with the main buildings. Their arrangement and siting on a lot is to be carefully considered to be harmonious with the main structure and within building envelopes. Metal buildings are not allowed.

LANDSCAPE GUIDELINES

SINGLE FAMILY LOT LANDSCAPE DESIGN

Landscape design for homes can take on a myriad of styles and character. In general, however, landscape design at the Foothills should take its cue from native vegetation and climate in the valley. The services of a licensed landscape architect or garden design professional should be seriously considered as they will go far in enhancing the aesthetics, enjoyment and future value of your home.

Indigenous species are perfectly adapted to the local conditions and will most likely thrive. Please

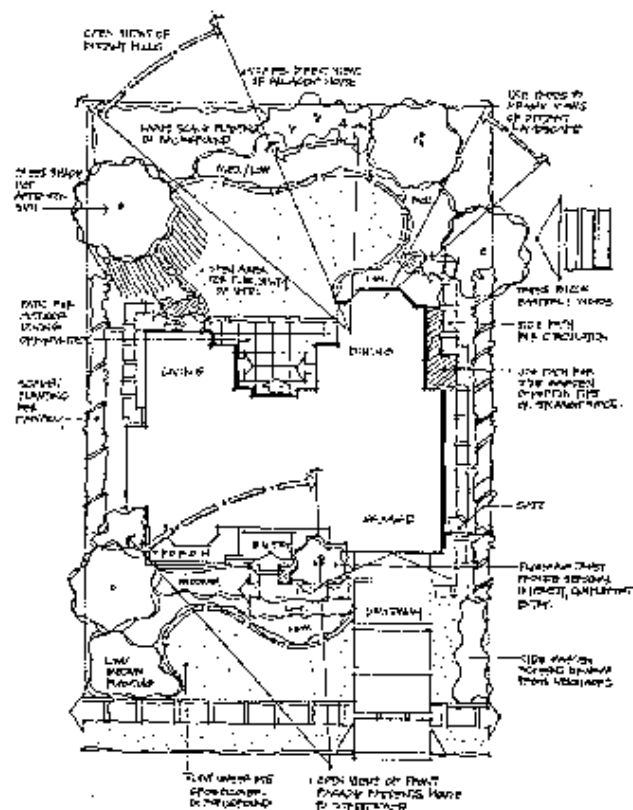
refer to the General Plant Palette at the end of this section for plant material which may be used in your landscape design.

All homes are required to utilize irrigation systems fully controlled by an automatic timer.

Rock mulches conserve the most water and should be 4" minus in size. Restraint is to be used when selecting rock mulches in order to avoid chaotic or uncomplimentary color schemes. The primary mulch used in the common areas is 'Nevada Green', an inexpensive and simple material which complements indigenous planting and common area site features.

Consider the following when evaluating your site regarding landscape design:

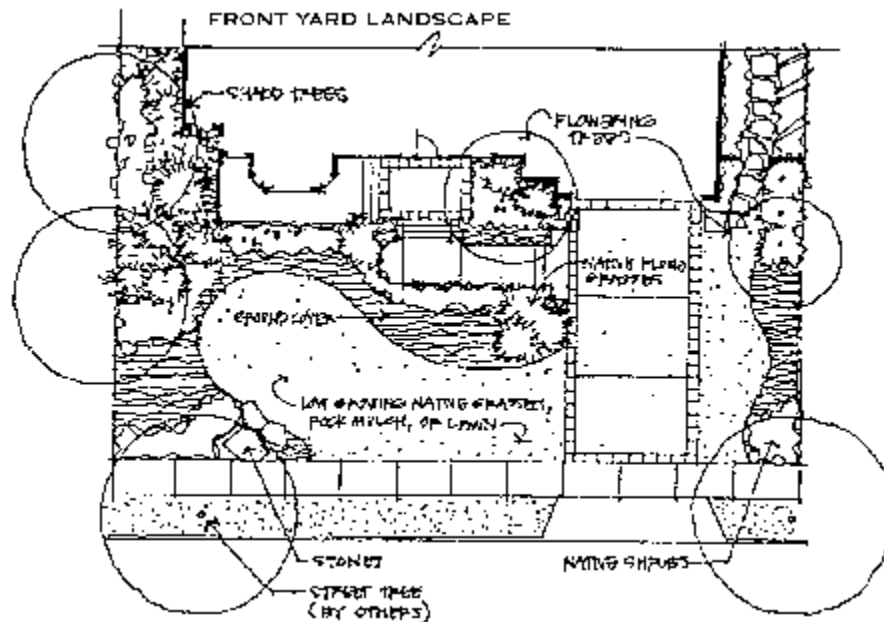
- Outdoor spaces, recreation or gardening.
- Spatial definition and human scale of outdoor 'rooms'. Size activity areas approximately the same size as their indoor equivalent.
- Building scale and mass should relate to adjacent landscape and be mutually complementary.
- Complementary forms throughout the landscape, in both two and three dimensions.
- Harmony of materials that do not combine too many different forms, colors and textures.
- Circulation patterns.
- Shade in summer and sunlight in winter.
- Breezes and strong winds.
- Screening or enhancing views both on and off-site.
- Plantings on adjacent land.
- Slopes which may require erosion control or terracing.
- Positive drainage.
- Safety for children and pets.



SINGLE FAMILY FRONT YARD LANDSCAPE

Initial landscape planting and irrigation for the front yard of each lot, and exposed sideyards on corner lots must meet certain minimum costs and be installed within 120 days of Certificate of Occupancy (weather permitting). This minimum cost is related to lot size and is to be applied in the exposed front and side yard area only. To calculate your minimum requirement, use the following formulas:

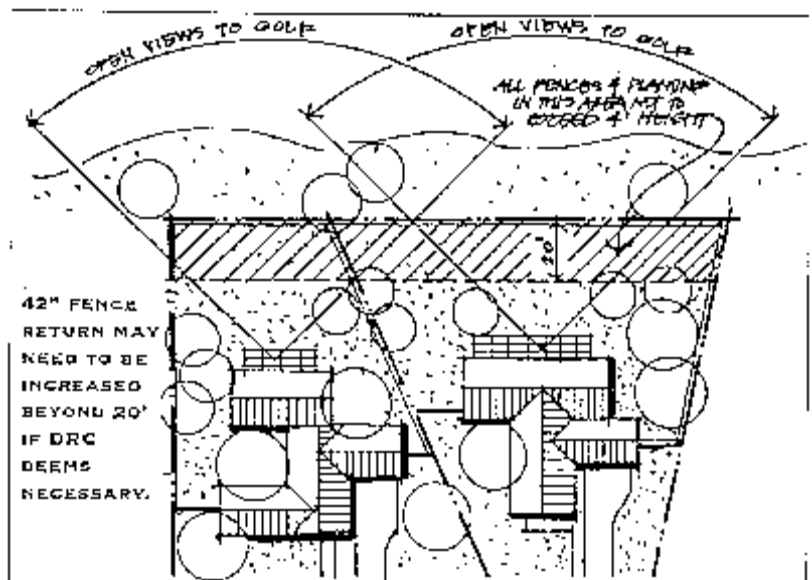
- Average Lot Width x Required Setback = Exposed Yard Area (square feet)
- Exposed Yard Area X \$1.50 per square foot = Total Minimum Exposed Yard Landscape Value
- Rear yard and unexposed side yard landscape must be installed within 180 days of receipt of Certificate of Occupancy.



BUFFERS AND SCREENING

While it is important to create privacy on your lot, it is equally important to respect your neighbors' views of common area or off site features.

For these types of lots, fences and shrub buffers or screens within 20' of the lot line paralleling the amenity must be kept to a maximum height of 4'-0". This will help to insure broader diagonal views of these amenities from each view lot.



LANDSCAPE STRUCTURES

The landscape may include outdoor structures such as decks, trellises, and gazebos.

- The FAWDRC may approve structures that are located behind the front plane of the residence and are not obtrusive to adjacent homesites, the street, or other community amenity areas.
- In general the same guidelines that apply to architecture apply to landscape structures.
- These structures must complement house architecture.
- Landscape structures shall meet setback requirements per the City of Sparks.

ROADWAYS AND COMMON AREA LANDSCAPE

Common area and roadway landscape designs will be selected by the Foothills and must be constructed according to these plans. Merchant builders should request a neighborhood landscape diagram which will indicate where street trees, cul-de-sac planting, hedgerows, buffers and entry landscapes are required for their parcel. Neighborhood entrances should conform to the neighborhood entry monuments attached as an exhibit to this section. Street and hedgerow trees are to be selected from the tree palette at the end of this section.

When selecting street trees, care must be taken to consider species already selected for adjacent streets. Ideally, a monoculture of trees of trees within a planned development is to be avoided. While all of the species on a continuous street should be the same, a change in species for different streets is encouraged. Local street tree spacing shall be provided at rate of 1 tree per 40 to 50 feet on center, on each side of the roadway and be a 2" minimum caliper.

ARTERIAL / DIVIDED COLLECTOR LANDSCAPE

Landscaping in the streetscape area along the street shall be 1 tree per 30 feet on center, on each side of the roadway. The trees may be grouped. The minimum deciduous tree size shall be 50% 2" caliper and 50 % 3" caliper. The minimum evergreen tree size shall be 6 foot minimum height. The ratio of deciduous trees to evergreen trees shall be 75% deciduous trees and 25% evergreen trees. There shall be 4 shrubs for every tree, with a minimum size of 5 gallons. Median landscaping shall be 2" caliper deciduous trees planted 30 feet on center and 4 shrubs per tree with minimum size of 5 gallons.

UNDIVIDED COLLECTOR LANDSCAPE

Landscaping in streetscape area along the street on each side of the roadway shall be 1 tree per 30 feet on center. The trees may be grouped. The minimum deciduous tree size shall be 50% 2" caliper and 50% 3" caliper. The minimum evergreen tree size shall be 6' minimum height. There shall be 75% deciduous trees and 25% evergreen trees. There shall be 4 shrubs for every tree, with a minimum size of 5 gallons.

Botanical Name - Trees

Abies concolor
Acer circinatum
Acer rubrum 'Red Sunset'
Acer saccharum
Acer platanoides
Aesculus carnea
Amelanchier laevis
Calocedrus decurrens
Cedrus atlantica
Cercis occidentalis
Cornus florida 'Cloud N.'
Cotinus coggygia 'purp.'
Crataegus phaenopyrum
Ginkgo biloba
Liquidambar styraciflua
Liriodendron tulipifera
Malus floribunda
Picea pungens
Pinus jerreri
Pinus nigra
Pyrus calleryana 'Chanticleer'
Pyrus calleryana 'Bradford.'
Quercus coccinea
Quercus lobata
Quercus palustris
Tilia cordata

Common Name - Trees

White Fir
Vine Maple
Red Maple
Sugar Maple
Norway Maple
Red Horsechestnut
Serviceberry
Incense Cedar
Atlas Cedar
Western Redbud
Flowering Dogwood
Purple Smoke Tree
Washington Hawthorn
Maidenhair Tree
American Sweetgum
Tulip Tree
Flowering Crabapple
Green Colorado Spruce
Jeffery Pine
Austrian Pine
Ornamental Pear
Flowering Pear
Scarlet Oak
California Black Oak
Pin Oak
Littleleaf Linden

Botanical Name - Shrubs

Artemesia tridentata
Berberis verruculosa
Berberis buxifolia
Buddleia davidii
Chaenomeles spp
Cornus mas
Cornus stolonifera
Cornus stolon. 'Flavira.'
Cortaderia selloana
Corylus avellana
Euonymus alata 'compacta'
Forsythia suspensa
Hypericum calycinum
Ilex altaclarenis
Juniperus sabina 'Tam.'
Kerria japonica
Kolkwitzia amabilis
Lonicera pileata
Mahonia aquifolium 'compacta'
Philadelphus coronarius
Potentilla fruticosa 'Snowf.'
Prunus besseyi
Pyracantha coccinea
Rhamnus frangula
Ribes sanguinum
Spiraea prunifolia
Spiraea vanhouttei
Syphoricarpos albus
Syringa vulgaris
Viburnum burkwoodii
Viburnum davidii

Common Name - Shrubs

Bigbasin Sagebrush
Barberry
Barberry
Butterfly Bush
Flowering Quince
Cornellian Cherry
Redtwig Dogwood
Yellow Twig Dogwood
Pampas Grass
European Filbert
Winged Euonymus
Forsythia
St. Johnswart
Wilson Holly
Tam Juniper
Japanese Rose
Beauty Bush
Japanese Honeysuckle
Oregon Grape
Sweet Mock Orange
Potentilla
Western Sand Cherry
Firethorn
Alder Buckthorn
Red Flowering Currant
Bridal Wreath Spiraea
Vanhoutte Spiraea
Common Snowberry
Lilac
NCN
David Viburnum

Botanical Name - Street Trees

Acer platanoides
Acer Rubrum
Acer saccharum
Celtis occidentalis
Crataegus phaenopyrum
ginkgo biloba
Gleditsia triacanthos
Koelreuteria paniculata
Liquidambar styraciflua
Liriodendron tulipifera
Quercus coccinea
Quercus palustris
Quercus rubra
Tilia cordata

Common Name - Street Trees

Norway Maple
Red Maple
Sugar Maple
Hackberry
Washington Hawthorn
Maidenhair Tree
Honey Locust
Golden Rain Tree
American Sweetgum
Tulip Tree
Scarlet Oak
Pin Oak
Red Oak
Little Leaf Linden

Botanical Name - Ground Covers

Ajuga reptans
Arctostaphylos uva-ursi
Ceonothus volutinus
Cotoneaster horizontalis
Festuca ovina 'glauca'
Hedera helix 'needlepoint'
Hypericum calycinum
Juniperus horiz. 'Wilt.'
Liriope spicata
Mahonia repens
Phlox subulata
Santolina chamacyparissus
Santolina virens
Vinca Minor

Common Name - Ground Covers

Carpet Bugle
Kinnick Kinnick
Wild Lilac
Rock Cotoneaster
Blue fescue
Needlepoint Ivy
Creeping St. Johnswort
Emerson's Creeper
Creeping Lilyturf
Creeping Mahonia
Moss Pink
Lavender Cotton
Green Lavender Cotton
Periwinkle

Botanical Name - Hedgerow Trees

Ginkgo biloba
Liquidambar styraciflua
Quercus robur 'Fastigiata'
Robinia ambigua "Idahoensis"
Sorbus aucuparia 'Cardinal Royal'

Common Name - Hedgerow Trees

Maidenhair Tree
American Sweetgum
English Oak
Idaho Locust
Cardinal Royal Ash

Note: *Populus* species not listed above, as allowed by the City of Sparks, may be allowed at the discretion of the Design Review Committee.

MULTI-FAMILY / ATTACHED SINGLE FAMILY

The intent of these design standards is to allow maximum flexibility in the design of multi-family housing for the Foothills or attached single family (such as townhomes) and to encourage a variety of product types, while protecting the aesthetic value of the community, and natural environment.

The objective of these standards is the encouragement of well designed developments that: (1) are placed along potential transit corridors, (2) promote pedestrian activity, (3) create functional and aesthetic diversity, (4) provide quality living environment for the residents; and (5) protect features of the natural environment.

The review of a multi-family residential project for the Foothills will consider the following criteria:

- a. Proportional size, mix and arrangement of buildings;*
- b. Placement of attached homes or multi-family buildings;*
- c. Placement and orientation of parking / carports / garages;*
- d. Preservation of views;*
- e. Provision of amenities (landscaping, open space, recreational facilities, etc.*
- f. Preservation and / or treatment of natural features;*
- g. Compatibility with surrounding uses; and*
- h. If located in a transit corridor, higher density of dwellings units and adjustment in parking and landscaping will be assessed.*

SITE PLANNING STANDARDS

SITE CHARACTER

Natural site features of the Foothills shall be preserved and become part of the new project, whenever feasible. If the development will be removing a natural feature, there shall be a replacement with a similar feature of same or greater value, such as:

- a. Natural features such as mature trees, creeks, riparian corridors and similar features unique to the site shall be preserved and incorporated into development proposals.*
- b. Development of sloped properties, as defined in Title 20 of the Sparks Municipal Code shall generally follow the natural contours of the land. If necessary, the Foothills will use terraced parking lots, stepped building pads and larger setbacks to preserve the general shape of the natural landforms and to minimize grade differentials with the adjacent streets and with adjoining properties.*

BUILDING ORIENTATION

- a. Buildings shall be generally oriented with varying setbacks to provide visual interest and varying shadow patterns. There shall be variations in the buffers.
- b. Buildings shall be oriented in such a way as to create courtyards and open space areas. Clustering of multi-family units shall be consistently planned throughout the Foothills.
- c. To provide indoor privacy between living spaces, there should be distance separations, buffering or changes in the angle of units.
- d. Private outdoor space shall be designed with maximum consideration for privacy, such as separations and orientation of the outdoor space.
- e. Building orientation shall provide opportunities for public spaces, for recreation and general open space. Public spaces shall be located within central areas accessible to the majority of the surrounding units. The open space shall be useable areas and not steep slopes or riparian areas.

PARKING AND CIRCULATION

Entry Driveways

- a. Monumentation, special textured paving, landscaping, and walls shall be in conformance with the safe siting standards set forth in the current edition of "A Policy on Geometric Design of Highway and Streets", published by the American Association of State Highway and Transportation Officials.
- b. Driveways shall be coordinated with existing or planned median openings in public streets. Driveways shall also line up with driveways on the opposite side of the public roadway, where feasible. Final locations shall be approved by the Public Works Director and the Administrator.
- c. Entry drives shall have a sidewalk on both sides.
- d. Intersections within the Foothills shall be kept to a minimum.

Parking

- a. Parking spaces include carports, garages or open parking.
- b. There shall be parking allocated within a travel distance of 200 feet of all residential units within the development.
- c. Carports and garages shall be designed as an integral part of the architecture of the development. They shall be similar in materials, color and detail to the principal buildings of the Foothills. Carports shall be designed to complement the architecture of the main buildings. Carport columns shall be located to assist in vehicular maneuverability and provide unobstructed vehicular access.

- d. Parking on the perimeter of the property adjacent to the public street shall be screened per the standards in the landscape section.
- e. Wheel stops shall be provided where parking adjoins landscaping and sidewalks.

Pedestrian Circulation

- a. All multi-family / attached single family developments shall incorporate pedestrian connections to adjoining residential, recreational and commercial uses.
- b. The parking area shall be designed in a manner which links it to the building and sidewalk network as an extension of the pedestrian system. The pedestrian system shall be designed within the development to connect the buildings and open space / recreational facilities. This can be accomplished by using design features such as walkways with enhanced paving, trellis structures and / or landscaping treatment.
- c. For projects along transit routes, they shall be designed to have a pedestrian entrance oriented towards transit stop(s) for convenient access by transit passenger.

MISCELLANEOUS

Trash Enclosure, Mechanical / Electrical and Storage Areas

- a. All trash and garbage bins shall be stored in an enclosure approved by disposal services, FAWDRC, and the Administrator.
- b. Trash enclosures shall allow convenient access from each tenant.
- c. Trash enclosures shall be constructed to be architecturally compatible with the main buildings. All trash enclosures shall be treated with anti-graffiti material. The trash enclosure shall be constructed of substantial building materials used in the design of the buildings(s). The gates shall be constructed of durable material that screens a minimum of eighty (80) percent into the trash enclosure. Wood and chain link gates shall not be allowed.
- d. Switch boxes, transformers, electrical and gas meters, including ground mounted air conditioning units and other above ground or building mounted utility elements (including antennas or satellite disks), shall be screened or located out of view from public roads, driveways and common public areas, such as exterior entrances.
- e. All roof-mounted equipment shall be screened from adjacent properties, public rights-of-way, and driveways / common areas within the project. The screening elements shall be designed to be compatible with building architecture and architectural elements of the building.
- f. All storage areas shall be screened and enclosed with durable materials that complement the project architecture.
- g. All screening methods shall be compatible with the building architecture for the

Foothills.

Recreational Facilities / Amenities

- a. Multi-family / attached single family developments shall have useable open space, whether common or private, for recreation and social activities. The recreational area shall be a minimum of 10% of the gross development area. All multi-family / attached single family developments shall choose 5 of the following recreational facilities: swimming pool, tennis courts, horseshoes, spa, exercise equipment, game room, community room, par course, walking trails (minimum 1/4 mile in length), picnic areas to include tables with barbeques, volleyball court, basketball court and lawn areas for field games as approved by the FAWDRC and the Administrator.
- b. The recreational facilities shall be conveniently located for the majority of the units.
- c. All living units shall have a private open space (i.e., decks or patios) and shall be contiguous to the units with a minimum width of 5 feet and 36 square feet.
- d. Multi-family / attached single family development shall have a secure children's play area with play equipment that is visible from as many units as possible.
- e. There shall be common barbeque areas with tables provided, within the multi-family / attached single family development, which can count towards recreational facilities. Individual barbecues are prohibited at units, unless approved by the Administrator.
- f. All units shall have at a minimum, a washer hook-up and dryer hook-up within each unit.



BUILDING ARCHITECTURE

Building Design

- a. Within the Foothills, the architecture shall include building style, form, size, color, material and roof lines that are complementary to the overall Nevada ranch design of the Foothills.
- b. Boxy and monotonous facades that lack a sense of human scale are prohibited. The buildings shall incorporate articulation with no long expanses of flat wall planes, vertically or horizontally, exceeding 50 feet, unless approved by the FAWDRC and the Administrator.



- c. The architectural character (i.e., exterior materials, window trims, cornices, arches, etc.) of the exterior elevations shall be consistent on all sides of the building(s).



- d. Roofs shall have variations in plane accomplished by use of dormers (pitched, shed-roof or eyebrow), gables, hipped roofs and variations in pitch. Pitched roofs are preferred. Pitched roofs that have a slope of 3:12 or steeper are encouraged. All roofs shall be articulated. This may be achieved by changes in plane or by the use of traditional roof forms such as hips, gables and dormers.



- e. Stairs shall be designed to be compatible with the architecture of the buildings and integrated into the design of the building.

- f. Shorter access balconies or corridors are encouraged. Access points to units should be clustered. To the extent possible, the entrances to individual units should be plainly visible. Use of distinctive architectural elements and materials shall be used to denote entrances.



- g. All buildings within multi-family / attached single-family residential developments (i.e., laundry facilities, recreation buildings and sales / lease offices) shall be consistent in architectural design with the rest of the Foothills.
- h. Separations, changes in plane and height, and the inclusion of elements such as balconies, porches, arcades, dormers, and cross gables will be used to mitigate flat walls and roof. Hipped or gabled roofs for the entire mass of buildings are preferable to mansard roofs or segments of pitched roof applied at the building's edge.
- i. Attached dwelling units whose garages and / or carport constitute more than 50% of the total width of the unit shall incorporate architectural features (shutters, windows in garage doors(s), trim, offsets of 2 feet minimum, etc.) to reduce the dominance of garage / carport on the front facade.
- j. The architecture abutting a pedestrian system shall exhibit a human scale of detail such as awnings, moldings, pilasters, or other architectural embellishments.
- k. Use of vertical elements such as towers may be used to break up the horizontal massing and provide visual interest.
- l. All site entrances shall be designed to be highly visible from public areas such as parking lot, common areas and walkways. It is also essential that all access points be well lit.

Building Materials

- a. Exterior elevation shall demonstrate a logical use of materials, unified appearance and complementary materials and colors. The materials shall be architecturally related. Avoid frequent changes in materials. Expanses of uninterrupted single exterior materials without planar or color changes shall not be allowed.
- b. Change of materials or color shall occur at changes in plane or at a logical break point. Accent colors can be used for shutters, trim, balcony rail, stucco recesses, or cornice bands and shall relate to the architectural character of the building.
- c. Building materials and color schemes shall be consistent with the chosen architectural style.
- d. Materials such as brick and stone shall be left in their natural colors.
- e. Exterior color elevations for all sides shall be provided with the proposed materials as a part of the initial project submittal.
- f. Exterior materials acceptable shall be stucco, shiplap wood siding, rock, stone or masonry, including brick.
- g. Acceptable roofing material shall be standing seam metal, concrete tile, slate, clay tile roofing or 40-year architectural composition material.

LANDSCAPE STANDARDS

General Landscape Standards

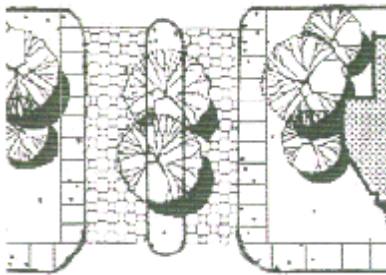
- a. Landscape elements shall provide a vertical dimension. Trees and tall shrubs shall be used in addition to grass and groundcover.
- b. Landscaping shall be used to enhance the quality of the residential environment, to buffer the units from noise or undesirable view, and to separate roads within the development.
- c. Landscaping around the entire foundation base of buildings is required to enhance the edge between the parking lot and the structure.
- d. Landscaping shall utilize water-efficient plants.
- e. Landscaping shall be protected from vehicular and pedestrian encroachment by raised planters or the use of curbs. Stepping stones shall be provided as access through a landscape planter(s) when adjacent to parking spaces.
- f. Landscaping shall be sited so that at maturity, the plants conform with safe siting standards set forth in current edition of "A Policy on Geometric Design of Highway and Streets", published by the American Association of State Highway and Transportation Officials.
- g. Planting islands in parking lots shall have a minimum width of 9 feet interior, protected

by a 6-inch high curb.

- h. Landscaping shall comply with Sparks Municipal Code.

Landscaping At Site Entries

- a. Entries shall be treated with special landscape elements that will provide an individual identity to the project (i.e., special paving, graphic sign, specialty lighting, specimen trees, flowering plants). Trees shall be a minimum of 3" caliper.
- b. Entry / access drives for multi-family / attached single family projects with more than 50 units shall include at least one of the following:
 - a minimum of 5 foot wide (exclusive of curbs) landscaped median;
 - textured paving, interlocking pavers or rough textured concrete;
 - other "gateway" elements such as lights, bollards, monument / stature or entry walls.
 - a roundabout containing landscaping and / or water fountain / feature or artwork.



Example of Landscape & Site Entry Textured Paving

Perimeter Landscape

- a. The landscaping along the street periphery shall be a minimum width of 15 feet and provide a mix of trees, shrubs, and living groundcover. The trees shall be a minimum of 4 trees per 100 lineal feet and 6 shrubs per tree. All parking lots and buildings shall incorporate landscaping at their street periphery.
- b. All sites shall incorporate screening at their periphery. Screening shall be implemented utilizing the following:
 - utilize evergreen shrubs and ornamental grasses that are 30 to 36 inches high at maturity to create a loose, informal landscape screen.
 - provide evergreen trees at 4 trees per 100 lineal feet of landscape area. Evergreen trees shall be installed at a mix of 50% 6 foot in height and 50% 8 foot in height.

- c. Perimeter landscaping adjacent to single family residential land use (existing or approved):
 - minimum landscape planter of 10 feet wide, with a minimum 6 foot high solid screening wall with landscape planted at 1 tree per 25 lineal feet and 5 shrubs for every tree.

SCHOOL SITE

The objectives of these standards are to encourage a well designed educational facility that: (1) provides safe and convenient pedestrian access, (2) is sensitive to the existing and proposed surrounding neighborhoods, and (3) protects significant features of the natural environment.

The review of the elementary school at the Foothills will consider the following criteria:

- a. Adequate and appropriate vehicle and pedestrian access;
- b. Compatibility of surrounding uses;
- c. Proportional size, mix and arrangement of buildings;
- d. Placement and orientation of parking; and
- e. Provisions of amenities (landscaping, plazas, pedestrian friendly environment, etc.)



SITE PLANNING STANDARDS

SITE CHARACTER

- a. Natural amenities such as mountain views, riparian corridors, and other natural features, (i.e., rock outcropping) unique to the site shall be considered in development proposals.
- b. Development of properties shall generally follow the natural contours of the land. Slightly terraced parking lots, stepped building pads, and larger setbacks should be used to preserve the general shape of natural landforms and to minimize grade differentials with adjacent streets and with adjoining properties where possible.

LAND USE BUFFERING

- a. Adjacent residential uses to the school site shall be segregated from noise and visual impacts as is possible to maintain a livable residential environment. This shall be achieved with landscaping, berms, building orientation, and/or public rights-of-way.
- b. Delivery areas, access and circulation driveways, trash and storage areas, and rooftop equipment shall be visually screened using landscape and/or fencing and located away from adjacent residences. If service areas are located near or adjacent to playground areas, they shall be screened with a combination of chain link slatted fencing and landscaping (or acceptable alternative) for security purposes.
- c. Trees and shrubs shall be planted around the perimeter to provide a visual and noise buffer between the School and adjacent residential uses. Deciduous trees shall be planted in clusters approximately 25 feet on center on average, where adjacent to residential uses.

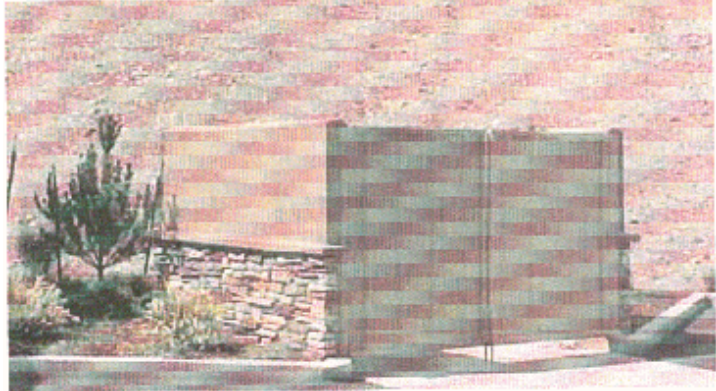
BUILDING PLACEMENT

- a. Active building elevations with public access or windows shall face public streets.
- b. Bus loading areas shall be designed to minimize traffic, noise, and visual impacts on adjacent existing and proposed residential neighborhoods. Where bus loading areas are located adjacent to existing or proposed residential neighborhoods, they shall be screened with landscaping consisting of deciduous trees and/or low level evergreen shrubs to effectively screen this area.
- c. Site design shall place school buildings on the site in a manner that limits impacts on existing and proposed residential neighborhoods. The school building(s) shall be designed with primary vehicle drop-off/pick-up areas located adjacent to major arterial or collector streets and to facilitate efficient traffic movement through the site.

TRASH/SERVICE/STORAGE AREAS

- a. All trash and garbage bins shall be stored in an enclosure approved by disposal services, FAWDRC and the Administrator.

- b. Trash enclosures shall be constructed to be architecturally compatible with the project. All trash enclosures shall be treated with anti-graffiti material. The trash enclosures shall be constructed of substantial building materials used in the design of the building(s). Gates shall be constructed of durable materials that screen a minimum of 80% of the view into the trash enclosure. Wood or chain link gates shall not be allowed.
- c. Trash enclosures must include provisions for concrete pads or appropriately designed asphalt sections in front of the enclosure. The area in front of the trash enclosure shall be a minimum of 6 feet to reduce pavement damage from disposal trucks.
- d. When non-residential buildings are adjacent to residential properties, service areas shall be planned to occur on the side of a building away from residences. Service areas shall not be located in a required setback area.
- e. Loading and delivery spaces shall be located as far away as possible from single family residential properties. When this is not possible, they shall be screened with deciduous trees and shrubs to reduce noise and visual impacts.
- f. Service areas shall not be directly visible from a public street. Screening shall be complete.
- g. Required parking or loading areas shall, at no time, be used for outdoor storage.



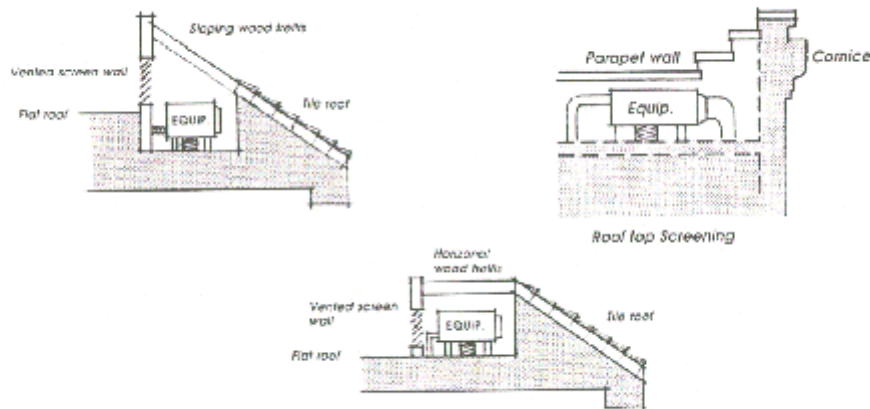
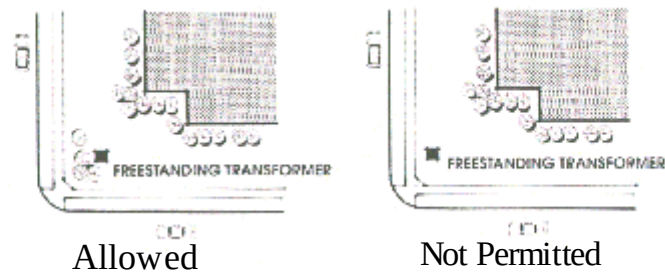
Example of Backflow Preventer Screen

UTILITY AND MECHANICAL EQUIPMENT

- a. Utility equipment such as electric and gas meters, electrical panels and junction boxes shall be located in a utility room within the building.

- b. Delivery, service, transformers, and mechanical equipment (such as compressors, air conditioners, antennas, pumps, heating and ventilating equipment, emergency generators, chillers, water tanks, stand pipes, solar collectors, satellite dishes and communications equipment, and any other type of mechanical equipment for the building) shall be concealed from public view.
- c. Transformers should never be the dominant element of the front landscape/setback area to the extent possible. The intent is to soften the effect or draw one's eye away from the transformers, by using landscaping or structural components.
- d. All utility lines from the service drop to the site shall be underground.
- e. All screening shall be architecturally compatible with the architectural design of the building (respecting the needs for student safety and security at all times).

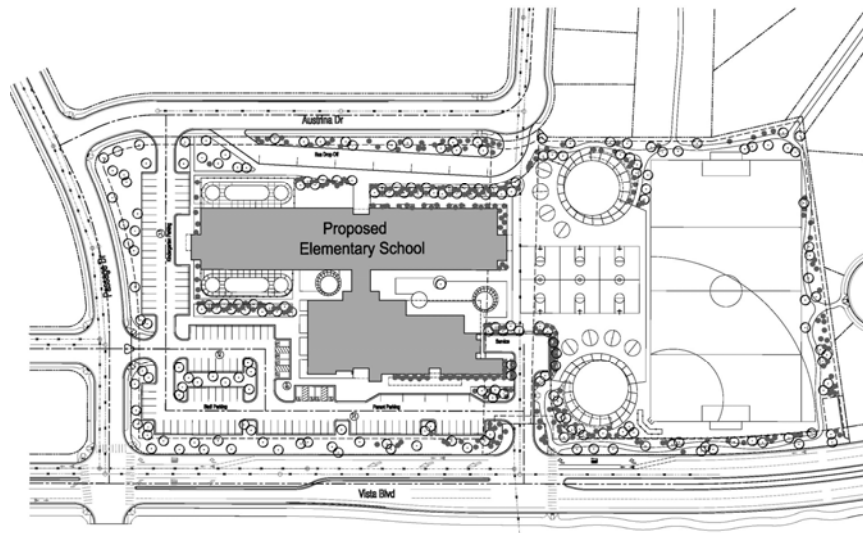
Example of Mechanical Screening



PARKING AND CIRCULATION STANDARDS

PARKING LOT DESIGN STANDARDS

- a. Circulation for vehicles in a parking lot must be within the property and cannot use a public street to move from one portion of the parking lot to another.
- b. Minimize aisle intersections and dead ends.
- c. The school site shall be designed with a clear hierarchy of circulation to ease times of drop off and pick up with major entry drives designed with no parking and designated pedestrian walkways throughout.
- d. Where possible, bus loading/unloading areas shall be located on the rear or side area of the school site opposite the arterial/collector street. When adjacent to residential uses, trees and evergreen shrubs shall be used to provide a visual and noise buffer.
- e. Parking lots shall be separated from buildings by a landscape strip or a combination of landscape strip and sidewalk at least 9 feet wide. If using only a landscape strip, it must be a minimum of 5 feet wide. Wheel stops shall also be provided to prevent overhang of vehicles into the landscape strip. Walkways shall be a minimum of 4 feet wide when using wheel stops to prevent vehicular overhang, or a minimum of 6 feet wide when not providing wheel stops. Parking aisles or spaces directly abutting the buildings are prohibited.



PROJECT ENTRY STANDARDS

- a. A main entry drive shall extend from the public street to the front cross aisle and shall:
 - include a minimum 4 foot wide sidewalk from the street to the front cross aisle on both sides.
 - include 10 foot wide landscaped parkways on each side.
 - contain no parking stalls along the entry drive.
 - include a minimum 7 foot wide enhanced paving crosswalk to delineate the pedestrian

crossing at the public sidewalk.

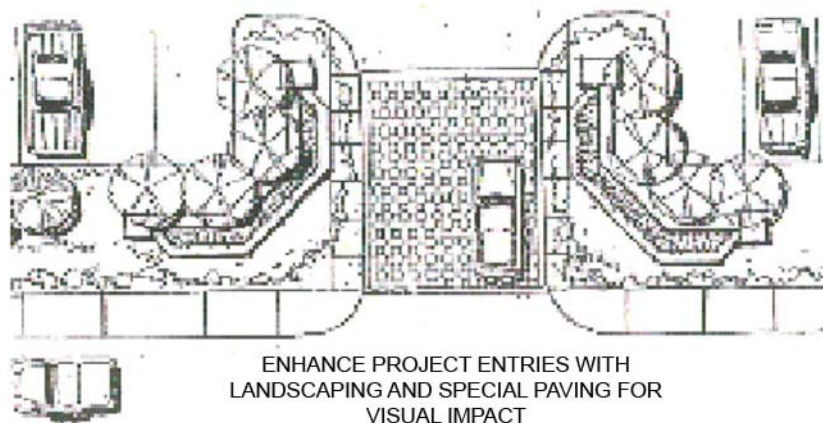
- b. In all parking lots there shall be adequate queuing distance off the street to prevent backing up onto the street.

SITE ACCESS / EGRESS STANDARDS

The Foothills school shall coordinate access / egress points with median openings and existing driveways on the opposite side of the roadway, except for right-in / right-out points. Final locations shall be subject to review and approval of the FAWDRC and the City of Sparks.

NON-RESIDENTIAL PEDESTRIAN ACCESS STANDARDS

- a. Drop-off/pick up points shall be located adjacent to major arterial or collector streets.
- b. Separate cars and pedestrians by designing parking lots so that pedestrians walk parallel to moving cars in parking aisles. The design shall minimize the need for the pedestrians to cross parking aisles and landscape islands to reach building entries.
- c. Clearly defined pedestrian access shall be provided from parking areas and adjacent residential neighborhoods to the site and building entrances where appropriate.
- d. Bicycle racks shall be provided away from parking areas for the safety of children.
- e. Provisions for access by disabled persons shall be incorporated into the overall pedestrian circulation system.
- f. The Foothills School site shall demonstrate connection of the on-site pedestrian circulation system to the off-site public sidewalk and/or pathways. Off-site paths will be gated for security purposes.



g. A separate pedestrian walkway shall be provided from the public sidewalk to the on-site walkways. At a minimum, this main entry sidewalk shall:

- be located on both sides of the main entry drive aisle
- be a minimum of 4 feet wide at all points including locations where signs, poles, fire hydrants, newspaper racks etc., are placed in the walkway.
- be raised and protected from the drive aisle by a 6-inch high curb.
- be constructed of concrete, concrete paver, brick, tile pavers, or combination.

PERIMETER LANDSCAPE

a. The School site within the Foothills shall incorporate screening at its periphery. Perimeter landscaping is considered as part of the required landscaping and is not an addition. Screening shall be implemented utilizing the following:

- 6 foot tall chain link fence shall be located around all playground/recreational fields
- utilize evergreen shrubs and ornamental grasses that are 30 to 36 inches high at maturity to create a loose, informal landscape screen.
- provide deciduous trees at a rate of 4 trees per 100 lineal feet of landscape area. Deciduous trees shall be installed at a mix of 50% 1" caliper and 50% 2" caliper (minimum).

b. Street frontage required:

- Width of landscaping along street frontage shall be a minimum of 10 feet and shall include a mix of trees planted at a rate of 4 trees per 100 lineal feet of frontage, shrubs and ground cover (not to exceed 36-inches at a rate of 6 shrubs per tree). Parking lots shall incorporate landscaping at the street frontage.

c. Perimeter landscaping adjacent to residential land use (existing or approved):

- minimum landscape planter of 10 feet wide with 1 deciduous tree per 25 lineal feet.

LANDSCAPING REQUIREMENTS FOR PARKING LOTS

a. The following landscape / design standards shall be incorporated for the school site:

- Create large planting islands at the ends of parking rows that are a minimum of 300 square feet for double loaded parking and 150 square feet for single loaded parking, with an 9 foot minimum interior width. They shall be planted with shade trees, low shrubs and / or groundcover. They shall be protected by a 6-inch high curb on all sides.
- Provide interior planting islands between parking spaces per Sparks Municipal Code. The planting islands shall be a minimum of 300 square feet for double loaded parking and 150 square feet for single loaded parking and be protected by a 6-inch high curb. The planted area should be at least 9 feet wide (interior).

b. Parking lots shall include landscaping that accents the driveways from the street, frames the major circulation aisles, and highlights pedestrian pathways.

PARKING LOT LIGHTING

- a. Parking lot lighting is required for public safety; such lighting facilities shall be located, with hoods provided and adjusted, so as to preclude the direct glare of the lights from shining directly onto adjoining property or streets.
- b. The height of parking lot lighting shall not exceed 22 feet from grade of parking lot.
- c. The parking lot lighting poles shall be consistent with standards set forth in this Section.

DELIVERY / SERVICE AREA SCREENING

Delivery/service areas shall not be directly visible from a public street or neighboring land use. Screening shall be completed with a minimum 5 foot wide landscape planter to include 1 deciduous tree and 5 shrubs. The landscaping, as demonstrated on the approved landscape plans, shall screen the wall 80% within 3 years. Trees shall be a minimum size of 2" caliper.

SIGNAGE

Signage associated with the school site shall be compatible with the approved Foothills signage program and the Sparks Municipal Code, section 20.56. Additional signage (directional, parking, building, etc) shall be permitted as allowed by The Foothills at Wingfield Springs Development Standards handbook.

GENERAL LANDSCAPE STANDARDS APPLICABLE TO THE FOOTHILLS SCHOOL SITE

STANDARD DESIGN CONCEPTS

- a. Specimen trees, 2-inch caliper deciduous shall be used in informal groupings and rows at major focal points such as project entries.
- b. The following design concepts are encouraged for development of the school site:
 - use of flowering vines on walls and arbors.
 - use of plantings to create shadows and patterns against walls.
 - use of herbaceous perennials and ornamental grasses in informal groupings at major focal points such as project entries.
 - use ground covers as a turf replacement in areas that receive minimal pedestrian traffic, i.e., along walkways and in medians.

SIGHT DISTANCE TREE AND SHRUB SPACING

Trees and shrubs should be placed so as to be in conformance with safe siting standards set forth in the current edition of "A Policy on Geometric Design of Highway and Streets", published by the American Association of State Highway and Transportation Officials.

IRRIGATION

- a. Permanent landscape irrigation shall be provided for all landscape material.
- b. Deep root irrigation is required for all trees and shrubs.
- c. Use of laser-drilled soaker hose or mini-dripperline is encouraged or equivalent technology is required on slopes and large perennial / annual beds.

GENERAL

- a. All landscape planters shall be protected by a minimum 6-inch high concrete curb.
- b. All ground surfaces shall have one or more of the following treatments: paving, turf, 4 inch minus rounded river rock, 4-inch deep bark mulch placed over a pre-emergent herbicide; and / or decomposed granite with pre-emergent herbicide using weed barrier underneath. This does not exclude the use of accent boulders and rocks.
- c. All landscaped areas shall be planted with living ground cover to effectively cover the ground to 90% within 3 years.

SITE AMENITIES

Site amenities associated with the school site may include playground areas, playground equipment, sports fields, backstop, and other similar amenities.

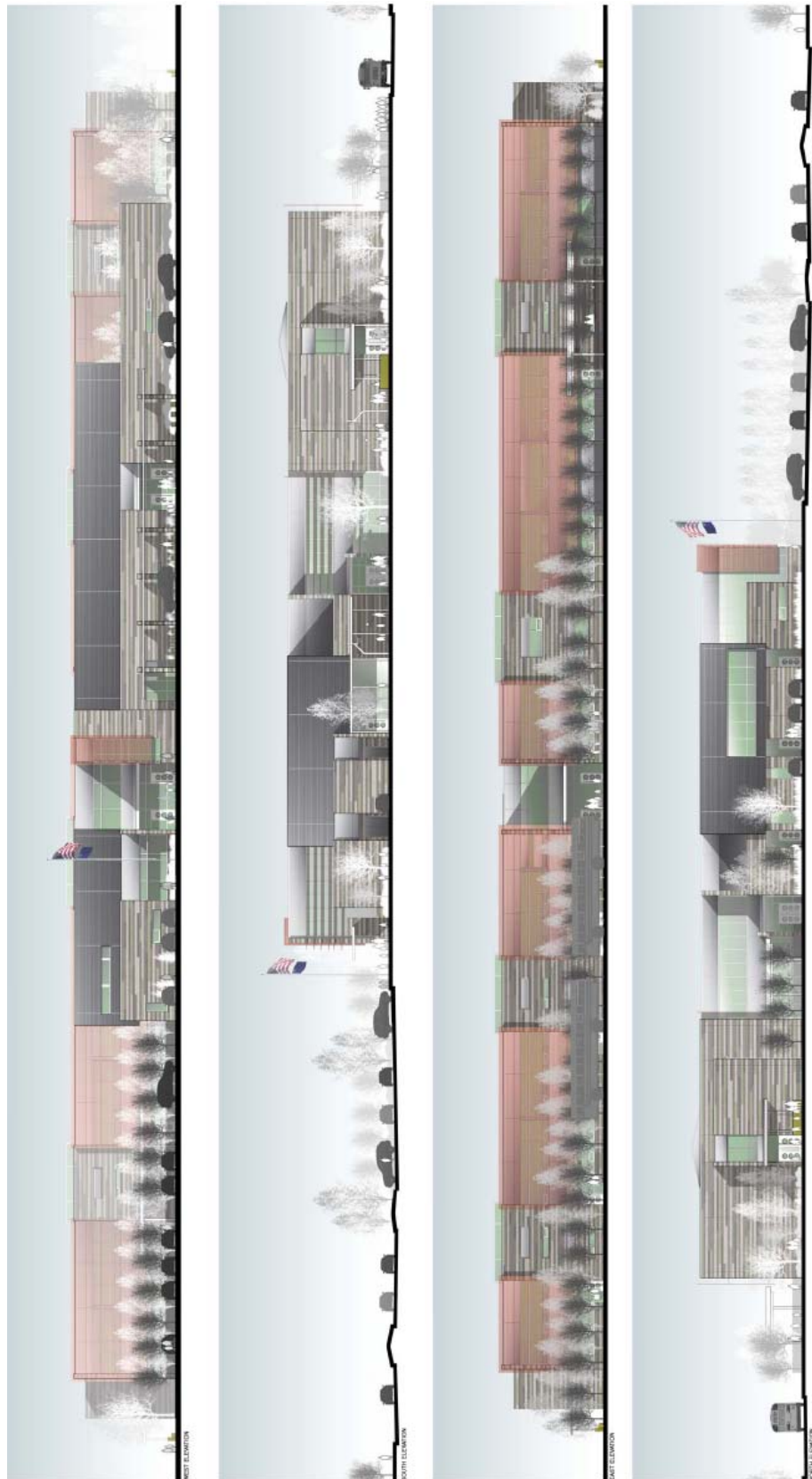
- a. Playground areas will include a soft mat or equivalent base for safety purposes. Playground equipment shall be earthtone or compatible with the building color palette to compliment the structure.
- b. Sports fields will be designed with an all weather surface such as decomposed granite (dg) or asphaltic concrete (ac) to accommodate various activities.

ARCHITECTURAL STANDARDS

This section provides general design principles which are applicable to the Foothills School site.

- a. Buildings should be designed utilizing an institutional modern architectural aesthetic style, employing long lasting low maintenance materials consistent with publicly owned buildings.
- b. Building shall be designed so that facades shall be visually interesting by incorporating wall plane projections or recesses on all 4 sides of the building to reduce flat wall expanses. Facades shall be designed with color change, material change, or relief plane changes to avoid large expanses of blank walls. Warm color tones are encouraged.
- c. Building massing may vary but shall reinforce the concept of visual cohesion, the creation of pedestrian spaces and a interesting modern character that is complimentary to the use and surrounding community.
- d. Surface textures shall be varied in harmonious combination to reduce the appearance of flat wall expanses.
- e. Roofs can either be sloped or “flat”. If “flat”, parapets shall be utilized to provide a continuous datum in lieu of following the deck drainage profile. Variations in roof lines/parapet heights are encouraged to add interest to the horizontal plane of the building. Exposed sloped roofs shall be standing seam metal or compositions shingles.
- f. Variations of wall and window surface planes shall be included in the building design and achieved through use of reveals, recesses, projections, and/or attachments.
- g. Preferred building materials include but are not limited to concrete, concrete masonry units, brick, stone, glass, glass block, tile, stucco, and architectural metal panels and metal attachments. The use of exterior wood siding or wood shingles or any exposed wood shall not be permitted.
- h. Exterior wall materials shall be predominately soft warm earth tone colors. The diversity of colors shall stay within a similar color palette. Bright colors are discouraged. All exposed flashing, sheet metal, vent stacks, and pipes that can not be screened within the building design shall be painted to match the adjacent building surface and roofs.
- i. Roof mounted mechanical equipment shall be screened from public view with materials architecturally integrated with the building design. Communication equipment such as satellite dishes and radio antennas shall be screened to the best degree possible to maintain proper function. All HVAC ducting and other piping shall be concealed from public view. Gutters and downspouts shall be concealed unless designed as a continuous architectural feature painted to match adjacent roof and wall materials.
- j. Building entrances shall give orientation and aesthetically pleasing character to the building. The entrances shall be clearly distinguished by the architectural design of the building.
- k. Second story windows and decks adjacent to residential properties shall be designed to protect views in the private yard areas, where possible.

Conceptual School Elevations





Hershenow + Klippenstein
ARCHITECTS

Lemelson Elementary School
Sparks, Nevada

Washoe County School District
January 13, 2009



Hershenow + Klippenstein
ARCHITECTS

Lemelson Elementary School
Sparks, Nevada

Washoe County School District
January 13, 2009

SIGNAGE INDEX

NEIGHBORHOOD IDENTIFICATION SIGN (BUILDER MARKETING)

COMMUNITY

- Main Entryway Monuments
- Main Entry Letters
- Main Entry Letters (Detail)
- Main Entryway Wall Exterior Light Option
- Main Entryway Monument Light (Detail)

NEIGHBORHOOD

- Neighborhood Village Entry Monuments
- Neighborhood Monument (Light Detail)

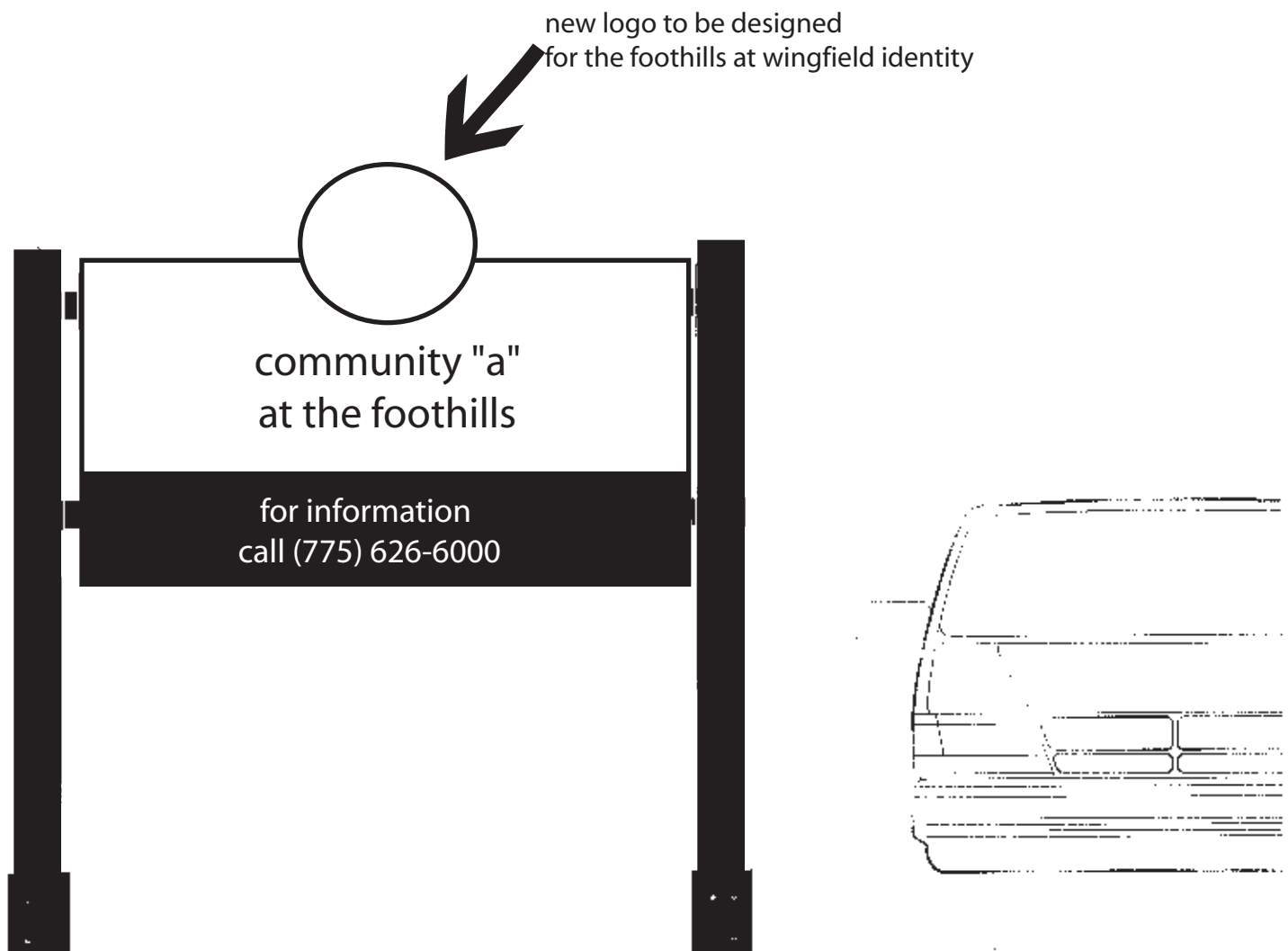
DIRECTIONAL

- Directional Signage Type I
- Directional Signage Type II

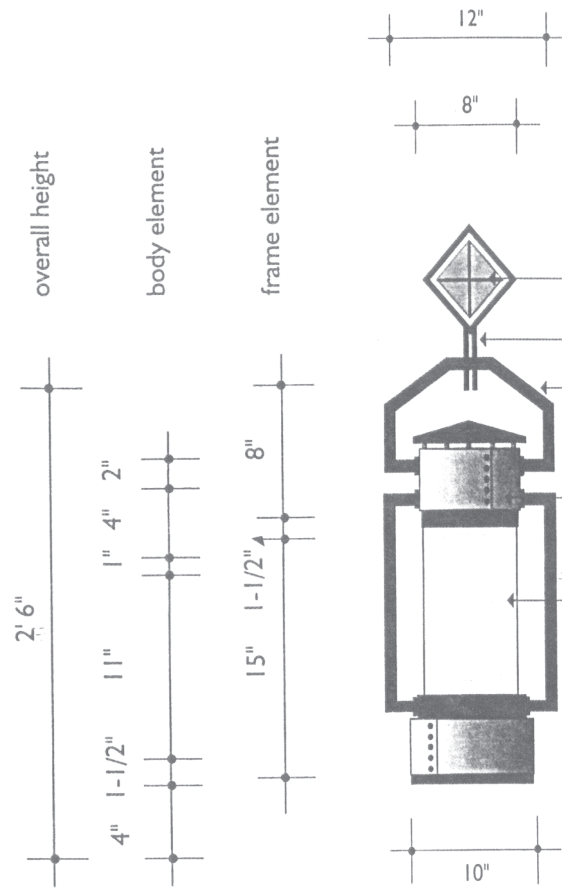
HANDICAP PARKING

STREET/STOP SIGNAGE

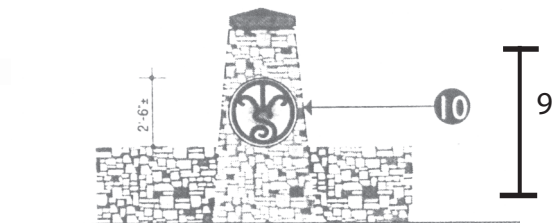
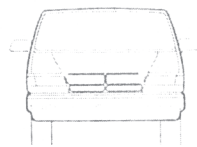
one neighborhood identification sign is allowed at the entry to each neighborhood while under construction. the sign must be located on private property out of the street right-of-way and shall not interfere with the visibility triangle at the intersection of the neighborhood entry. the sign shall be no more than 6 feet in height and a maximum of 32 square feet in area. the sign location and design shall be approved by the foothills design review committee. the sign must be removed at the time of construction of the last home in the development.



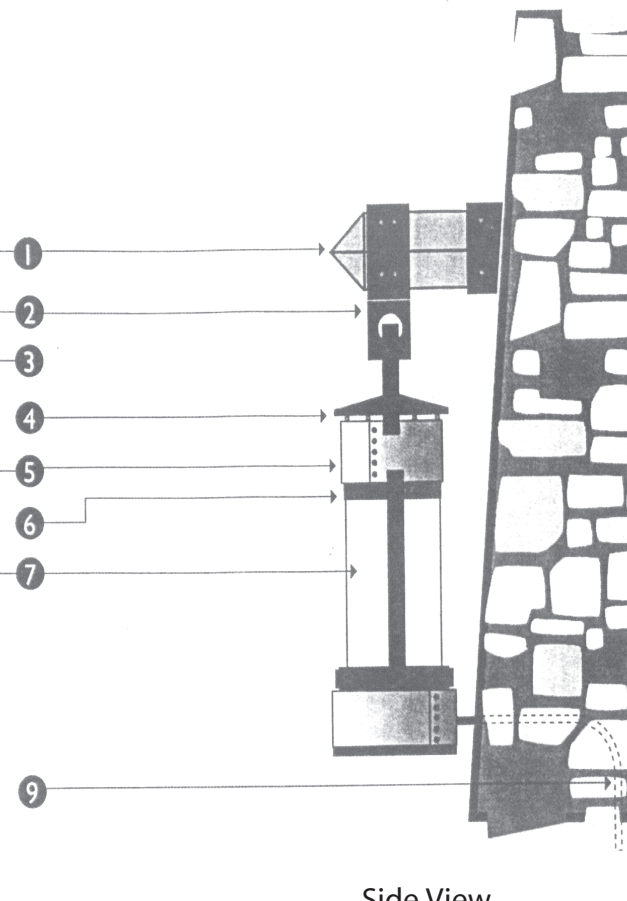
neighborhood identification sign



Lantern Fabrication Detail Front View



main entryway monuments



Side View

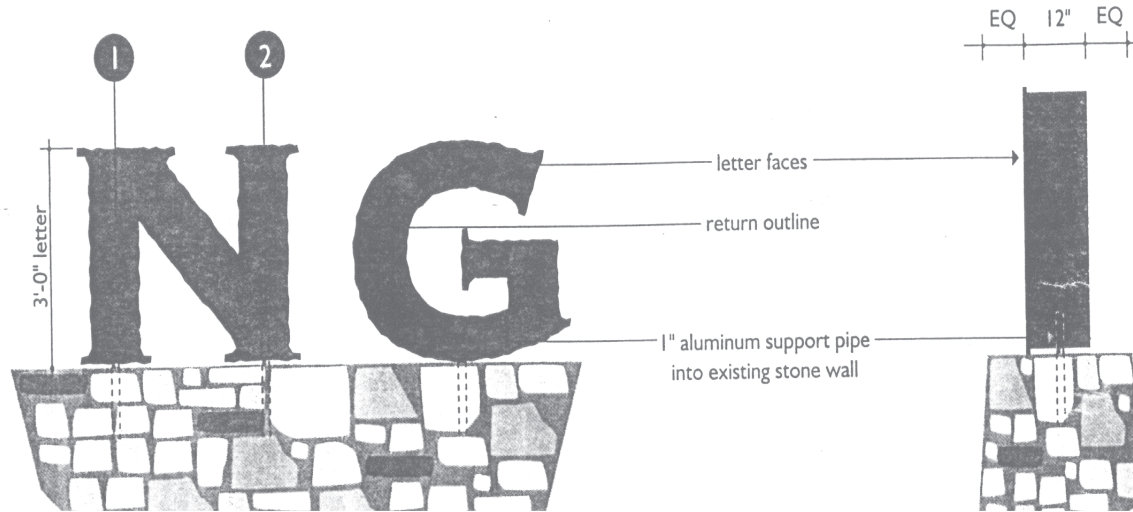
Notes:

- 1 6" x 6" Douglas Fir beam with 45° beveled end, set into stone column.
- 2 Fabricated 1/4" Aluminum hanger bracket to fasten to 6" x 6" beam with 3/8" carriage through bolt fasteners. Fasteners and collars to have "blackened" finish to match supplied sample. Protective satin clear powder coat.
- 3 1" aluminum square tube external frame element with "blackened steel" dyed finish to match supplied sample. Protective clear satin powder coat finish.
- 4 Spun aluminum 8" dia. x 1-1/2" tall vented cap with "blackened steel" dyed finish to match supplied sample. Protective clear satin powder coat finish.
- 5 8" Dia. rolled aluminum lantern shroud fastened with exposed rivets. Sandblasted with protective clear satin powder coat finish.
- 6 Rolled aluminum retainer band with faux rust finish per supplied sample. Final "rust" finish to be approved by designer.
- 7 7-1/2" dia. white Lexan tube.
- 8 Internal fluorescent U-lamp illumination with integral transformer. Lamp access through open bottom.
- 9 120v power supply routed through column to base of lantern fixture and logo element.
- 10 Final logo for Foothills per FAWDRC

NOTE: FINAL "BLACKENED STEEL" FINISH TO BE APPROVE BY THE DESIGNER.

Approx. 68'-0"

3'-8"
3'-0"
WINGFIELD SPRINGS



- 1 Fabricated aluminum letters. Plasma cut 1/8" faces with faux rust finish. Copperplate 33bc type style. 12" returns and letter backs fabricated .080" aluminum. No visible fasteners. Black

- 2 Mount letters to stone wall (by others) with 1" dia. aluminum pipe supports into drilled holes with silicone adhesive. Sprayed black. (See detail)

NOTE: MATCH LETTER SPACING PER LAYOUT

- * Ground mounted spotlight illumination to be determined at a future date.

NOTE: FAUX RUST FINISH TO BE APPROVED BY THE FAWDRC.

NOTE: LETTERING TO BE CHANGED TO REFLECT "THE FOOTHILLS AT WINGFIELD



MAIN ENTRY LETTERS

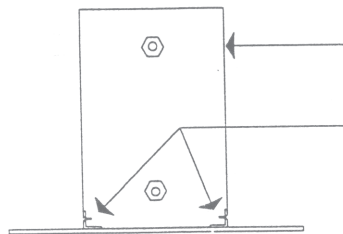
3'-0" [WINGFIELD SPRINGS]

3/16" = 1'-0"...Elevation Development View...Quantity One Set Non-illuminated

WINGFIELD

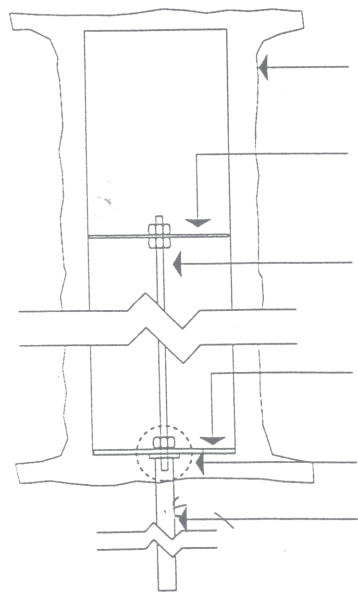
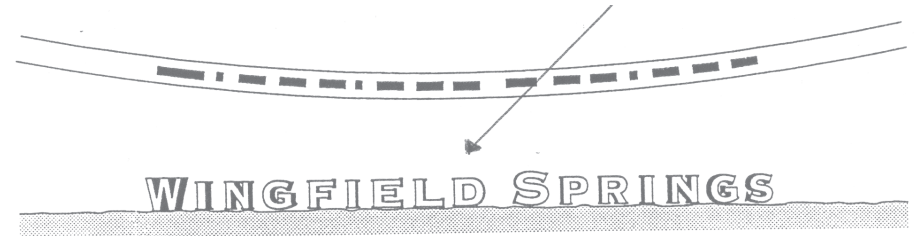
SPRINGS

NOTE: CHANGE LETTERING TO
"THE FOOTHILLS AT WINGFIELD"



Fabricated .080" aluminum pan channel letter
PAINT COLOR BLACK.

1/8" alum. angle clips welded to backside of
letter face to fit inside channel. Fasten with
countersunk screws at approx 6" O.C.
Paint screw heads BLACK to match returns.



Letter faces irregular plasma cut out 1/4"
aluminum with FAUX RUST finish to match
designer's sample.

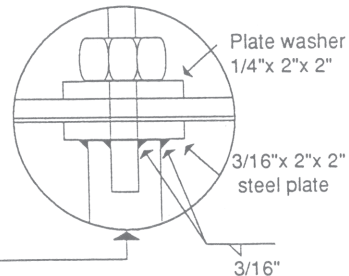
1/8" aluminum bridge welded inside letter channel.

3/8" steel all thread

1/4" aluminum plate
welded inside letter
channel at bottom.

See detail

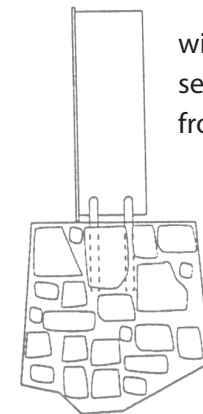
1" dia. steel pipe, ±13" length to imbed in rock wall 12".
Drill ±1-1/8" holes, set pipes with epoxy.
PAINT COLOR BLACK to match letter returns.



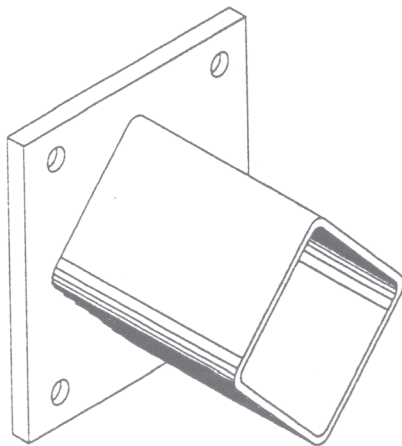
EQ 12" EQ

windload ...85mph
seismic zone ...3
frostline ...24"

Rock wall
by others.



main entry letter detail



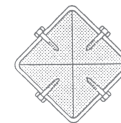
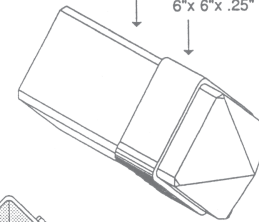
Steel plate welded to 6"x 6"x .25" collar/sleeve. Plate mount to column veneer level with bolts in expansion.

Collar/sleeve finish "blackened steel" sample by designer.

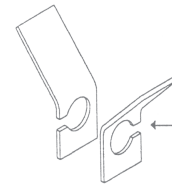
NOTE...GENERAL CONTRACTOR SIGN CONTRACTOR WITH DETAIL COLUMN MOUNTING CONDITIONS

6"x 6" Douglas fir beam, rough cut and sized to 5-1/2"x 5-1/2" with chamfered corners to fit inside collar.

6"x 6"x .25" steel sq. tube collar.



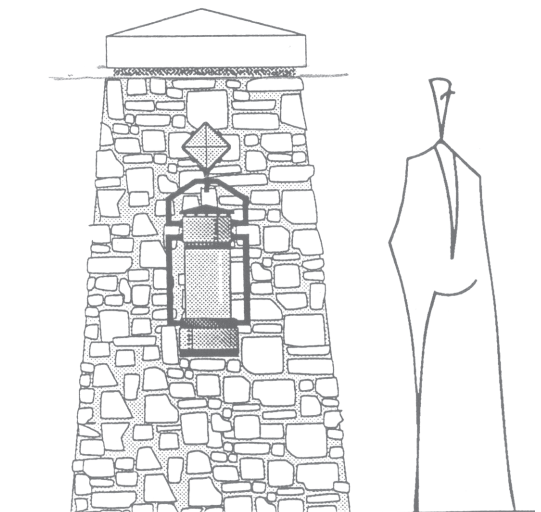
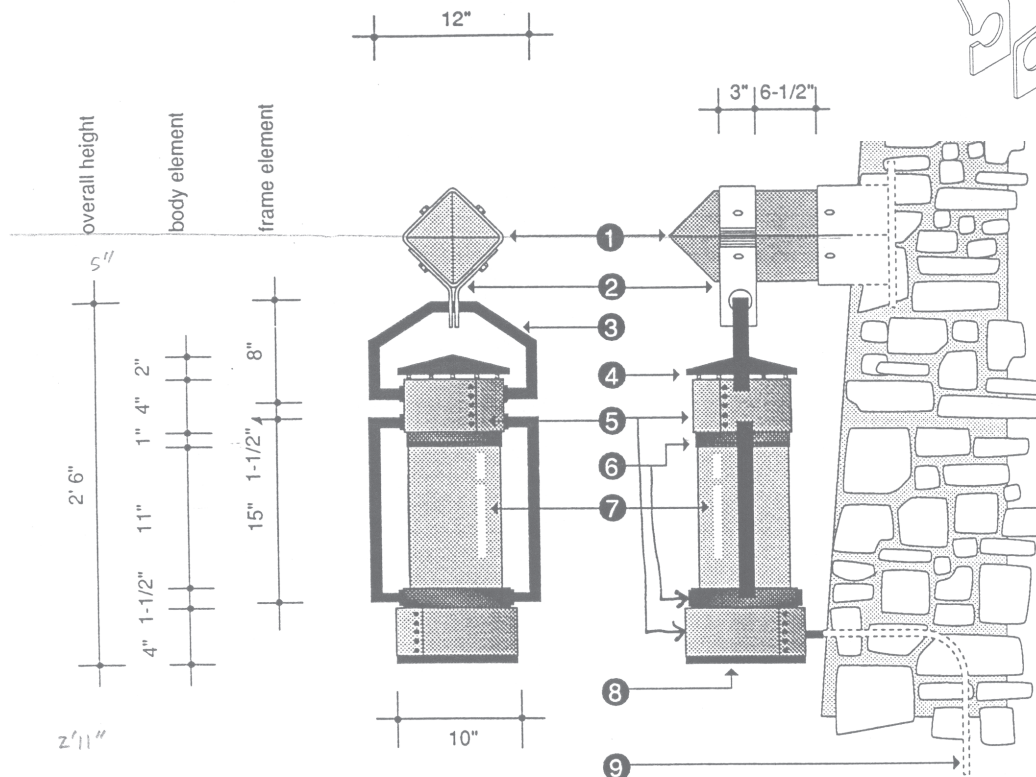
Set collar to post with 3/8" lag bolts.



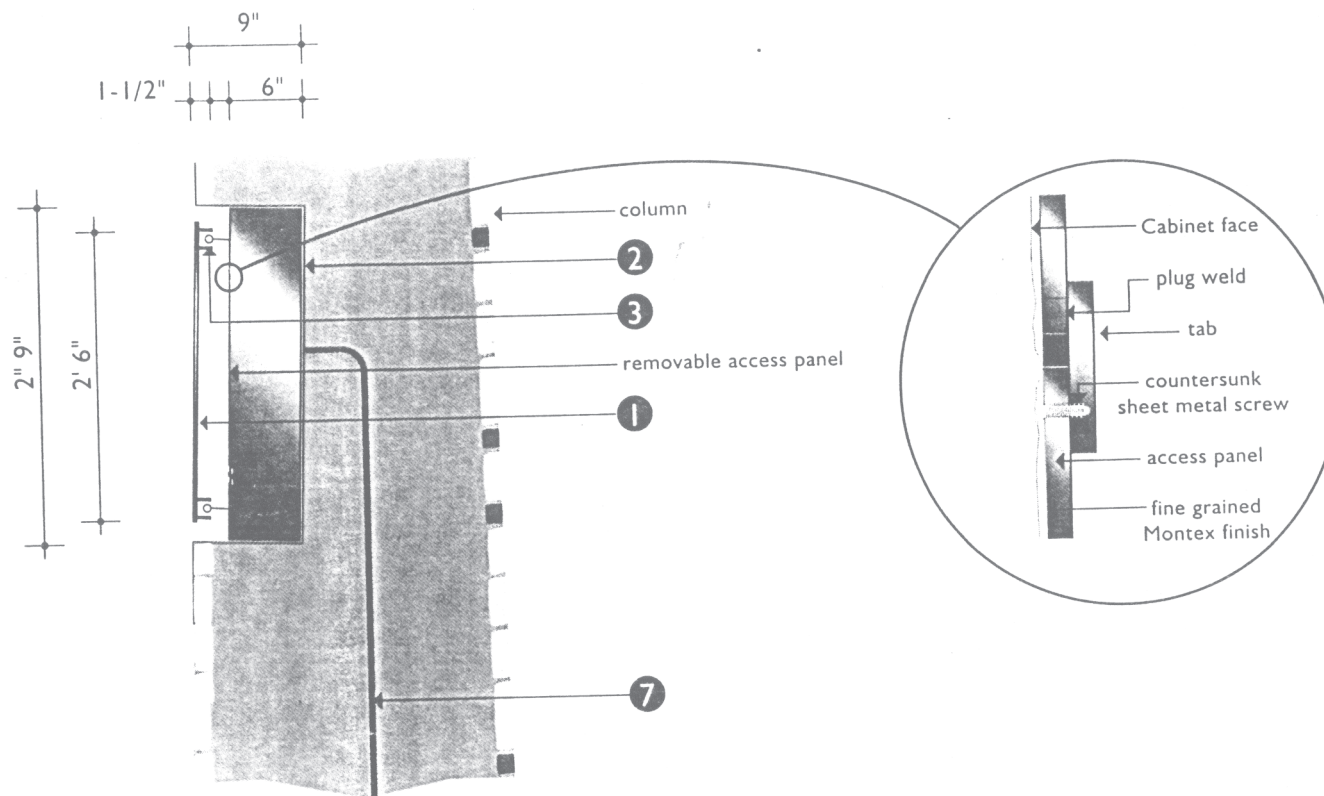
Fabricated 1/4" aluminum lantern hanging bracket set.

Notes:

- 1 Douglas Fir beam with 45° beveled end, set into stone column with collar/sleeve
- 2 Fabricated 1/4" Aluminum hanger bracket to fasten beam with 3/8" lag bolts. Fasteners and collars to have "blackened" finish to match supplied sample. Protective satin clear coat.
- 3 1" aluminum square tube external frame element with "blackened steel" dyed finish to match supplied sample. Protective clear satin coat finish.
- 4 Spun aluminum 8" dia x 1 1/2" tall vented cap with "blackened steel" powder-coated, matte finish.
- 5 8" Dia. rolled aluminum lantern shroud fastened with exposed rivets. Sandblasted with protective clear satin coat finish.
- 6 Rolled aluminum retainer band with faux rust finish per supplied sample. Final "rust" finish to be approved by designer.
- 7 7-1/2" dia. white Lexan tube.
- 8 Internal Philips PL13 fluorescent lamp illumination with integral transformer. Lamp access panel and service disconnect switch at bottom.
- 9 120v power supply routed through column (by others) to base of lantern fixture.

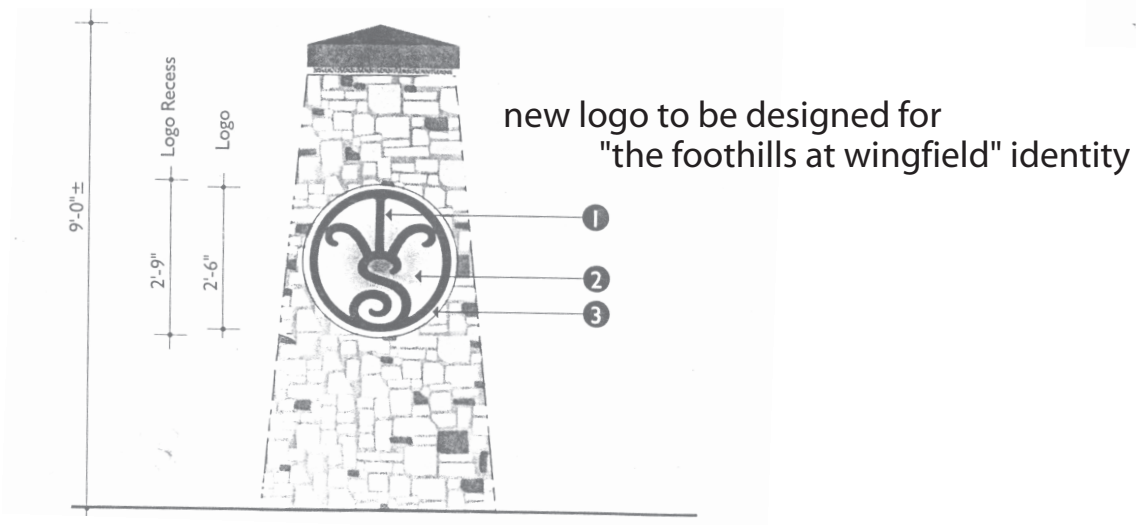


main entryway wall ext. light option



notes

- 1 3/8" aluminum FCO logo with 1 1/2" returns at perimeter ring. "Blackened steel", powder-coated, matte finish. Logo design per FAWDRC. Stud mount to recessed sheet metal cabinet with 1 1/2" peg-off. Single Face.
- 2 Aluminum cabinet to recess into column. Fine grain Montex finish at face to match adjacent concrete color and texture. Removable front access panel to secure with countersunk sheet metal screws.
- 3 Neon "halo" illuminated ring.
- 7 120v power supply routed to cabinet location.



main entryway monument light detail

Notes

1 3/8" aluminum FCO logo with 1 1/2" returns at perimeter ring. "Blackened steel", powder-coated, matte finish. Logo design per FAWDRC. Stud mount to recessed sheet metal cabinet with 1 1/2" peg-off. Single Face.

2 Aluminum cabinet to recess into column. Fine grain Montex finish at face to match adjacent concrete color and texture. Removable front access panel to secure with countersunk sheet metal screws.

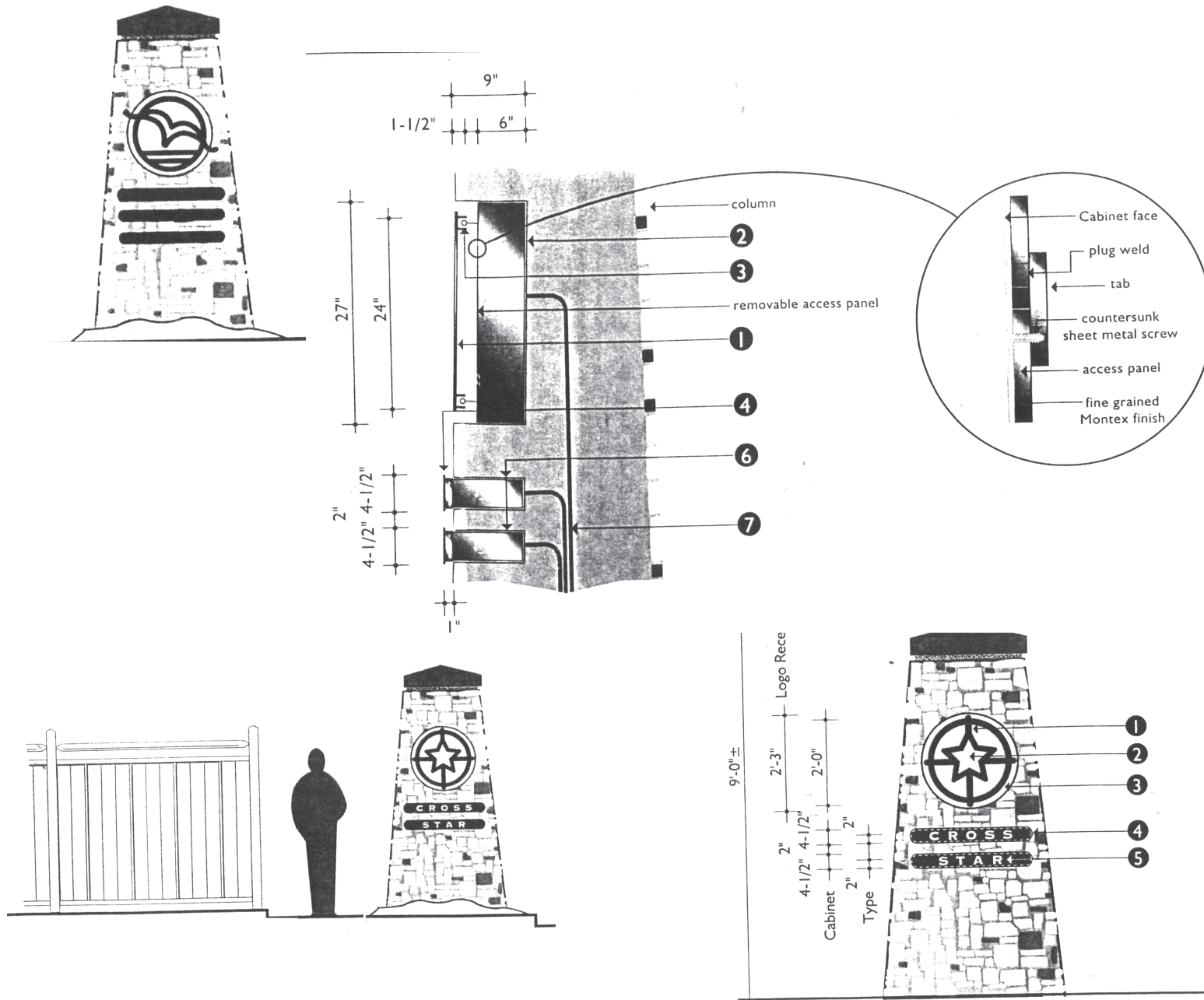
3 Neon "halo" illuminated ring.

4 1/8" aluminum identification panels with 1" returns inset 1/2" (detail). "Blackened steel" dyed finish to match supplied sample. Protective Satin clear powder coat finish. Face panels fasten to recessed cabinets with counter sunk sheet metal screws (black) at returns. Single Face.

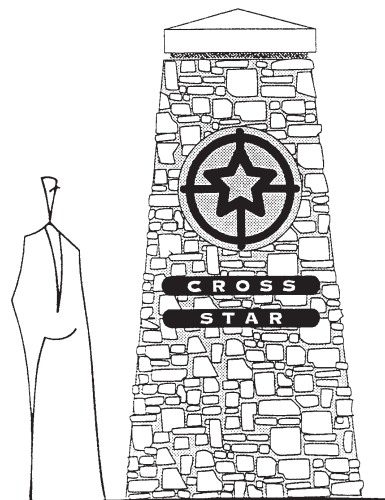
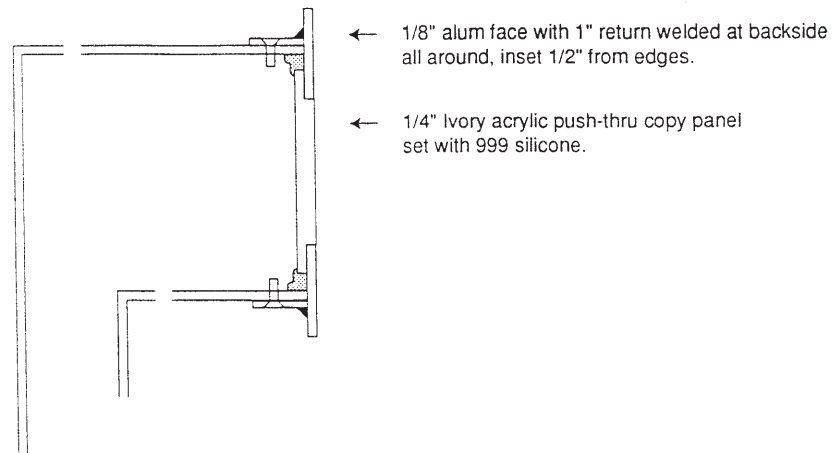
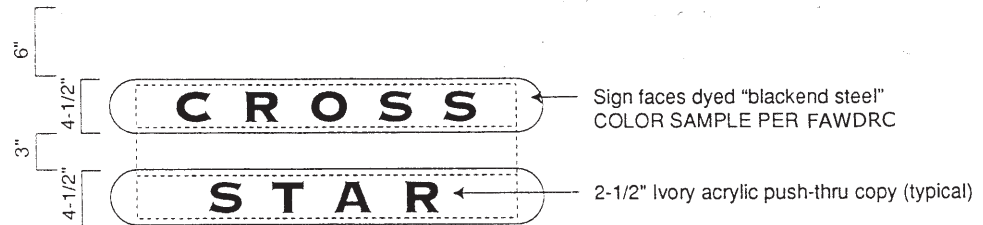
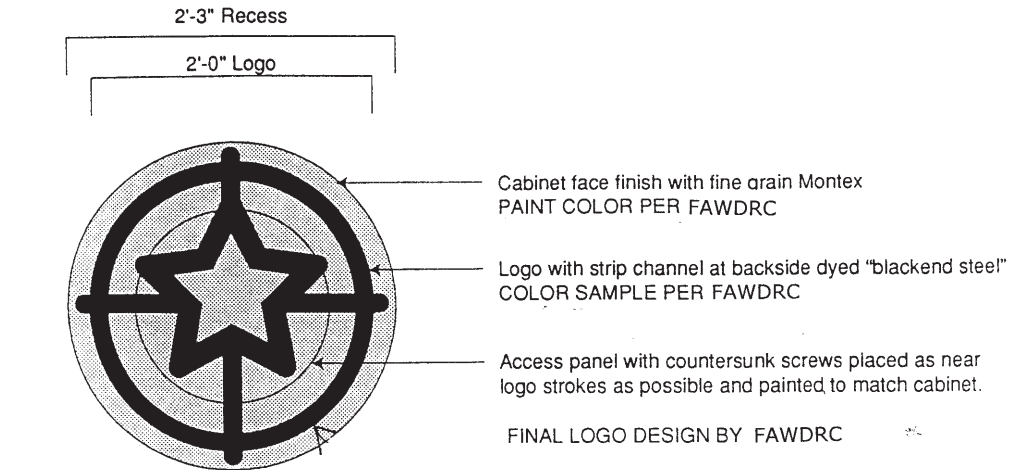
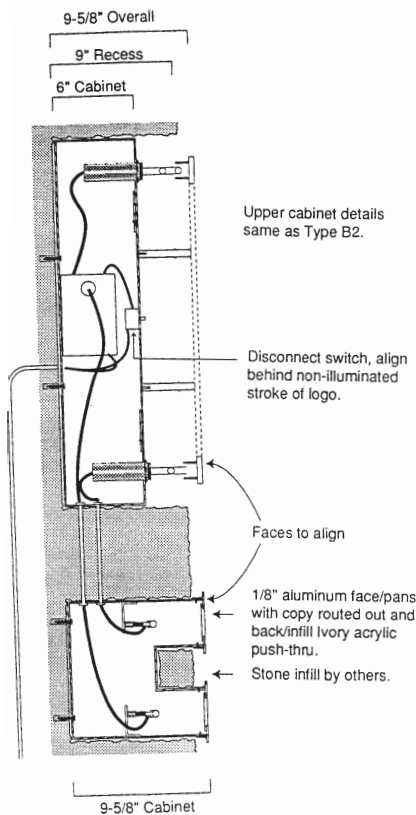
5 "Ivory" acrylic plastic 2-1/2" letters to push through flush to panel face. Copperplate 33BC type face.

6 Recessed sheet metal cabinet with internal fluorescent illumination and transformer. Coordinate with mason for installation at time of column construction.

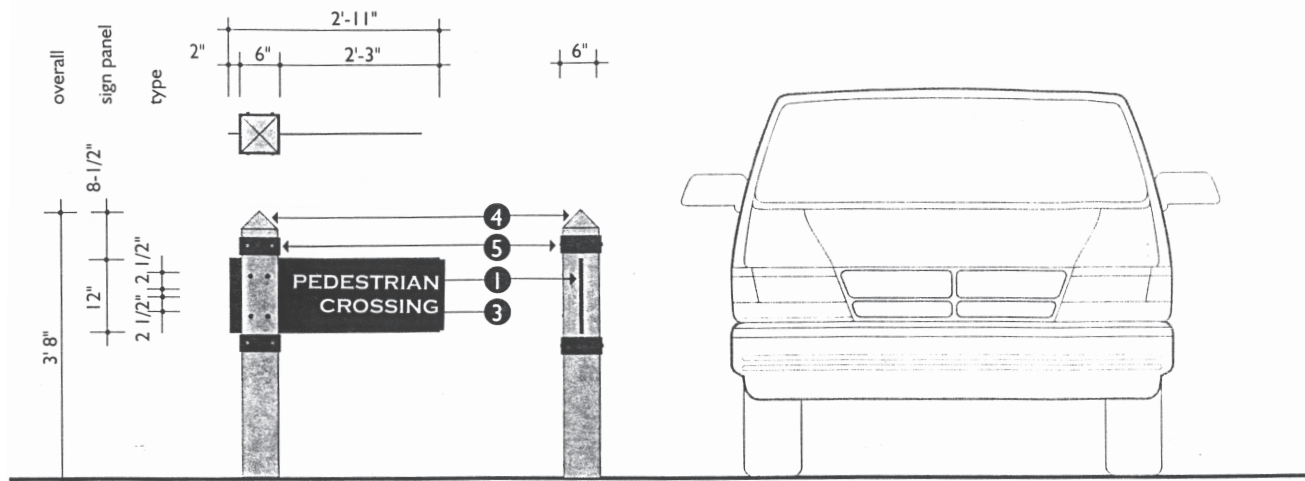
7 120v power supply routed to cabinet location.



NEIGHBORHOOD VILLAGE ENTRY MONUMENTS

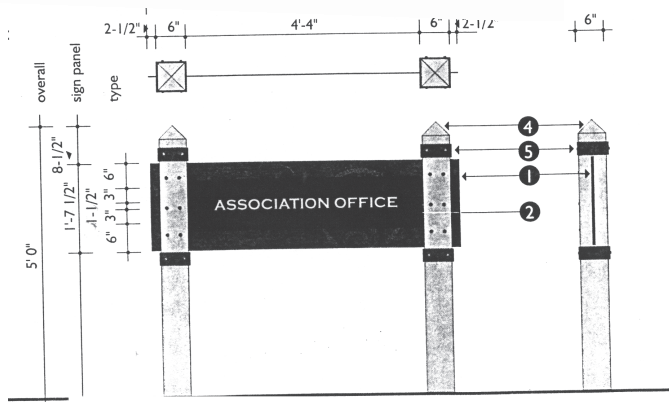
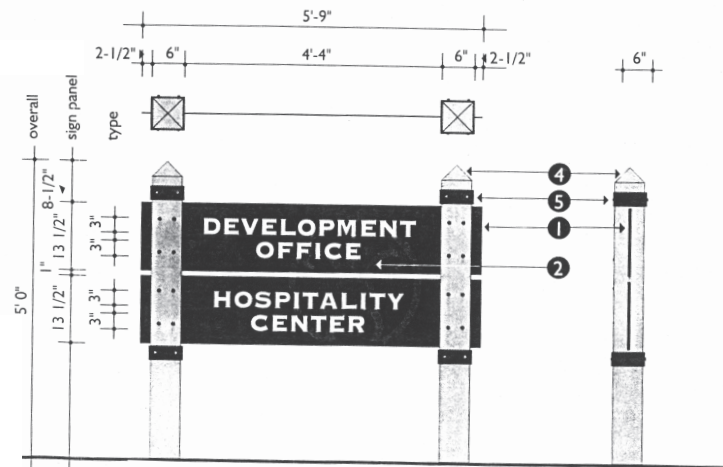
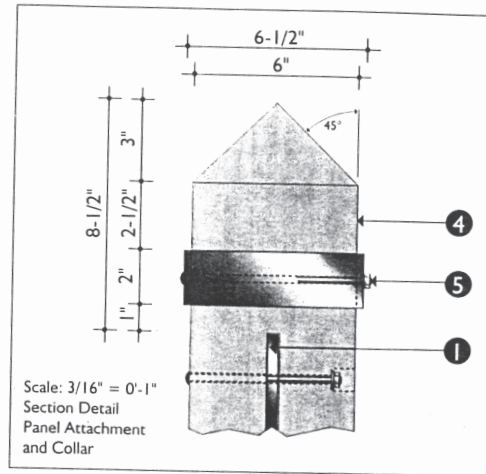


neighborhood monument (light detail)



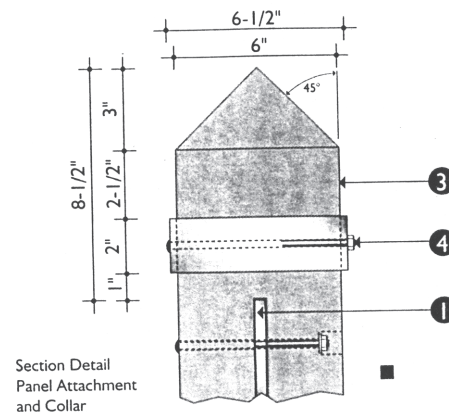
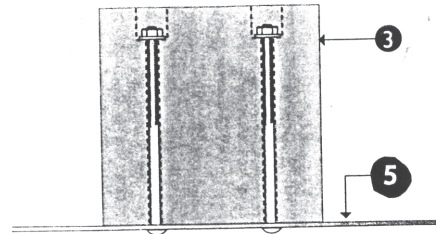
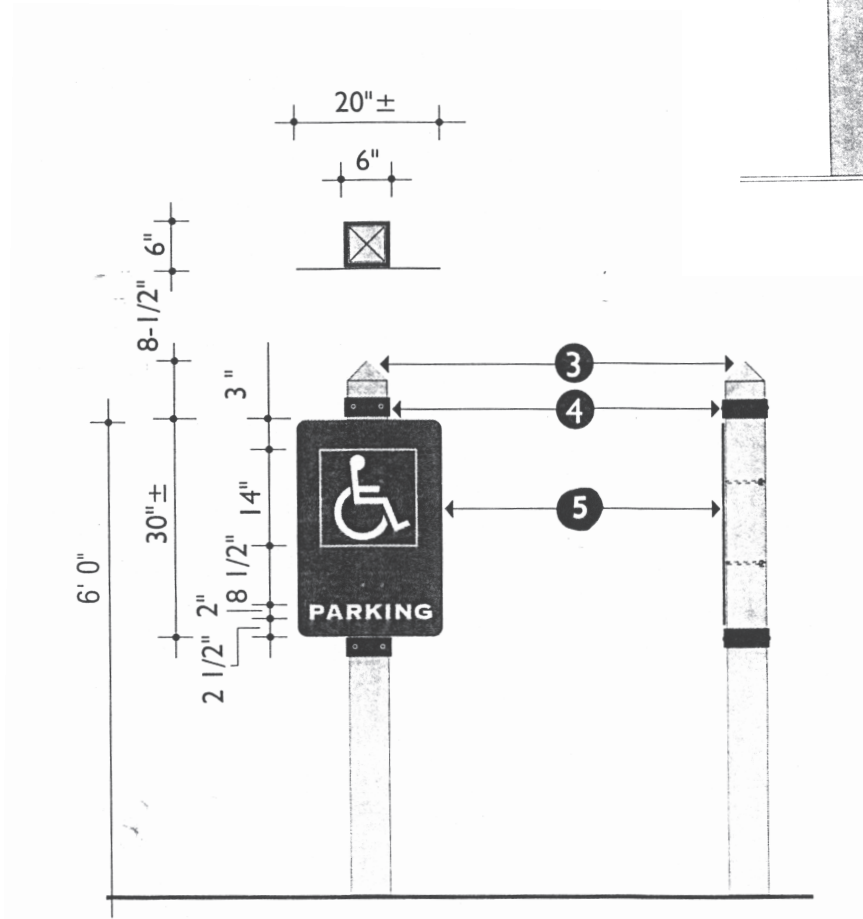
Notes:

- 1 3/8" aluminum panel with a "blackened steel" dyed finish to match sample. Glass beaded logo element. Protective satin clear powder coat finish. Secure with 3/8" "blackened" finish through-bolt fasteners to match sample (see detail). Double Faced
- 2 1/8" aluminum FCO 3" letters flush mount to 3/8" panel. Paint to match: DE WW 115-1 "WhiteSand". Copperplate 33BC type style. Double Faced
- 3 White reflective vinyl copy. Type face is Copperplate 33BC, 2 1/2" caps. Double Faced
- 4 Slotted 6" x 6" Douglas Fir posts with natural wood tone finish and protective sealant.
- 5 1/4" aluminum collars with "balckened steel" powder-coated, matte finish. Secure with 3/8" "blackened finish through-bolt fasteners to match supplied sample (see detail).



DIRECTIONAL SIGNAGE - TYPE I

directional signage - type ii

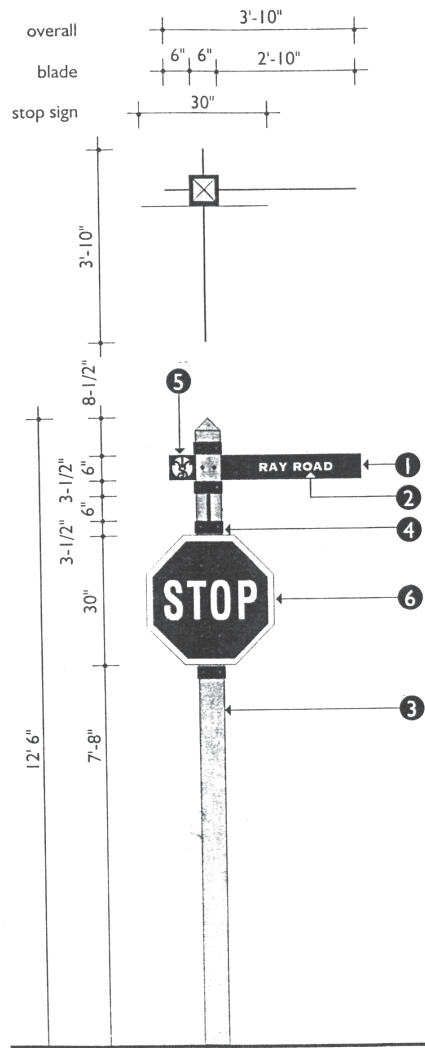


Notes:

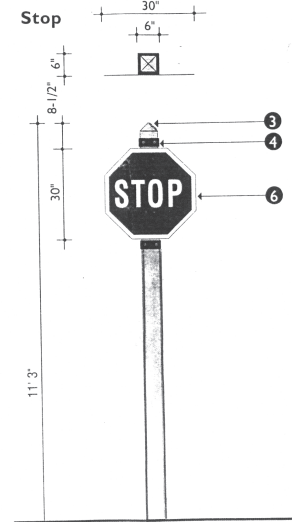
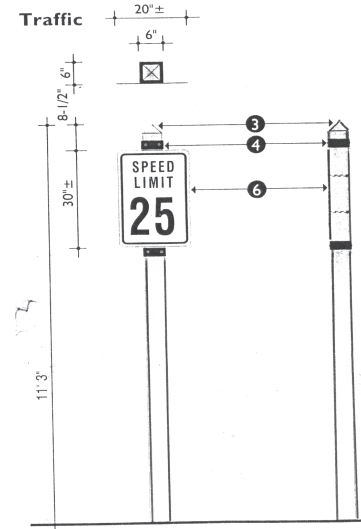
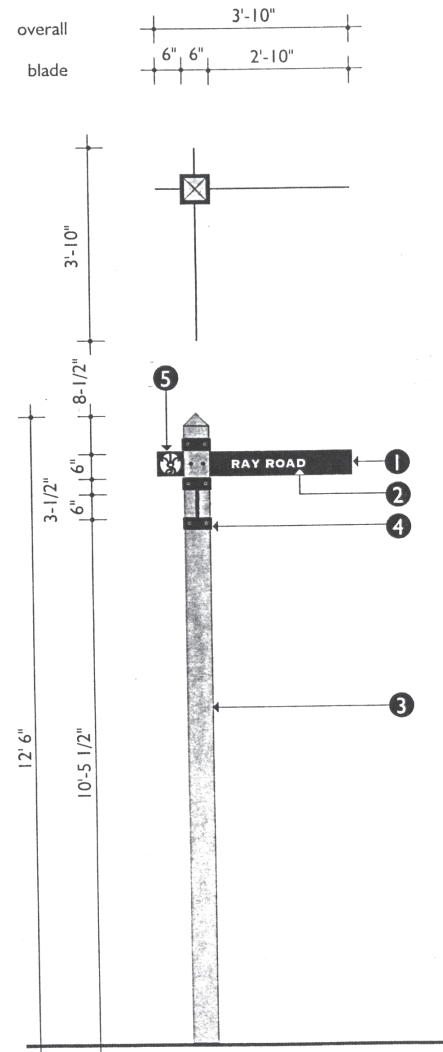
- 2 White reflective vinyl type and graphics sized as shown. Type has 2-" cap height. Copperplate 33BC type style. Single Faced
- 3 Slotted 6" x 6" Douglas Fir posts with natural wood tone finish. Protective sealant.
- 4 1/4" aluminum collars with "blackened steel" dyed finish to match supplied sample. Satin clear powder coat finish. Secure with 3/8" "blackened" finish through-bolt fasteners to match supplied sample (see detail).
- 5 1/4" aluminum signage panel to be thru-bolted with 3/8" zinc-plated fasteners with recessed hex nuts. Background paint color to be medium blue to match H/C regulatory blue.

handicap parking signage

Street/Stop



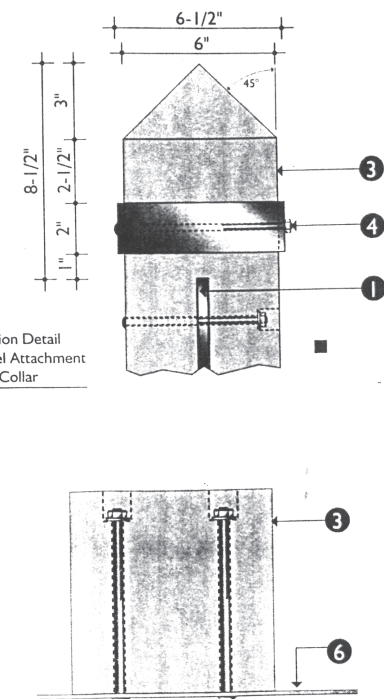
Street



Notes:

- 1 3/8" aluminum collars with "blackened steel" powder-coated, matte finish. Secure with 3/8" "blackened finish" through-bolt fasteners to match supplied sample (see detail).
- 2 White reflective vinyl 2-1/2" letters. Copperplate 33BC type style. Double Faced
- 3 Slotted 6"x6" posts shall be made of material approved by the City of Sparks.
- 4 1/4" aluminum collars with "blackened steel" powder-coated, matte finish. Secure with 3/8" "blackened finish" through-bolt fasteners to match supplied sample (see detail).
- 5 New logo will be established
- 6 30" standard traffic signage to be thru-bolted with 3/8" zinc-plated fasteners with recessed hex nuts.

Section Detail
Panel Attachment
and Collar



street / stop signage

APPENDIX A ~ GLOSSARY

APPENDIX A: GLOSSARY

ACCESSORY APARTMENT

Accessory apartment means a secondary dwelling unit located in, attached to, or in a separate accessory structure on the same lot as main dwelling for use as a complete independent living facility

ACCESSORY STRUCTURES

Accessory structures means a tool or storage shed, shops, garages, playhouses or other similar uses which are greater than 120 square feet.

ADMINISTRATOR

The Sparks City Manager or his designee shall be the Administrator hereinafter referred to individually or collectively as the “Administrator” of this process. The Administrator shall have the principal authority to interpret and make decisions based on the plans, and standards contained herein which are in accordance with the scope of the responsibilities granted to them in Titles 15, 17 and 20 of the City of Sparks’ Municipal Code.

AMENITY

Landscaped open space, landscaped trail and park, and landscaped common area (excluding streetscape).

AMENITY LOT

Amenity lot means a lot that shares a common property line with an amenity.

APARTMENT HOUSE

“Apartment house” means a multiple family dwelling, as that term is defined in this title.

AVERAGE DAILY TRAFFIC (ADT)

“Average daily traffic” (ADT) is the total volume of vehicles in both directions during a given time period (in whole days), greater than one day and less than one year, divided by the number of days within that time period.

BUILDING	“Building” means any structure having a roof supported by columns or walls used for the enclosure of persons, animals, or chattel, but not including a trailer coach or mobile home.
BUILDING FOOTPRINT	“Building footprint” is the area encompassed by the exterior walls of a fully enclosed dwelling unit, garage, or other structure.
BUILDING HEIGHT	“Building height” means vertical distance from the average level of the highest and lowest points of that portion of the lot covered by the building to the ceiling line of the topmost floor.
BUILDING MASSING	“Building massing” means the three-dimensional bulk and scale of a building.
BUILDING SETBACK	“Building setback” means the distance between the property line and the nearest portion of the structure on the property.
BUILDING SETBACK PROJECTIONS	Projections into the building setbacks may be allowed under the following circumstances with the approval of the Design Review Committee (DRC). Fireplaces, chimneys, greenhouses, eaves, window bays and wall pop-outs may project into the building setback. The encroachment into the setback shall not be more than 25 square feet and the depth of the encroachment shall not be more than 2.5 feet. All encroachments shall comply with the Uniform Building Code requirements
CHILD CARE FACILITY	“Child care facility” means any place or homes, institution or establishment in which children are received, cared for or maintained for any period of time with or without compensation.

CLUB	“Club” means a profit or nonprofit association of persons organized solely or primarily to render a service which is usually a commercial enterprise.
COMMON AREAS	“Common Areas” means those portions of the project site which do not fall within a residential or commercial parcel and will ultimately be owned and maintained in “common” by the Homeowners Association.
COMMUNITY FACILITY	“Community facilities” means an office and / or meeting facility to conduct the business of the Homeowners Association. In addition, the facility could be used by residents of the community for games, meetings, exhibits, or other community resident activities.
COTTAGES	“Cottages” are attached townhouse or condominium type units.
DENSITY, GROSS	“Gross Density” means the ratio of total number of dwelling units to the total land area contained within the application.
DENSITY, NET	“Net Density” is the ratio of the total number of dwelling units or lots contained within privately held land to the amount of area within that privately held land, excluding roadways.
DESIGN REVIEW COMMITTEE (DRC)	The “DRC” will consist of a committee of individuals appointed by the land owner or Homeowner’s Association to review issues of planning, architecture and landscape design related to this project.

DEVELOPMENT AGREEMENT

“Development Agreement” means the agreement entered into between the City of Sparks, Loeb Enterprises LLC and The Foothills at Wingfield, LLC.

DWELLING

“Dwelling” means any building or portion thereof used exclusively for residential purposes, but shall not include hotels, clubs, boarding or rooming houses, fraternity or sorority houses or mobile homes.

DWELLING UNIT

“Dwelling unit” means one or more rooms in a building or apartment used for occupancy by one family (including necessary employees of such family) for living or sleeping and having only one kitchen.

EASEMENT

“Easement” is the right of one party to use the land of another for a specified purpose or purposes.

EXTERIOR SIDE SETBACK

“Exterior Side Setback” is defined as the side yard adjacent to a street on a corner lot.

EXTERIOR PROJECT SIDE SETBACK

“Exterior Project Side Setback” is for attached housing products, to establish project village exterior side setback criteria.

FLOOR AREA, GROSS

“Gross Floor Area” is the sum of the gross horizontal areas of the several floors of a building, or portion thereof with the interior walls.

GAMING

“Gaming” includes all legally authorized activities consistent with the currently applicable NRS Ch. 463.

GARAGE, PRIVATE

“Private Garage” means the space intended for or used by the private vehicles of families resident upon the lot.

HEDGEROW

“Hedgerow” means a linear common area used for landscaping and pedestrian circulation to connect to a trail.

LOT

“Lot” means a distinct part of parcel of land divided with the intent to transfer ownership or for building purposes which abuts upon a means of access.

LOT DEPTH

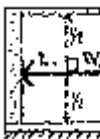
“Lot Depth” means the distance between the front and rear lot lines.

LOT FRONTAGE

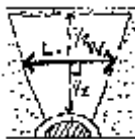
“Lot Frontage” means the narrowest lot dimension fronting on a street or access.

LOT WIDTH

“Lot Width” means the distance between the side lot lines measured at right angles to the lot depth at the midpoint between the front and rear line. This is where minimum lot width is measured.



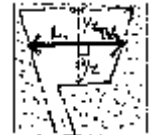
*Lot Width on
“Rectilinear” Lot*



*Lot Width on
“Cul-de-Sac” Lot*



*Lot Width on
“Wedge Lot”*



*Lot Width on
“Flag” Lot*

LOT LINES

“Lot Lines” are the property lines bounding the lot.

NATIVE VEGETATION

“Native Vegetation” means plant materials indigenous to the region surrounding Sparks, Nevada.

MULTIPLE-FAMILY DWELLING

“Multiple-family dwelling” means a building designed to be used to house three or more families living independently of each other having their own kitchen facilities and including the necessary employees of each family.

NATURAL GRADE

“Natural grade” is the slope of the natural or undisturbed ground surface prior to any grading operation.

NET USABLE FLOOR AREA

“Net usable floor area” means the sum of the gross floor area minus the following areas measured from the center of the inside walls: areas used for public corridors, interior stairways, public lobbies, interior courts, public rest rooms; mechanical equipment areas; elevators and elevator shafts and such other areas.

OPEN SPACE

“Open Space” is the area of land designated in the Master Plan for trails, landscaping, golf course use and public facilities.

PARCEL OF LAND

“Parcel of land” means any unit or contiguous units of land, in the possession of or recorded as the property of one owner.

PERMITTED USE

“Permitted use” means the allowed use of land within a land use designation.

PERSONAL SERVICE SHOP

“Personal service shop” means a business which provides a service to the general public. This includes, but is not limited to beauty shops, massage establishments, copy / mail centers, dry cleaners, tailors, pet groomers and shoe repair.

PUBLIC FACILITIES

Public Facilities means public safety and service facilities and public utility structures.

RECREATIONAL CLUB PRIVATE

“Recreational Club Private” means a group or association formed as a legal entity to provide recreational services to its members, either for profit or non-profit.

RECREATIONAL VEHICLE

“Recreational vehicle” means a vehicular type unit primarily designed as temporary living quarters for travel, recreational, or camping use which may be driven or towed on a highway, and which may be self-propelled, mounted upon, or drawn by a motor vehicle. Recreational vehicle includes any travel trailer, camping trailer, motor home, jet skis, pickup coach, or slide-in camper.

RIGHT-OF-WAY

“Right-of-way” means land which by deed conveyance, dedication, or process of law is reserved for use by the general public for roadway improvements, drainage facilities, and other public utilities.

SINGLE-FAMILY DWELLING

“Single-family dwelling” means a building containing one kitchen designed or used or designed and used to house not more than one family, including necessary employees of such family.

SITE

“Site” means a parcel or combination of parcels or lots which share a common development plan or which are dependent upon one another for access, parking or utilities.

STREET	“Street” means a public or private thoroughfare, which affords a primary means of access to abutting property.
STRUCTURE	“Structure” means any construction except a tent, trailer, mobile home or vehicle.
TRAIL	“Trail” means a developed pathway that will accommodate pedestrian and non-motorized traffic (i.e. bicycles).
YARD	“Yard” means an open space on the same lot or parcel with the building, extending from the building to the nearest lot line.
YARD, EXTERIOR SIDE	Exterior yard means the yard lying between the wall of the main building and the property line fronting on the street side where the front yard is the shorter side.
YARD, FRONT	“Front yard” means the yard lying between the front wall of the main building and the front property line and extending across the full width of the lot or parcel on the street or access road.
YARD, REAR	“Rear yard” means the yard between the main building and the rear line and extending across the full width of the lot or parcel.
YARD, SIDE	“Side yard” means the yard lying between the side lot line on both sides of the main building and extending the front yard line to the rear yard line on both sides.

ZERO-LOT-LINE

“Zero-Lot-Line” means the placement of a dwelling where there is no minimum building setback requirement on an interior side yard, on two (2) interior side yards or on an interior side yard and rear yard, complying to UBC requirements pertaining to roof drainage and project eaves. There shall be no architectural projects such chimneys, pop-outs, bay windows, porches, shade structures, etc.

APPENDIX B ~ PROJECT DESIGN TEAM

APPENDIX B: PROJECT DESIGN TEAM

The project design team for the Wingfield Springs Development consists of the following members:

Kautz and Associates ~

Kautz and Associates have performed archaeological investigations of the property and are responsible for coordinating with the Nevada Department of Conservation and Natural Resources.

Black Eagle Consulting ~

Black Eagle Consulting has performed preliminary geotechnical investigations on the property for the tentative map process, as well as a hydrologic study for planning purposes. Black Eagle Consulting may be responsible for providing more in depth investigations with regard to geotechnical matters and groundwater as the project develops.

Lionel Sawyer and Collins ~

Lionel Sawyer and Collins has provided legal counsel and coordination assistance through the permitting process.

Tri-State Surveying ~

Tri-State Surveying has been involved in the project since its inception providing mapping and surveying services.

Meridian Consulting ~

Meridian Consulting has provided the Fiscal Analysis for the project.

Nimbus Engineering ~

Nimbus Engineering has provided the Hydrological Analysis of the property.

Wood Rodgers ~

Wood Rodger formerly of Mountain West Engineering has provided the planning, civil engineering and assistance in governmental processing for the project.

Solaegui Engineers ~

Paul Solaegui Engineers have provided the traffic analysis for the project.

The Wingfield Nevada Group ~

The Wingfield Nevada Group has provided entitlement, development and real estate services for the project.

APPENDIX C ~ CONSTRUCTION ACTIVITIES

APPENDIX C: CONSTRUCTION ACTIVITIES

GENERAL PROVISIONS

1. Construction Hours

Construction activities at the Development may commence no earlier than 7:00 a.m. and must cease no later than 7:00 p.m. Monday through Friday, 9:00 a.m. to 5:00 p.m. on Saturday and no construction on Sunday. For purposes of this handbook, construction activities include any start-up of machinery back up beepers, cutting wood, pounding, nails, earth moving, etc. which involves material noise to any adjoining residence or business. The foregoing limitations shall not be applicable to any activities involving dust control procedures pursuant to the Dust Control Plan, as hereinafter defined, vehicle or equipment fill or dirt), or in the event of any activity in response to an emergency situation at the Development. Notwithstanding the foregoing, the parties acknowledge that the Foothills may submit a plan to the City for approval by the administrator for temporary periods of construction activities beyond the hours of construction listed above, in the event it becomes necessary to complete water production wells, concrete placement, and paving or other similar construction activities. Such plan must include a statement of need and issue and may include temporary construction lighting, but shall provide for reasonable mitigation from such lighting and noise for surrounding residences and / or businesses.

2. Traffic Control Plan

Prior to the commencement of any construction activities at the Development, the Foothills, or its contractor (the “Contractor”), shall submit a plan for the orderly control and regulation of construction related traffic at the Development including, without limitation, the procedures relating to safety of public traffic, to the extent thereof, and emergency access through the Development, during the course of construction, to the City Public Works Director for approval. Upon approval, such plan shall be referred to as the “Traffic Control Plan” and shall be deemed a part of this Handbook. The Foothills shall use reasonable efforts to maintain two-way traffic throughout the construction process with a maximum delay of fifteen (15) minutes, with the public roadway open to two-way traffic at the conclusion of each working day, except to the extent the City Public Works Director approves the temporary closure of portions of the roadway due to public safety considerations. The Traffic Control Plan shall also set forth the intended haul routes from time to time for dirt moving during the course of construction in order to avoid excessive loan on sewer and water lines in the Development and the areas adjoining the Development. No construction activities may occur prior to the approval of the Traffic Control Plan. As construction progresses through the various phases of the Development, it is anticipated that the Traffic Control Plan, including haul routes will require certain changes from time to time. Prior to deviation from the approved Traffic Plan or haul routes, the Foothills or the Contractor shall submit a revised Traffic Plan to the City Public Works Director for its review and approval, which shall, upon such approval, become the governing Traffic Plan for the Development. The Contractor shall maintain the roadway surface in a condition satisfactory to the City Public Works Director throughout the course of construction.

3. Dust Control

Prior to the commencement of any construction activities at the Development, the Foothills or its contractors shall submit to the Washoe County District Health Department and the Nevada

Department of Environmental Protection (the “Health Agencies”) a plan for dust control at the Development, which shall be in accordance with the requirements of Nevada law including, without limitation, the pollution control and NPDES regulations of the Nevada Department of Environmental Protection. Such plan, when approved by the Health Agencies, shall be referred to herein as the “Dust Control Plan” and shall be deemed a part of this Agreement. The Foothills shall, and shall cause its contractors to agree to, comply in all material respects with the Dust Control Plan and any modifications thereto required during the course of construction of the Development shall be submitted to the Health Department for approval, which, when approved, shall become a part of the Dust Control Plan under this Handbook.

4. Livestock Safety Plan

Prior to the commencement of any construction activities, the Foothills or its contractor shall submit to the City Public Works Director a plan dealing with the presence of livestock at the Development, which plan shall be in accordance with the requirements of Nevada law. The Foothills shall show all fencing, which is part of the Livestock Safety Plan on the United States Geological Survey map showing any trails and paths in the areas. Such plan, when approved by the City Public Works Director, shall be referred to herein as the “Livestock Safety Plan” and shall be deemed a part of this Agreement. The Foothills shall cause its contractors to agree to, comply in all material respects with the Livestock Safety Plan and any modifications thereto required during the course of construction of the Development shall be submitted to the City for approval, which, when approved, shall become a part of the Livestock Safety Plan under this Agreement. All fencing, gates, and cattle guards installed by the Foothills as part of the Livestock Safety Plan shall be installed and maintained by the Foothills throughout the course of construction to the reasonable satisfaction of the City. After completion of construction, the Foothills shall provide for maintenance of such of the foregoing items as are not dedicated to the City and which are located on the Development, either through maintenance by the Foothills, by a homeowner’s association or by a successor owner of the real property upon which such items are located, as indicated in the Livestock Safety Plan.

5. Approval of Activities

The City shall notify the Foothills within ten (10) days after the submission of any of the Traffic Control Plan, Construction Yard Plan and / or Livestock Safety Plan, or any revision thereto, of its approval or disapproval thereof and, in the event of any disapproval, the particular reason therefore. In the event the City fails to notify the Foothills within such ten (10) day period, the submitted plan or request shall be deemed approved.

6. Indemnification

The Foothills hereby agrees to indemnify and hold the City harmless from any and all liability to the extent caused by the acts or omissions of the Foothills or any of its agents in connection with the construction activities performed pursuant to the Agreement.

7. Arbitration

Any controversy or claim between or among the parties arising out of or relating to this Agreement shall the request of any party be determined by arbitration. The arbitration shall be conducted in accordance with the Nevada arbitrator(s) shall be selected in accordance with the rules of American Arbitration Association. The arbitrator(s) shall give effect to statutes of

limitation in determining any claim. Any controversy concerning whether an issue is arbitrable shall be determined by the arbitrator(s). Judgment upon the arbitration award may be entered in any court having jurisdiction. The institution and maintenance of an action for judicial relief of pursuit of a provisional or ancillary remedy shall not constitute a waiver of the right of any party, including the plaintiff, to submit the controversy or claim to arbitration if any other party contests such action for judicial relief.

BUILDER CONSTRUCTION PRACTICES

1. Supervision / Scheduling

The builder and / or owner shall begin work as indicated in the Certificate of Construction and shall perform the work diligently, expeditiously and with adequate resources to meet all milestones identified in the final approved schedule and the Buyer's Purchase Agreement.

The builder and / or owner shall supervise and direct the work using their best skill and full attention. The builder and / or owner is solely responsible for all construction means, methods, techniques, sequences, coordination, scheduling and procedures, and for all cleanup, safety and weather precautions in connection with the work.

2. Protection of Persons and Property

The builder and / or owner is responsible in initiating and maintaining all applicable safety precautions and programs and shall provide all protection to prevent any injury to persons or damage to the property involved in construction. These precautions shall include but not be limited to: posting of hazard and danger signs, use / maintenance of necessary traffic control devices, regular equipment inspection and service employee training.

3. Clearing

Site clearing shall begin only after the following are complete:

- a. Boundaries of any protected upland or wetland vegetation have been properly located and fenced.
- b. Existing native vegetation to remain has been properly protected with barrier fencing.

If archaeological / cultural sites are uncovered during site preparation, clearing or grading activities, work in the immediate vicinity shall cease and the builder / owner shall immediately notify the appropriate state and local agencies to determine the significance of the findings. The builder / owner shall comply with all federal, state local statutes, regulations and ordinances related to archaeological sites.

The debris from site clearing work shall be disposed of off-site.

4. Construction Fencing

Prior to site clearing, a 1" plastic orange marking tape shall encompass existing vegetation to be preserved. This tape border shall be installed with a minimum of 2" x 4" pressure-treated wooden stakes at a minimum of 2 feet penetration. The spacing of the stakes is not to exceed 8' - 0". Upon completion of site clearing, a four (4) foot high orange polyethylene fence, (Geogrid model as manufactured by Siltech Enterprises or equal) shall be installed along the boundaries of existing vegetation to be preserved. This barrier must be maintained in good condition until construction is complete. After construction is complete, the fence barrier shall be removed in 24 hours.

5. Construction Limitations

Construction shall be conducted so it is not injurious or offensive to adjacent premises because of the emission or creation of, without limitation, noise, music, vibration, smoke, dust or other particulate matter, toxic or noxious waste materials, odors, fire and explosive hazard or glare.

Where construction activities occur adjacent to an existing residential or recreational parcel, the DRC may require the builder and / or owner to erect a fence to screen that activity. The location and design of the fence shall be approved by the DRC.

Erosion and sediment control measures shall be established and implemented to control runoff and contain silt within disturbed areas of the construction site.

Protection and stabilizing methods for preventing erosion of stockpiled soils shall be included with the landscape plan or grading plan submittal.

Builders and owners shall at all times comply with each and every applicable law, ordinance, rule and regulation including without limitation (i) those contained in the Construction Activities section of the Handbook, (ii) storage and disposal of hazardous waste laws and (iii) those contained in the Development Agreement between The Foothills at Wingfield Springs, LLC and the City dated _____ and recorded with the Washoe County Recorder on. Each builder and / or owner hereby agrees to indemnify and hold harmless the Foothills at Wingfield Springs, LLC, its parent and / or affiliate companies, representatives, members, managers, the DRC and all persons acting on behalf of any of them (“Indemnified Party(ies)”) from any loss, liability, deficiency, damage, claim or expense (“Claim”) incurred by or Claim made against them arising by virtue of the builder’s and / or owner’s failure to comply with any such applicable law, ordinance, rule or regulation, including all costs and attorney’s fees and attorney’s fees and attorney’s fees on appeal incurred by Indemnified Party(ies) in defending any such Claim.

6. Construction and Delivery Hours For Builders

Construction and deliveries shall be permitted only between the following hours:

7:00 a.m. to 7:00 p.m., Monday through Friday
9:00 a.m. to 5:00 p.m., Saturday

Construction and deliveries shall not be permitted on Sundays or on the following national Holidays:

New Years Day
Memorial Day
4th of July
Labor Day
Thanksgiving Day
Christmas Day

The DRC reserves the right to require special noise attenuation procedures for construction or delivery activities which disturb existing residents or affect special project-related events.

7. Construction Trailers / Portable Toilets / Dumpsters

At the DRC's option, builders may be allocated space for one or more construction trailers on site subject to approval by the City of Sparks and the issuance of a temporary permit. All builders shall supply one portable toilet, screened as much as possible from the street and adjoining buildings and uses. Builders shall also supply one or more dumpster(s) with a full closing lid, of a dark color, onsite to collect trash and debris generated by construction activities and employees. Both the portable toilet and the dumpster shall be emptied regularly to avoid sanitation problems.

8. Site Appearance and Maintenance

All portions of the construction site shall be maintained in a clean and orderly fashion throughout the construction process complying with NDEP regulations. Construction materials shall be neatly piled and stored in a DRC approved area, and screened if required. Debris and rubbish shall be contained and periodically removed. Tall, unsightly weeds shall be routinely cut back. The streets adjoining the construction site shall be frequently swept clean of dirt and construction trash. Adjacent properties, protected wetland and native vegetation areas and all other areas shall not be used for the dumping of construction debris, dirt, trash, etc. When the construction site is not being properly maintained the DRC will notify the builder and / or owner and request immediate remedy. Should the builder and / or owner not be responsible to this request the DRC will authorize clean-up or repairs and deduct their cost from the construction deposit.

9. Builders Signage

Builders shall erect (1) Doc-Box to contain permits, keys and other elements which must be posted at the construction site. The type of Doc-Box shall be approved by the DRC. The Doc-Box shall be mounted approximately 42" above grade on the property line at the edge of the access drive corridor and maintained in good condition until an Authorization to Occupy is granted (see Final Inspection).

10. Storm Protection

Builders, architects and their subcontractors and subconsultants shall adhere to all federal, state and local ordinances and procedures governing storm warning for the construction area, builders, general contractors and subcontractors shall remove any construction vehicles, equipment or materials to safe storage. Builders and subcontractors shall then take all reasonable measures to secure and protect the construction in progress. The DRC reserves the right to take additional precautions and implement additional protective measures to protect nearby residents and common area site features.

11. Security

Only current employees of active builders, architects, city inspectors, general contractors and approved subcontractors and subconsultants shall be allowed on the site. Builders, architects and general contractors shall be held directly responsible for the actions and behavior of their employees, subcontractors, and all of their employees, agents, guests, licensees, and invitees. Construction personnel are permitted access to and from the job site only.

APPENDIX D ~ MODEL HOME & CONSTRUCTION YARD REQUIREMENTS

MODEL HOME COMPLEXES

Model Home Complexes shall comply with the following standards:

- A. Sales office hours of operation: 10 am to 7 pm weekdays, 10 am to 6 pm on Saturdays and Sundays.
- B. Temporary sales office and model homes will cease operation with the sale of the final home in the subdivision, at which time the temporary sales office will be vacated and a building permit issued to return the former office to a garage, remove temporary trap fencing and model home signs. The model homes will then be sold as residential units.
- C. A paved off-street parking lot shall be provided for the model home complex and accessible parking provided per S.M.C. The off-street parking lot will terminate at the point in time, which all the residential lots have been sold and the sales office is closed. The parking lot will be removed and a residential structure constructed, if the parking lot is situated on a residential lot. If not a residential lot, then the lot shall be landscaped as open space or the other intended use as recorded on the final map and / or as indicated on the improvement plans for the development site.
- D. The developer shall provide minimum of six (6) paved, off-street parking spaces plus one (1) van accessible disabled parking to the approval of the administrator prior to final inspection. The parking lot must comply with all requirements of the Title 20.49 and be striped parking spaces and signed identifying the van accessible parking space.
- E. The model home lots will be completely landscaped as well as the area surrounding the off-street parking lot. The developer shall submit landscaping and irrigation plans for the project, including off-street parking lot area for review and approval by the administrator prior to issuance of a building permit for the model home complex and off-street parking. The landscaping and irrigation shall be installed per the approved plans prior to final inspection for occupancy of the model home complex office and off-street parking lot.
- F. If temporary trap fencing is used, it shall be placed between the path to the model homes and the street to guide the prospective buyers to each model home. The temporary trap fencing shall be located on private property and shall not block or obstruct the public sidewalk along the street. The temporary trap fencing will be removed when the conversion of the sales office to a garage is submitted to the City.
- G. Signs for the model homes will include small freestanding monument signs at the entrance of the temporary sales office and the entrance of each model home. The monument signs are temporary and will be removed when the conversion of the sales office to a garage is submitted to the City. Sign sizing shall be per S.M.C. and as approved by administrator. The sign locations shall comply with the safe siting standards in the Title 20.56.
- H. The developer shall limit all construction and construction-related activities to between the hours of 7:00 A.M. through 7:00 P.M., Monday through Friday and 9:00 A.M. to 5:00 P.M. Saturday. There shall be no construction related activities on Sundays in residential areas. The developer shall install signs at all access points to the project that clearly indicate these limited hours of activity on-site prior to the start of any construction-related activities. The developer shall maintain these signs in good repair for the duration of the construction of the project. Once construction is completed, the developer shall remove these signs.
- I. The developer shall designate to the administrator a project contact person responsible / authorized to correct problems regarding the project on a 24-hour / 7-days a week basis. The developer shall designate the project contact person to the Administrator prior to issuance of a grading permit for the project.

- J. The developer shall apply for and receive approval of a building permit for improving the garage or other room in model home to the Sales Office and apply for and receive a building permit for the conversion of the sales office back into garage or room.
- K. If the sales office is not converted back into a garage, there must be parking documented to the approval of the administrator that complies with Title 20.49.

CONSTRUCTION YARD

In any zoning district in which a construction yard is permitted, the following standards shall apply:

- A. Definition. Construction yard is a temporary area used for the storage of construction materials, supplies, equipment, tools, stock pile of useable construction materials and other items as permitted including temporary storage containers, construction trailers and temporary office trailers.
- B. Proposed construction yards shall be associated to a specific project with an approved building permit issued for grading, construction remodel and / or demolition.
- C. Construction yards shall be supervised by one (1) contractor who will be responsible enforcing compliance of these standards. The contractor shall be responsible for compliance of the construction yard to all applicable codes.
- D. Construction yards shall be removed prior to a final inspection of the last building in a non-residential project and for the last structure in a residential project or final approval for the project.
- E. The contractor shall be required to provide curb cuts for all egress / ingress areas onto a paved street. To prevent mud / dirt from transferring from trucks, vehicles and equipment onto the paved street the contractor shall install pavement / a surface treatment at all egress / ingress points form the yard a minimum of 50 feet to the street access to the approval of the administrator.
- F. A project site with physical constraints may utilize an alternative off site property for a construction yard subject to site plan review process. The contractor shall be required to reclaim the alternative off site property to its original conditions prior to final inspection / issuance of a certificate of occupancy for the associated project to the approval of the administrator. Site reclamation may include site clean-up and / or revegetation with temporary irrigation. Bonding may also be required to verify revegetation within three (3) years.
- G. The developer shall limit all construction and construction-related activities to between the hours of 7:00 AM through 7:00 PM, Monday through Friday and 9:00 AM to 5:00 PM Saturday, there shall be no construction yard usage on Sundays in residential areas or adjacent residential to be determine by the Administrator. The developer shall install signs at all access points to the project that clearly indicate these limited hours of activity on-site prior to the start of any construction-related activities. The developer shall maintain these signs in good repair for the duration of the construction of the project. Once construction is completed, the developer shall remove these signs.
- H. The developer shall designate to the administrator a project contact person responsible / authorized to correct problems regarding the project on a 24-hour / 7-days a week basis. The developer shall designate the project contact person to the administrator prior to the issuance of a grading permit for the project.
- I. The developer may construct a fence around the construction yard that is higher than six (6) feet and use barbed wire on the top of the fence with the approval of the City of Sparks Building Department and Administrator. The fence must be located in compliance with safe siting standards.

BUILDER GUIDE

INTRODUCTION

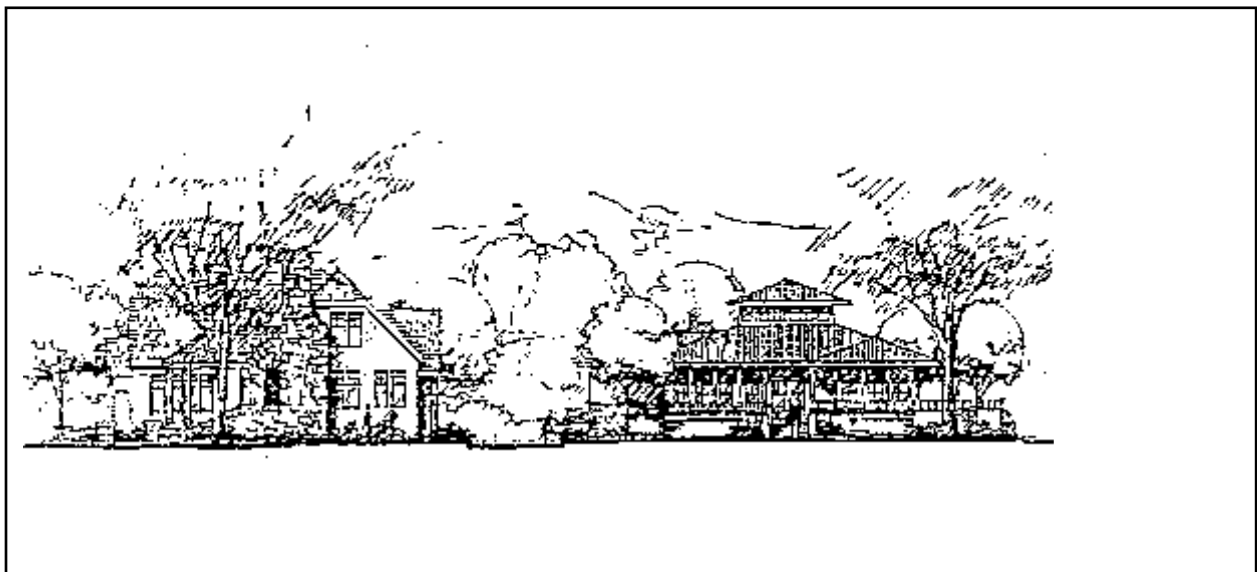
A design review committee will be set up to review plans for the development of all lots and parcels in the Foothills. The Foothills at Wingfield Design Review Committee (“FAWDRC”) may include one member from the City of Sparks, appointed by the City Manager. FAWDRC responsibilities will include the review of site plans, building plans, elevations, materials, colors, fencing, signage, lighting, landscaping and parking arrangements prior to permit submittal to the City of Sparks.

Specific responsibilities and standards will be further defined in the Declaration of Covenants, Conditions and Restrictions (CC&R’s) which will also serve the Foothills.

ARCHITECTURE

The Foothills at Wingfield Springs is not intended to be developed with one prevalent architectural style and variety in the architecture is encouraged. An emphasis, however, will be placed on consistency with the overall ranch theme including indigenous architectural styles, the use of quality materials and complementary relationships between building and site design features. Historic ranch styles are encouraged.

1. House scale and building heights shall relate to topography, lot sizes and setbacks. A mix of one and two story units in the single-family neighborhoods will be encouraged. Building heights in multi-family neighborhoods and non-residential uses may be taller but should have a massing and scale compatible with adjoining residential uses.



A mix of one and two story homes with varying architectural styles

2. A mix of housing styles and types is encouraged. Front and rear yard setbacks shall be varied. No adjacent single family detached home will be permitted to have the same plan / elevation or color. Each single family village developed by a home builder shall have a minimum of four models each having three elevations and material change and wall / roof color variations.
3. Homes on Amenity lots shall have side or rear-entry garages (garage doors not directly facing the street) if the lot width is 120 feet or greater. Where possible homes on smaller lots are encouraged to provide side or rear-entry garages.
4. Private exterior living spaces such as decks and patios are required in the design of each unit in the multi-family neighborhoods.
5. Roof pitch variations are preferred. No flat roofs or rock covered roofs shall be permitted. Tile, concrete tile, architectural grade composition shingles or other materials approved by the FAWDRC are permitted.
6. Passive solar designs are encouraged.
7. The use or incorporation of wood, stone, cultured stone and / or brick on exteriors shall be used. Material changes, fenestration changes and variations of wall and window surface planes shall be used.
8. In order to avoid the appearance of a false appliqué, no material changes shall be allowed on corners or on facades which abut common areas.
9. Windows shall be sensitively placed to protect privacy of adjacent residences.
10. View corridors are critical to and from all open spaces. The siting of buildings, accessory structures, fences, etc. and their impact on view and adjacent uses shall be carefully considered.
11. Mechanical equipment on roofs, above ground transformers, utility equipment and loading, service and storage areas shall be screened, enclosed or buried from view from the streets, pathways, public areas and adjacent uses. Trash enclosures and maintenance structures shall be designed to be compatible in style, materials and colors with the main building and shall be by architectural elements incorporated into the building and made of durable material.
12. Strong vertical elements (chimneys, multistory bays, etc.) should be used sparingly. Horizontal elements should dominate facades, in order to reduce the perceived height.
13. No reflective glass is permitted.

SIGNAGE

The signage and graphics within the Foothills will follow the overall “ranch” style theme and history of the neighboring areas. Signage will further reinforce design concepts and provide identification for the residential villages and non-residential uses. Signage will also be provided for traffic control, along pathways and for public information purposes. In all cases, signs will be kept simple to reduce, not contribute, to visual clutter.

Signage throughout the project shall be consistent in color, size and materials. Sizes, styles and configurations will vary dependent on the specific purpose, activity level, and building materials.

1. General

- a. The Foothills logo shall be used as appropriate on signage throughout the project.
- b. Lighting and landscaping shall be considered an integral part of all signage proposals.
- c. Signs constructed of native stone, wood, and other natural materials with painted or relief cut letters are encouraged.
- d. Prohibited signs shall include:
 - Signs which constitute a hazard to traffic of pedestrians;
 - Signs located within any stream or drainage channel;
 - Mobile signs or portable signs except as provided in Sparks Municipal Code;
 - Inflatable signs except as provided in Sparks Municipal Code;
 - Signs which produce odor, sound, smoke, flame, or other emissions;
 - Signs which imitate or simulate official signs, or which use yellow or red blinking or intermittent lights resembling danger or warning signals;
 - Signs using strobe lights or individual light bulbs exceeding 75 watts;
 - Signs on public property or right-of-way signs attached to utility poles, street lights, fences, barns, sheds, or other similar structures; and
 - Roof signs.
- e. All signs shall be in accordance with the City of Sparks ordinances in effect at the time of use and subject to approval by the FAWDRC and permitted by the City of Sparks.
- f. All house numbers shall be visible from street.

2. Identification signage

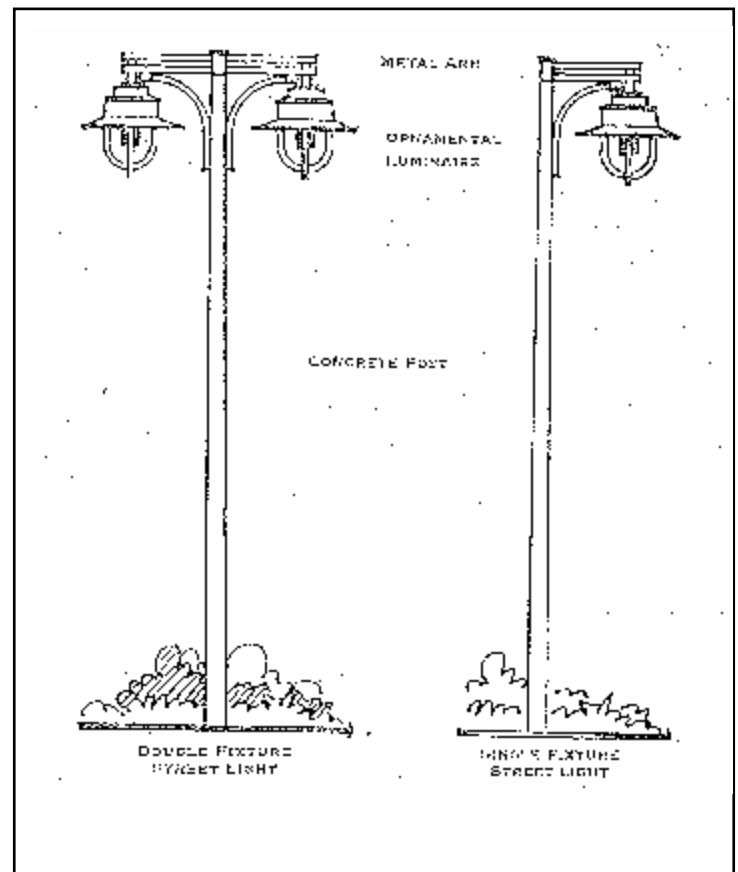
Identification signs will be provided at project entrances as part of the overall entry statement to the Foothills. Each village shall have its own entry statement and signage theme or color combinations approved with preliminary development plan by FAWDRC and the City of Sparks.

LIGHTING

Lighting shall be functional and efficient, while keeping with the design themes of the Foothills lighting will vary from larger scale illumination of major roadways to intimate lighting of pathways, building entries or residential lots. In general, to reduce light pollution in the high visibility desert development, overall lighting shall be minimized. Lighting guidelines are outlined below.

All lighting shall be in accordance with City of Sparks ordinances in effect at the time of site plan approval and subject to approval by the FAWDRC.

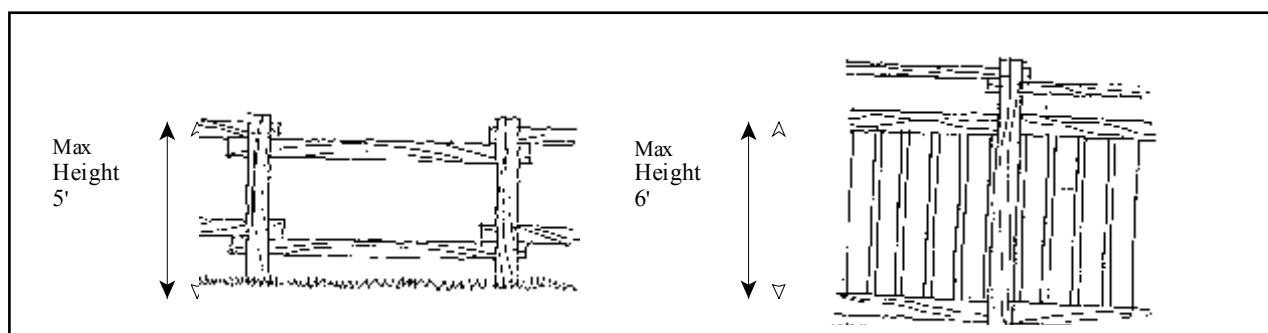
1. Fixtures will be of a scale consistent with use.
2. Light fixture style, type and color shall be consistent and compatible throughout the project. The style of light standards along public streets shall be subject to the approval of the City of Sparks. However, if such light type is not consistent with city standards, the Homeowner's Association shall be responsible for the cost of repair and replacements. Specific lighting design criteria in Section VI are to be followed
3. In all cases, lighting shall not extend beyond its tasks. Cut-off fixtures shall be used as appropriate on arterials and collector streets.
4. Illumination levels shall not be in excess of what is required. Lighting design shall address specific functions of activity areas.
5. If lighting for signage is provided, it shall relate to signage and graphics and shall increase visibility and appearance of signage.
6. Lighting fixtures shall be located as to minimize shadows and interference.
7. Spillover lighting shall not be permitted cut off fixtures shall be used. Lighting shall reflect away from adjoining properties.
8. Energy consumption shall be considered in determining lighting fixtures.



FENCING

Fencing will be used for safety and security purposes, sound abatement, to control pets, enhance village themes, delineate uses and for screening. All fencing shall be approved by the FAWDRC.

1. A consistent fencing theme will be required throughout each individual village and along Vista Boulevard.
2. If fencing is desired on rear or side yards adjacent to open space areas, open fencing such as buck and pole or split rail, or other transparent fencing approved by the FAWDRC not to exceed 42" in height, shall be used to preserve vistas and maintain an open space feeling. Fencing in these areas may be replaced by additional landscaping, berming or in the case of owners with dogs, "invisible fencing."
3. Open fencing is generally encouraged to maximize view, however, solid fencing for safety, security and privacy purposes may be considered where lots are not adjacent to lakes, or open space areas. Solid fencing shall be consistent in design in the Foothills, shall not exceed 6 feet in height and may be constructed of wood with stone or masonry accents for columns. Pilasters may be used along Vista and the north south collectors, the design of pilasters shall be approved by the FAWDRC and the City of Sparks.
4. Fencing within the front yard shall be limited to low, transparent fences, not to exceed 48" in height. Within the front yard, walls or hedges shall not exceed 36" in height. Taller and more opaque rear and side yard fencing should terminate into the sidewall of residential buildings at least 5 feet behind street side facade(s). All sight triangles at intersections shall be maintained to the approval of the City of Sparks Administrator and the FAWDRC.
5. The use of chain link fence shall be restricted to pet and pool enclosures and tennis courts. Black vinyl coated chain link fence will be required when chain link fencing is necessary and approved by the DRC. Pet enclosures shall not be used as a property fence.
6. Adequate sight distance shall be maintained along roadways and intersections according to accepted engineering practices and roadway design speeds.
7. A fencing plan shall be submitted for each village for review and approval not to include custom lots. Once approved by the FAWDRC the plan shall be forwarded to the City prior to the issuance of any building permit.



Split Rail Fence Screen Fence

LANDSCAPE

Landscaping within the Foothills shall integrate resource efficient design measures and environmentally compatible plants to ensure drought resistant and water conserving vegetation as an integral part of the design. Conformance review shall be conducted by the FAWDRC prior to building permit submittal.

1. Colors and textures of plant material should be consistent within the overall project common areas yet vary within the individual parcels in order to create unity in the common areas and variety in the individual villages.
2. The ultimate mature size of plants will be evaluated on maintenance, life span and functional requirements. In areas where screening is needed, plants shall be selected upon their form and branching density.
3. New plantings are encouraged to be informal and clustered to relate to the existing landscape.
4. Landscape design shall incorporate appropriate native plants; low, natural massings and no abrupt transitions of plant materials, especially on the hillsides and ridgetops.
5. Trees shall be used to shade paved surface areas and consequently minimize reflected solar heat.
6. All plant materials shall be evaluated in terms of how well they enhance the architecture, existing plant material, enclose spaces and link various activities within the Foothills.
7. Climate influences shall be considered in order to get the maximum growth of the plant material. Evergreens along the north and west sides of buildings will be encouraged; as they will diffuse the winter winds. Deciduous plants adjacent to buildings will be recommended since they provide summer shade while allowing winter sun to enter the building. Special consideration shall be given to trees with tap roots and / or non-evasive root growth.
8. Drought tolerant principles shall be used when applicable. Plants selected shall be grouped and zoned according to water consumption rates and soil requirements. To aid in water conservation, plants should be confined to planting beds, and the use of mulches at a minimum of 1-inch depth is encouraged.
9. Native high desert plant materials shall be used in open space.
10. Plants which require little maintenance should be favored over those which require constant spray and pruning. Special attention shall be given to appropriate plant spacings, as this will reduce unwarranted pruning.
11. Plant life cycle should be considered with plant materials. An appropriate mix of slow, medium and fast growth rates shall be encouraged. The result of a proper mix will be a long living, increased drought tolerant and disease resistant stand of vegetation.
12. Fire retardant and low fuel plants shall be used within 30 feet of all buildings. A minimum of 10' vegetation clearance must be maintained around chimneys. Wetlands and their setbacks are excluded.

13. Proper turf management aids in the soil erosion control, dust stabilization, temperature moderation and high groundwater recharge. The type and selection of turf areas should be selected in the same manner as all other plantings. Hydromulching is permitted.
14. Irrigation is critical for healthy plant material with deep watering the best way to apply water. This promotes deeper roots which are not as susceptible to drought.
 - a. All permanent systems are to be below ground and fully automatic. Use of water conserving systems including, but not limited to, drip irrigation and moisture sensors shall be used. Irrigation heads, where used, are to be adjusted to minimize permissible run-off. All irrigation heads adjacent to paved areas, curbs and in turf shall be of the pop-up-type and not over-spray.
 - b. Backflow control devices are to be located so as to minimize their adverse visual impact. In addition, such control devices shall be screened by shrubs.
15. Undeveloped sits or portions of sites held in reserve for future development need not be irrigated or fully landscaped; however these areas shall, at a minimum, shall be seeded with a drought resistant clover / wildflower mix to minimize weed growth and erosion. The use of temporary on-grade irrigation systems shall be permitted in these areas.
16. Turf areas should be limited in size. Where used, turf shall be of a drought tolerant type.
17. Decomposed granite, stone, and gravel beddings are encouraged.

GRADING / REVEGETATION

Grading will be coordinated with the storm drainage plans for the property. Detention basins and ponds will be constructed to delay storm water flows in some locations. Lots in many of the villages will be individually graded in a site sensitive manner to reduce impacts. Cut and fill slopes along roadways will be carefully designed to minimize visual impacts. Grading and revegetation guidelines are outlined below and shall comply with Nevada Department of Environmental Protection, the Washoe County Health Department and the City of Sparks requirements.

1. All disturbed areas will be revegetated or restored, with proper erosion and dust control methods. Stockpiling, erosion and the loss of topsoil shall be minimized.
2. Seeding shall be done as soon as possible after finish grading has been completed.
3. Topsoil that is removed shall be centrally located with respect to construction phasing. The stockpile shall be protected by seeding, watering, mulching or covering or by other method.
4. All grading shall follow the City of Sparks requirements.
5. Individual site sensitive grading shall be reviewed and approved by the FAWDRC and the City of Sparks Public Works Department.
6. Detention basins will be developed in conjunction with other earthwork operations for use in

sediment and drainage control during construction.

7. All grading and slope stabilization shall meet the requirements set forth by the Nevada Department of Environmental protection for storm water discharge permits and the City of Sparks.

STORM DRAINAGE

Storm drainage will be accommodated through a combination of piping and surface drainage in accordance with the results of the final hydrology study.

1. A final hydrology study shall be prepared prior to development of each project phase / village.
2. Detention basins and ponds to be constructed shall be incorporated into the open space landscaping designs as project amenities. Drainage channels shall be natural in appearance, not concrete lined.
3. Accumulated sediments shall be removed and maintenance performed as necessary by the City of Sparks, the project's homeowner's association or golf course operator, as established pursuant to further agreement.
4. Catch basins shall include oil / sand separators or other measures to provide for the pretreatment / removal of petrochemicals and silts.
5. All grading and revegetation shall comply with standards set forth by the Nevada Department of Environmental Protection with the requirements for general storm water discharge permits.

FIRE PROTECTION / PREVENTION

A fire station site is provided on the old Wingfield School parcel. The design and construction of the fire station will be coordinated by the City of Sparks.

1. The developer shall contribute their fair share to the financing of the public facility in accordance with the Impact Fee Agreement for the Foothills.
2. The development shall comply with all applicable fire codes and requirements for construction, including, but not limited to the provision of secondary access, hydrant locations, class A roofing, fire breaks, etc. The irrigated open spaces will act as firebreaks throughout the project. It is further anticipated that fire sprinklers shall be installed in residences depending on requirements of the Sparks Fire Department.

WATER CONSERVATION

1. Water meters will be required for all uses within the project.
2. Resource efficient landscaping, water conservation irrigation systems and domestic water fixtures shall be required throughout the project in accordance with City of Sparks Ordinances.

3. Builders shall be encouraged to provide state-of-the-art water conserving fixtures and appliances in residential and non-residential developments.
4. The use of treated effluent will be used for parks and common area irrigation. The use of effluent is subject to a reuse line being constructed by the City of Sparks with an estimated completion date of July 2004.

**APPENDIX F ~ SOLAEGUI ENGINEERS, LTD
TRAFFIC STUDY**

TRANSMITTAL

SOLAEGUI ENGINEERS, LTD
715 H Street
Sparks, Nevada 89431
775-358-1004 Voice
775-358-1098 Fax
E-mail: Psolaegui@aol.com

Job No.

Date: June 13, 2003

Attention: Neil Krutz

RE: Tucker Wingfield

To: City of Sparks City Works

Quantity	Description
1 Set	Updated RTC Land use tables with our edits

Remarks:

We have noted the suggested changes in the dwelling unit counts for TAZ's in Wingfield Springs both north and south of Vista Boulevard as well as the Tucker property. Thanks for your help processing this information.

Copy To: Terry Reynolds

Signed:

Paul Solaegui

TRANSMITTAL/TUCKER2

WINGFIELD TUCKER
WINGFIELD EXISTING NORTH
WINGFIELD EXISTING SOUTH

2000, 2007, 2012, 2020, and 2030 Landuse

Dwelling Units				Population				Total Employees				Agricultural				Manufacturing				Warehouse				Retail				Service				Other				Hotel Rooms					
T.A.Z.	00	07	20	30	00	07	20	30	00	07	20	30	00	07	20	30	00	07	20	30	00	07	20	30	00	07	20	30	00	07	20	30	00	07	20	30					
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AREA 13: Sparks Sphere																																									
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		90				270																																			
407	241	248	250	250	650	668	675	675	5	5	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
		250				675					5																														
411	0	75	250	309	0	203	675	834	0	0	300	341	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
		100				270					200																														
412	0	100	400	946	0	270	1,080	2,554	0	0	78	78	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
		200				540					78																														
415	99	110	147	147	267	297	397	397	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
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447	261	300	400	474	705	810	1,080	1,280	0	28	28	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
		325				878					28																														
449	0	0	0	0	0	0	0	0	0	250	700	1,407	0	10	28	56	0	45	126	253	0	28	77	155	0	25	70	141	0	75	210	422	0	67	189	380	0	0	0	0	
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450	0	75	200	250	0	203	540	675	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
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	0	10	43	43	0	27	116	116	0	225	400	511	0	16	27	0	0	0	0	0	0	0	5	8	0	0	28	51	414	0	112	199	66	0	64	115	31	0	0	0	0
		30				81					315											6					40														
452	146	146	146	146	423	423	423	423	0	0	45	56	0	0	3	4	0	0	0	0	0	0	0	1	1	0	0	6	7	0	0	22	28	0	0	13	16	0	0	0	0
		146				423					25											1					3														
453	89	300	495	495	240	810	1,337	1,337	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
		350				945					0											0					0														
482	16	16	75	99	37	37	173	228	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
		50				115					0											0					0														
483	20	30	30	30	58	87	128	128	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
		30				128					0											0					0														
484	51	75	108	108	143	210	302	302	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
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485	145	145	145	145	421	421	421	421	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
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487	0	0	75	231	0	0	203	624	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
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489	0	0	120	426	0	0	324	1,150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
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490	0	0	75	297	0	0	203	802	0	0	0	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
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491	0	0	75	228	0	0	203	616	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
		50				135					0											0					0														

2000, 2007, 2012, 2020, and 2030 Landuse

2000, 2007, 2012, 2020, and 2023																																												
T.A.Z	Dwelling Units				Population				Total Employees				Agricultural				Manufacturing				Warehouse				Retail				Service				Other				Hotel Rooms							
	00	07	20	30	00	07	20	30	00	07	20	30	00	07	20	30	00	07	20	30	00	07	20	30	00	07	20	30	00	07	20	30	00	07	20	30								
	12				12				12				12				12				12				12				12				12				12							
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	0				0				490				0				0				0				397				64				29				0							
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494	0	0	332	332	0	0	896	896	0	57	107	107	0	2	3	0	0	5	10	0	0	3	6	0	0	3	6	46	0	9	17	8	0	35	65	53	0	0	0	0				
	0				675				107				3				10				6				6				17				65				0							
495	0	0	0	0	0	0	0	0	0	450	1,650	2,141	0	16	58	75	0	70	258	334	0	43	158	204	0	87	320	416	0	125	457	594	0	109	399	518	0	0	0	0				
	0				0				1,250				44				195				119				242				347				303				0							
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	0				0				1,000				40				180				110				100				300				270				0							
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	50				135				200				0				0				0				162				26				12				0							
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	200				540				100				4				18				11				10				30				27				0							
499	0	0	0	0	0	0	0	0	0	100	250	383	0	0	0	0	0	0	0	0	0	0	0	0	0	81	202	310	0	13	33	50	0	6	15	23	0	0	0	0				
	0				0				150				0				0				0				121				20				9				0							
500	0	0	100	273	0	0	270	737	0	300	500	731	0	12	20	30	0	54	90	132	0	33	55	80	0	30	50	73	0	90	150	219	0	81	135	197	0	0	0	0				
	75				203				425				17				77				47				43				127				114				0							
	0				0				0				0				0				0				0				0				0				0				0			
	0				0				0				0				0				0				0				0				0				0				0			
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	75				203				0				0				0				0				0				0				0				0				0			
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	75				203				0				0				0				0				0				0				0				0				0			
504	0	0	0	0	0	0	0	0	0	100	450	619	0	4	18	25	0	18	81	111	0	11	50	68	0	10	45	62	0	30	134	186	0	27	122	167	0	0	0	0				
	0				0				250				10				45				28				25				74				68				0							
505	0	50	200	310	0	135	540	837	0	100	450	619	0	4	18	25	0	18	81	111	0	11	50	68	0	10	45	62	0	30	134	186	0	27	122	167	0	0	0	0				
	75				203				250				10				45				28				25				74				68				0							
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511	12	131	250	608	29	314	600	1,459	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
	150				360				0				0				0				0				0				0				0				0				0			
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	136				394				0				0				0				0				0				0				0				0				0			

2000, 2007, 2012, 2020, and 2030 Landuse

2000, 2007, 2012, 2020, and 2030 Estimates																																								
T.A.Z	Dwelling Units				Population				Total Employees				Agricultural				Manufacturing				Warehouse				Retail				Service				Other				Hotel Rooms			
	00	07	20	30	00	07	20	30	00	07	20	30	00	07	20	30	00	07	20	30	00	07	20	30	00	07	20	30	00	07	20	30	00	07	20	30				
	12				12				12				12				12				12				12				12				12				12			
515.	0	100	500	600	0	270	1,350	1,620	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
		150				405				0				0				0			0				0				0				0			0	0			
516	191	216	216	216	554	626	626	626	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
		216				626				0				0				0			0				0				0				0			0	0			
517	37	90	90	90	100	243	243	243	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
		90				243				0				0				0			0				0				0				0			0	0			
518	23	82	82	82	62	221	221	221	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
		82				221				0				0				0			0				0				0				0			0	0			
519	14	25	100	110	36	65	260	286	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
		50				130				0				0				0			0				0				0				0			0	0			
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		50				135				0				0				0			0				0				0				0			0	0			
521	215	215	215	215	624	624	624	624	0	0	65	84	0	0	5	6	0	0	0	0	0	0	1	2	0	0	8	11	0	0	32	41	0	0	19	24	0	0	0	0
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		100				675				0				0				0			0				0				0				0			0	0	0	0	
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		94				216				0				0				0			0				0				0				0			0	0	0	0	
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		75				188				0				0				0			0				0				0				0			0	0	0	0	
660	159																																							

2000, 2007, 2012, 2020, and 2030 Landuse

2000, 2007, 2012, 2020, and 2030																																								
T.A.Z	Dwelling Units				Population				Total Employees				Agricultural				Manufacturing				Warehouse				Retail				Service				Other				Hotel Rooms			
	00	07	20	30	00	07	20	30	00	07	20	30	00	07	20	30	00	07	20	30	00	07	20	30	00	07	20	30	00	07	20	30	00	07	20	30				
	12				12				12				12				12				12				12				12				12				12			
669	151	151	151	151	423	423	423	423	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
		151				423				0				0				0			0				0				0				0			0	0			
670	6	100	270	270	16	270	864	864	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
		250				675				0				0				0				0				0				0				0			0	0		
671	0	0	0	0	0	0	0	0	0	235	469	469	0	0	0	0	0	0	0	0	0	0	0	0	0	190	380	380	0	31	61	61	0	14	28	28	0	0	0	0
		0				0				469				0				0				0				380				61				28			0			
Area 13 Totals																																								
2000	3,245				9,047				373				5				0				2				234				91				41				0			
2007	4,819				13,266				3,346				96				323				204				1,168				871				684				0			
2012	7,337				20,062				7,422				200				737				462				2,471				2,039				1,513				400			
2020	11,114				30,243				9,882				277				1,022				639				3,156				2,690				2,098				400			
2030	15,894				43,035				13,537				432				1,538				976				4,457				3,523				2,892				400			

TRANSMITTAL

SOLAEGUI ENGINEERS, LTD
715 H Street
Sparks, Nevada 89431
775-358-1004 Voice
775-358-1098 FAX
e-mail: psolaegui@aol.com

JOB # :
DATE : June 13, 2003
ATTENTION : Terry Reynolds
RE : Foothills at Wingfield Springs

TO: Red Hawk

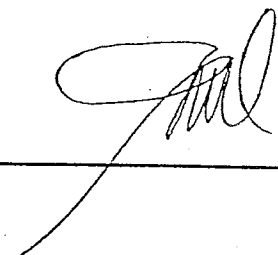
Quantity	Description
1	Final Traffic Study

REMARKS:

We have modified the traffic study based on the discussion I had with Ted Erkan and you. If access to the villages near the west side collector is restricted, that roadway will serve more than 5,000 ADT. Thanks for the opportunity do to this work.

COPY TO:

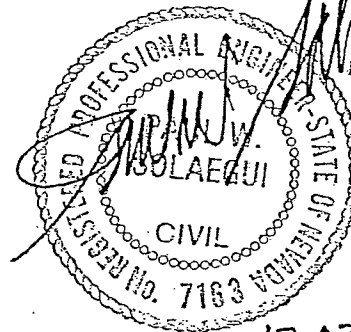
SIGNED:



THE FOOTHILLS
AT WINGFIELD SPRINGS

TRAFFIC ANALYSIS

JUNE, 2003



6-13-03
EXP 6-30-04

Prepared by:
Solaegui Engineers, Ltd.
715 H Street
Sparks, Nevada 89431
(775) 358-1004

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THE FOOTHILLS AT WINGFIELD SPRINGS

TRAFFIC ANALYSIS

EXECUTIVE SUMMARY

The Foothills at Wingfield Springs is located in the City of Sparks, Nevada. The project site is located north of Vista Boulevard, south of La Posada Drive and east of Wingfield Springs. The project site is currently undeveloped land. The purpose of this study is to address the project's impact upon the adjacent street network. The Vista Boulevard intersections with Wingfield Parkway and Wingfield Hills Drive and the La Posada Drive intersections with Pyramid Highway and a proposed access roadway have been identified for intersection capacity analysis. Vista Boulevard, La Posada Drive and the project access roadway have been identified for roadway capacity analysis.

The Foothills at Wingfield Springs will consist of the construction of 1,457 single family dwelling units, 1,117 multi-family dwelling units, commercial buildings on ± 8 acres and ± 9 acres of parks. The project is anticipated to generate 22,038 average daily trips with 1,664 trips occurring during the AM peak hour and 2,085 trips occurring during the PM peak hour.

Traffic generated by the Foothills at Wingfield Springs will impact the area roadways and intersections. The following recommendations are made to mitigate project traffic impacts.

It is recommended that any required signing, striping, or traffic control improvements comply with City of Sparks requirements.

It is recommended that the Pyramid Highway/La Posada Drive intersection be improved to include dual left turn lanes at the south and east approaches and an exclusive right turn lane at the north approach. These improvements are currently scheduled for completion in the Regional Transportation Commission's Capital Improvements Plan.

It is recommended that traffic signal warrants continue to be reviewed at the Vista Boulevard intersections with Wingfield Hills Drive and Wingfield Parkway with future development and traffic signals be installed when warranted.

It is recommended that the Vista Boulevard on-site intersections be designed to include the approach lanes shown in Figure 8 on page 22.

It is recommended that Vista Boulevard ultimately be constructed as a four-lane moderate access control arterial from Wingfield Parkway to the southerly on-site Vista Boulevard/access roadway intersection.

It is recommended that the north project access roadway be constructed as a two-lane collector street from La Posada Drive to Vista Boulevard.

It is recommended that the remaining on-site streets be constructed per City of Sparks neighborhood street standards.

INTRODUCTION

STUDY AREA

The Foothills at Wingfield Springs is located in the City of Sparks, Nevada. The project site is located north of Vista Boulevard, south of La Posada Drive and east of Wingfield Springs. The location of the project site is shown in Figure 1. The purpose of this study is to address the project's impact upon the adjacent street network. The Vista Boulevard intersections with Wingfield Parkway and Wingfield Hills Drive and the La Posada Drive intersections with Pyramid Highway and a proposed access roadway have been identified for intersection capacity analysis. Vista Boulevard, La Posada Drive and the project access roadway have been identified for roadway capacity analysis.

EXISTING AND PROPOSED LAND USES

The project site is currently undeveloped land. Adjacent properties include residential development to the west and north and undeveloped land to the east and south. The Foothills at Wingfield Springs will consist of the construction of 1,457 single family dwelling units, 1,117 multi-family dwelling units, commercial buildings on ± 8 acres and ± 9 acres of parks.

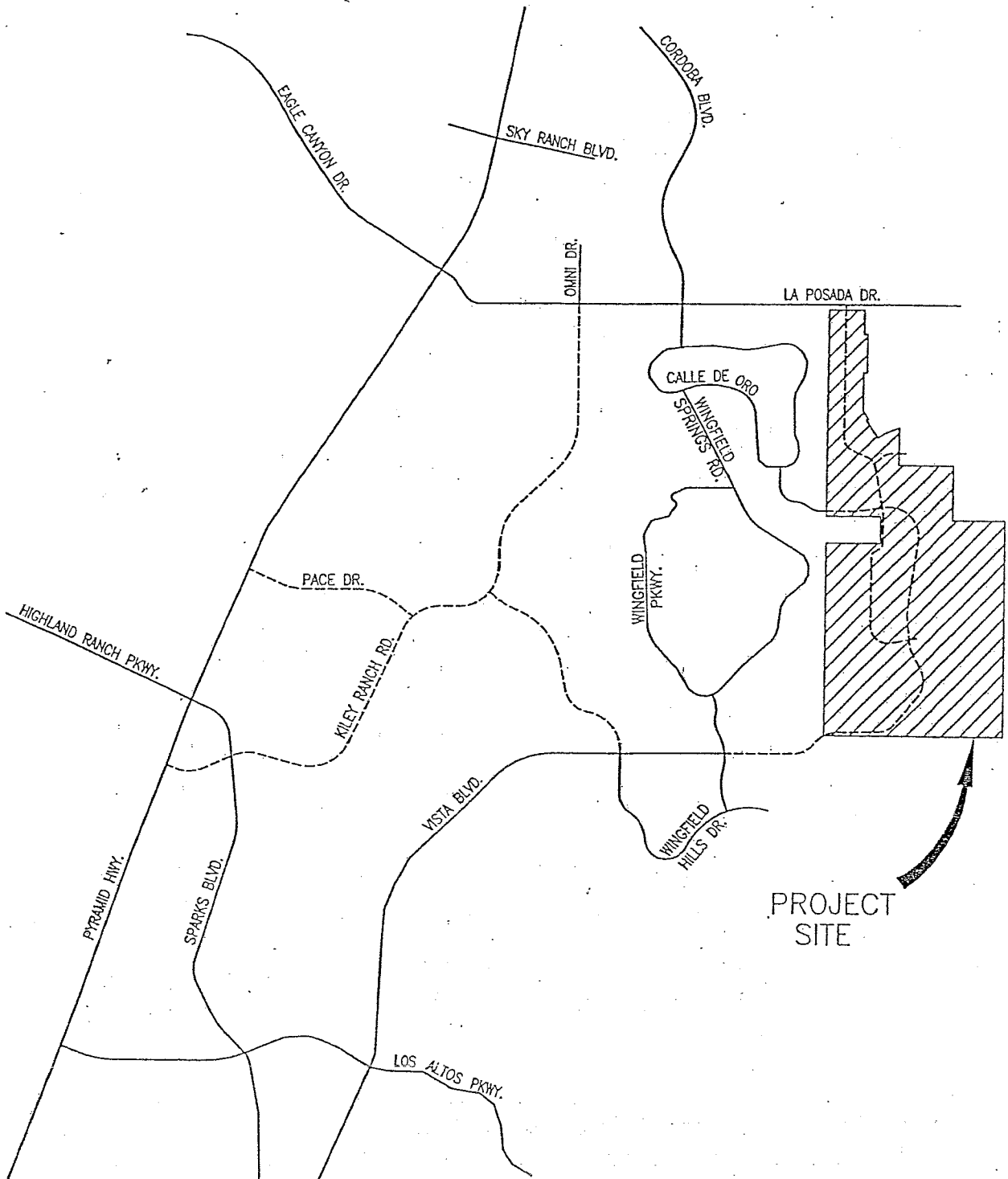
EXISTING AND PROPOSED ROADWAYS AND INTERSECTIONS

Pyramid Highway is a four-lane roadway with two lanes in each direction in the vicinity of La Posada Drive. The speed limit is posted for 45 miles per hour in the vicinity of the La Posada Drive intersection. Roadway improvements include a center two-way left turn lane, bicycle lanes and graded shoulders near the La Posada Drive intersection.

La Posada Drive is a two-lane roadway with one lane in each direction east of Pyramid Highway. The speed limit is 35 miles per hour. Roadway improvements include curb and gutter near the intersection with Pyramid Highway and graded shoulders further east. West of Pyramid Highway the street is named Eagle Canyon Drive.

Vista Boulevard a two-lane roadway with one lane in each direction in the vicinity of the site. The speed limit is posted for 45 miles per hour. Roadway improvements generally include centerline striping and graded shoulders west of Wingfield Hills Drive and curb, gutter and sidewalks east of Wingfield Hills Drive.

Wingfield Hills Drive is a two-lane roadway with one lane in each direction south of Vista Boulevard. The speed limit is not posted. Roadway improvements include curb, gutter and sidewalk on the east side of the street and median curb only on the west side of the street.



THE FOOTHILLS AT WINGFIELD SPRINGS
VICINITY MAP

Wingfield Parkway is a wide, two-lane roadway with one lane in each direction north and south of Vista Boulevard. The speed limit is posted for 25 miles per hour north of Vista Boulevard. Roadway improvements include curb, gutter and sidewalks on both sides of the street and a raised, landscaped center median.

The Pyramid Highway/La Posada Drive intersection is a six-phase traffic signal controlled intersection with protected left turn phasing on the Pyramid Highway approaches. The north approach contains one left turn lane, one through lane and a shared through-right turn lane. The south approach contains one left turn lane, two through lanes, and one right turn lane. The east approach contains one left turn lane, one through lane and an exclusive right turn lane. The west approach contains one left turn lane and a shared through-right turn lane.

The Vista Boulevard/Wingfield Hills Drive intersection is an unsignalized "T" intersection with stop sign control on the south Hills Drive approach. The east approach contains a single lane from which the left turn and through movements are made. The west approach contains a single lane from which the through and right turn movements are made. The south approach contains one left turn lane and one right turn lane.

The Vista Boulevard/Wingfield Parkway intersection is an unsignalized four-leg intersection with stop sign control on the north, south, east and west approaches. The north, south and west approaches each contain a single lane from which all movements are made. The east approach is an unimproved dirt road.

TRIP GENERATION

In order to assess the magnitude of traffic impacts of the proposed development on the key roadways and intersections, trip generation rates and peak hours had to be determined. Trip Generation rates for the project were based on information taken from the Sixth Edition of *ITE Trip Generation* (1997) for Land Uses 210: Single Family Detached Housing, 220: Apartment, 411: City Park and 820: Shopping Center.

As previously discussed, the project will consist of the construction of 1,457 single family dwelling units, 1,117 multi-family dwelling units, commercial buildings on ± 8 acres and ± 9 acres of parks. A total building area of 70,000 square feet was estimated for the commercial land based on a 20% floor area to acreage ratio.

Trips generated by the project were calculated for an average weekday and for the weekday peak hours between 7:00 and 9:00 AM and 4:00 and 6:00 PM which correspond to the peak hours of adjacent street traffic. Table 1 shows a summary of the average daily traffic volumes and peak hour volumes generated by the project.

TABLE 1
TRIP GENERATION

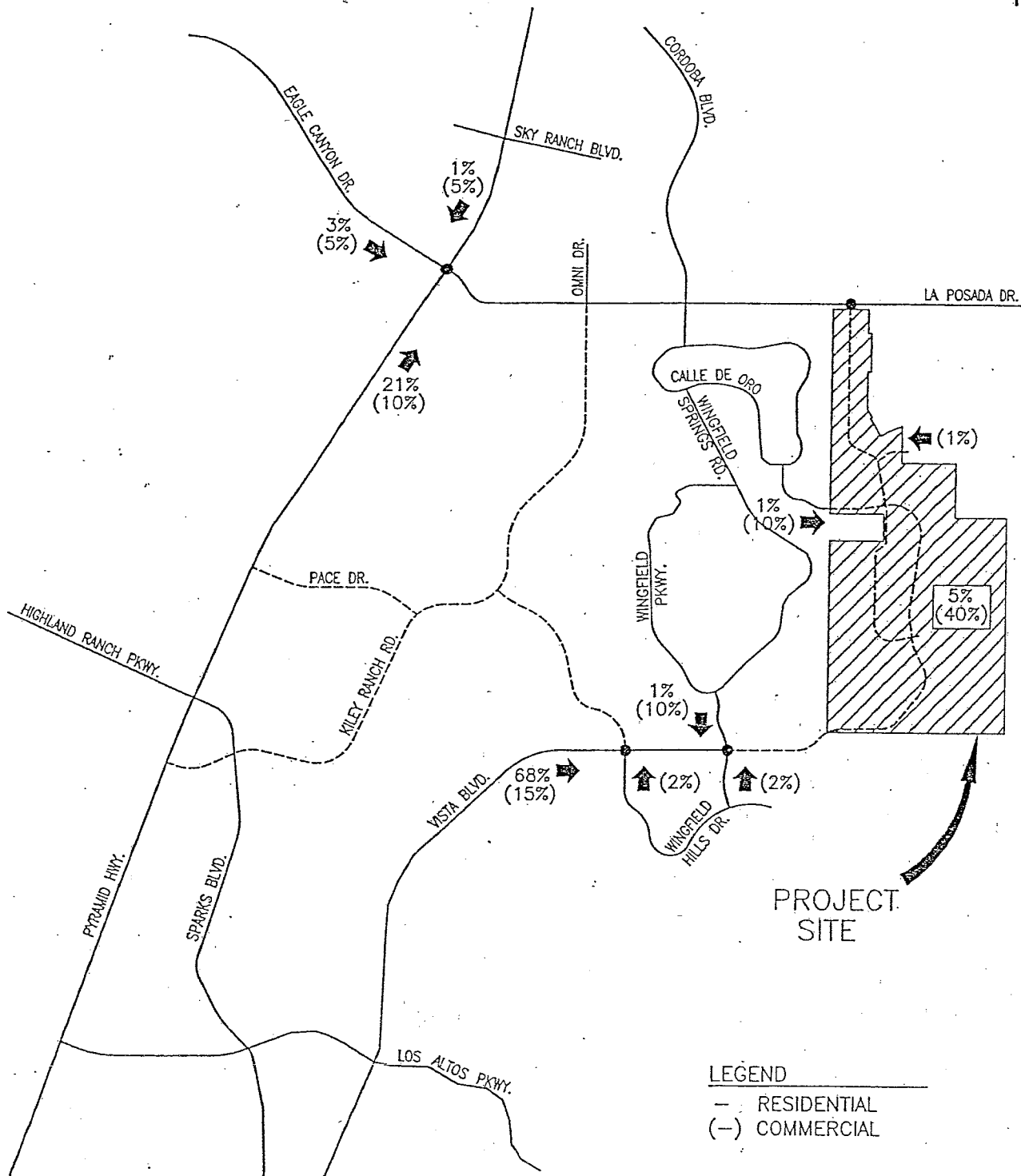
<u>LAND USE</u>	<u>ADT</u>	<u>AM IN</u>	<u>AM OUT</u>	<u>PM IN</u>	<u>PM OUT</u>
Single Family 1,457 Dwelling Units	12,195	262	772	772	437
Apartment 1,117 Dwelling Units	6,825	89	469	413	201
Shopping Center 70,000 Square Feet	3,004	44	28	126	136
City Park 8.68 Acres	<u>14</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
TOTAL	22,038	395	1,269	1,311	774

TRIP DISTRIBUTION AND ASSIGNMENT

The distribution of the project traffic to the key intersections was based on existing peak hour traffic patterns and the locations of attractions and productions of project trips. The Regional Transportation Commission's traffic forecasting model was also reviewed. The directions of approach of project trips are shown in Figure 2. The project trips were then assigned to the key intersections based on these directions of approach. Figure 3 shows the AM and PM peak hour trip assignment.

EXISTING AND PROJECTED TRAFFIC VOLUMES

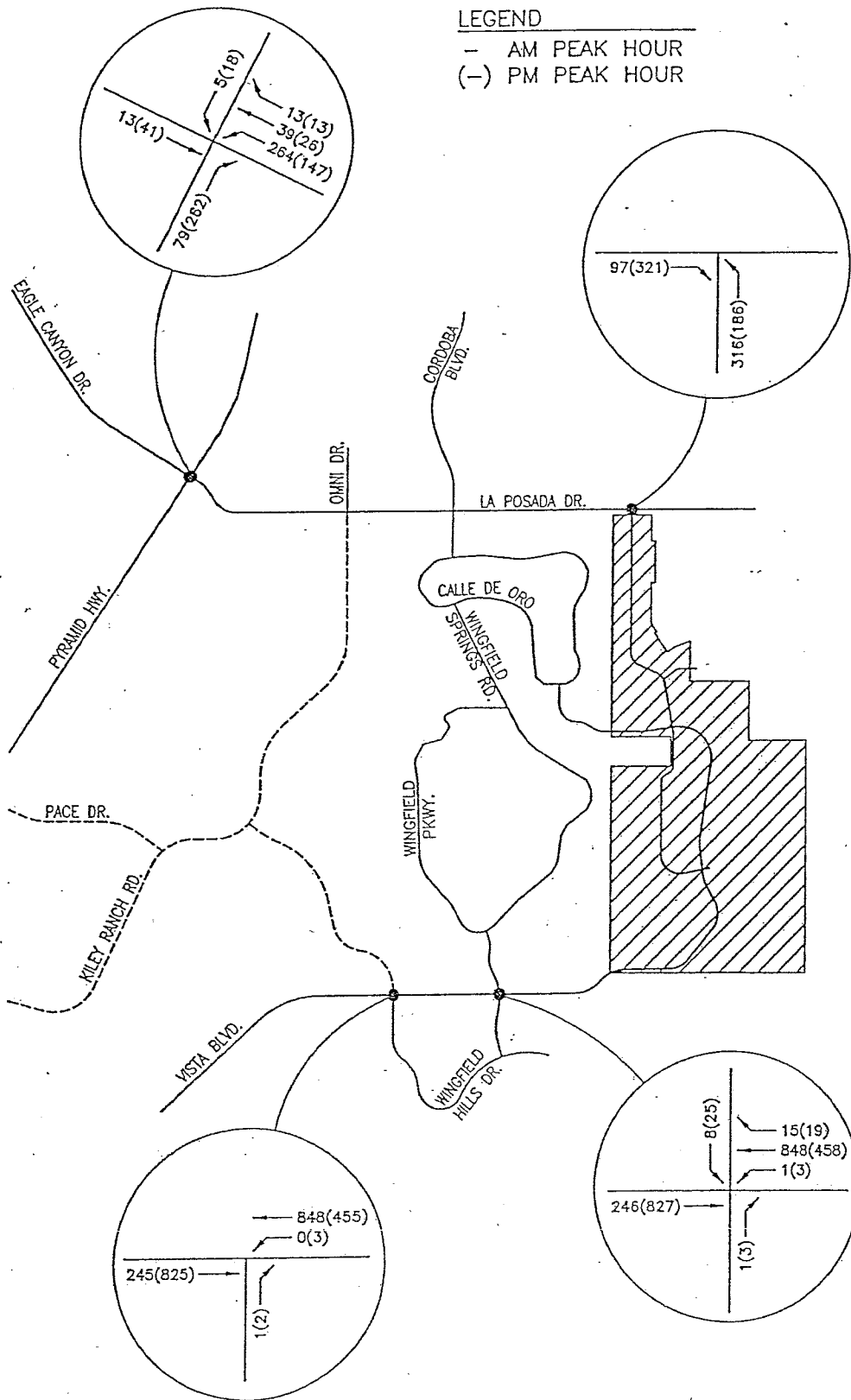
The existing AM and PM peak hour traffic volumes at the key intersections were obtained from traffic counts taken during December, 2002. Figure 4 shows the existing AM and PM peak hour turning movement volumes at the key intersections. Figure 5 shows the existing plus project traffic volumes at the key intersections for the AM and PM peak hours. Figure 6 shows the average daily traffic volumes on the key roadway segments for the 2012, 2020 and 2030 planning scenarios as obtained directly from the Regional Transportation Commission's traffic forecasting model. The model TAZ's in which the project is located indicates a total of 1,810 dwelling units. This number is 764 dwelling units less than the project is proposing. The forecast traffic volumes were subsequently adjusted to include the 764 dwelling units not included in the model. Figure 7 shows the adjusted average daily traffic volumes for the 2012, 2020 and 2030 planning scenarios.



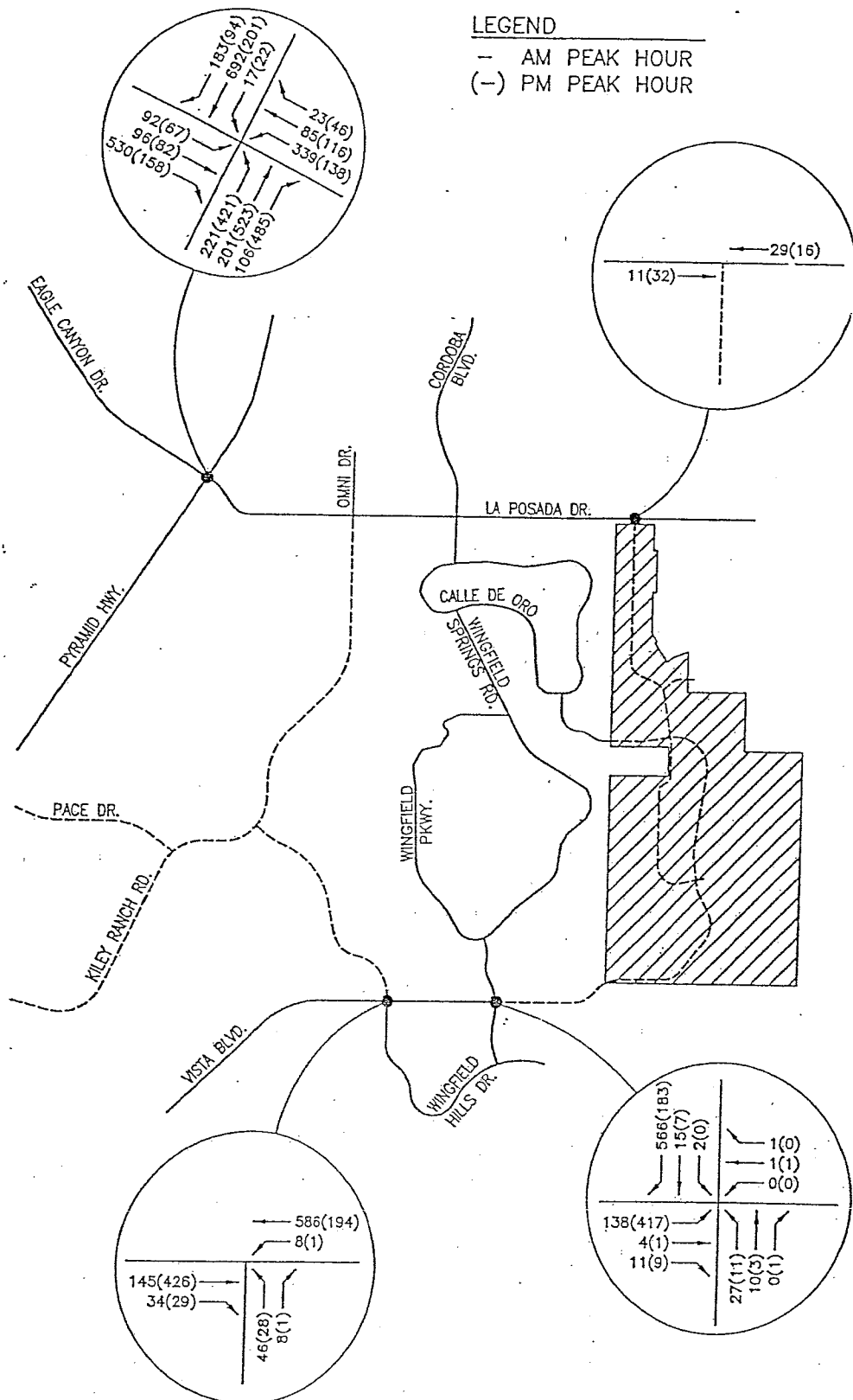
THE FOOTHILLS AT WINGFIELD SPRINGS
DIRECTIONS OF APPROACH

LEGEND

— AM PEAK HOUR
(-) PM PEAK HOUR



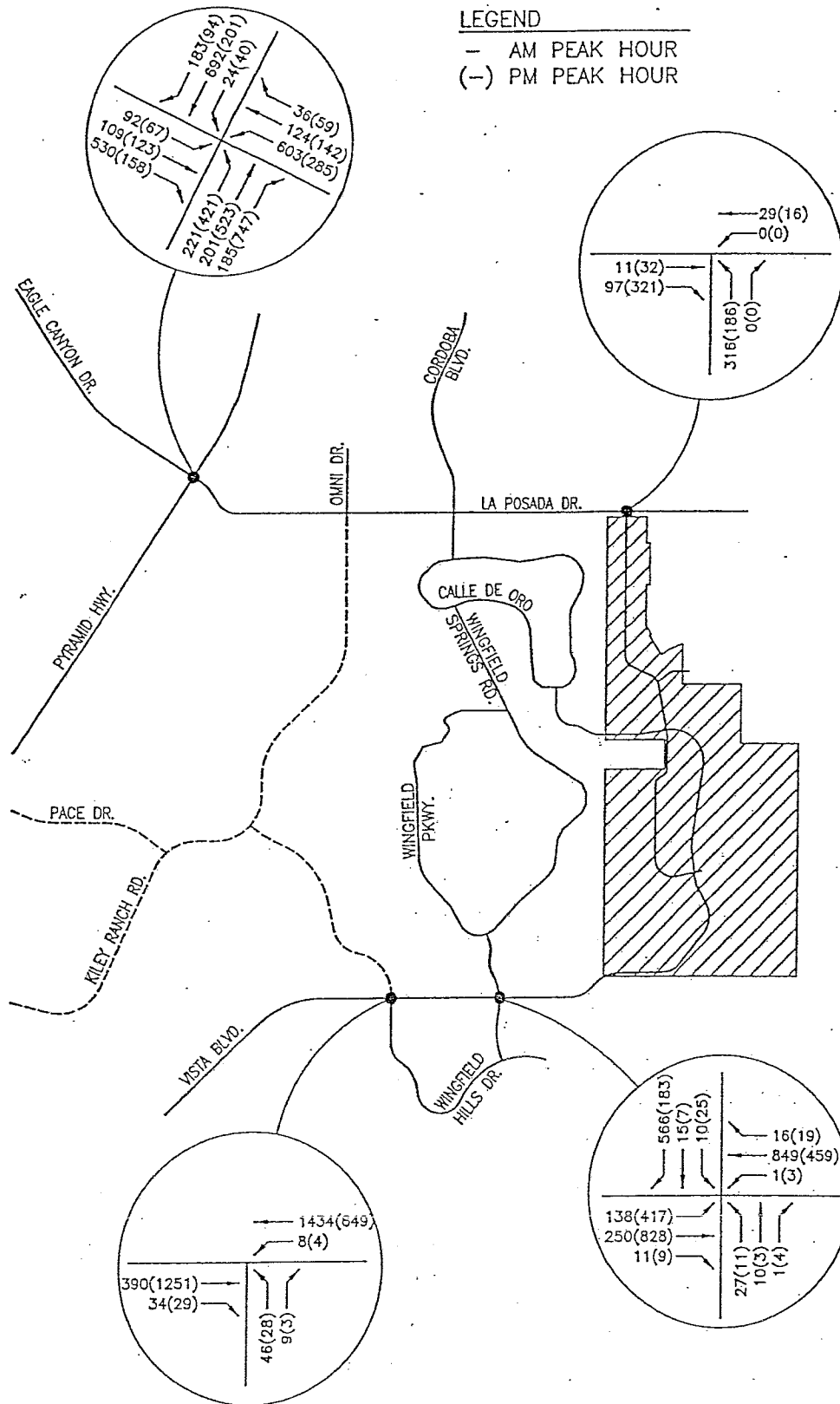
THE FOOTHILLS AT WINGFIELD SPRINGS
PEAK HOUR TRIP ASSIGNMENT
FIGURE 3



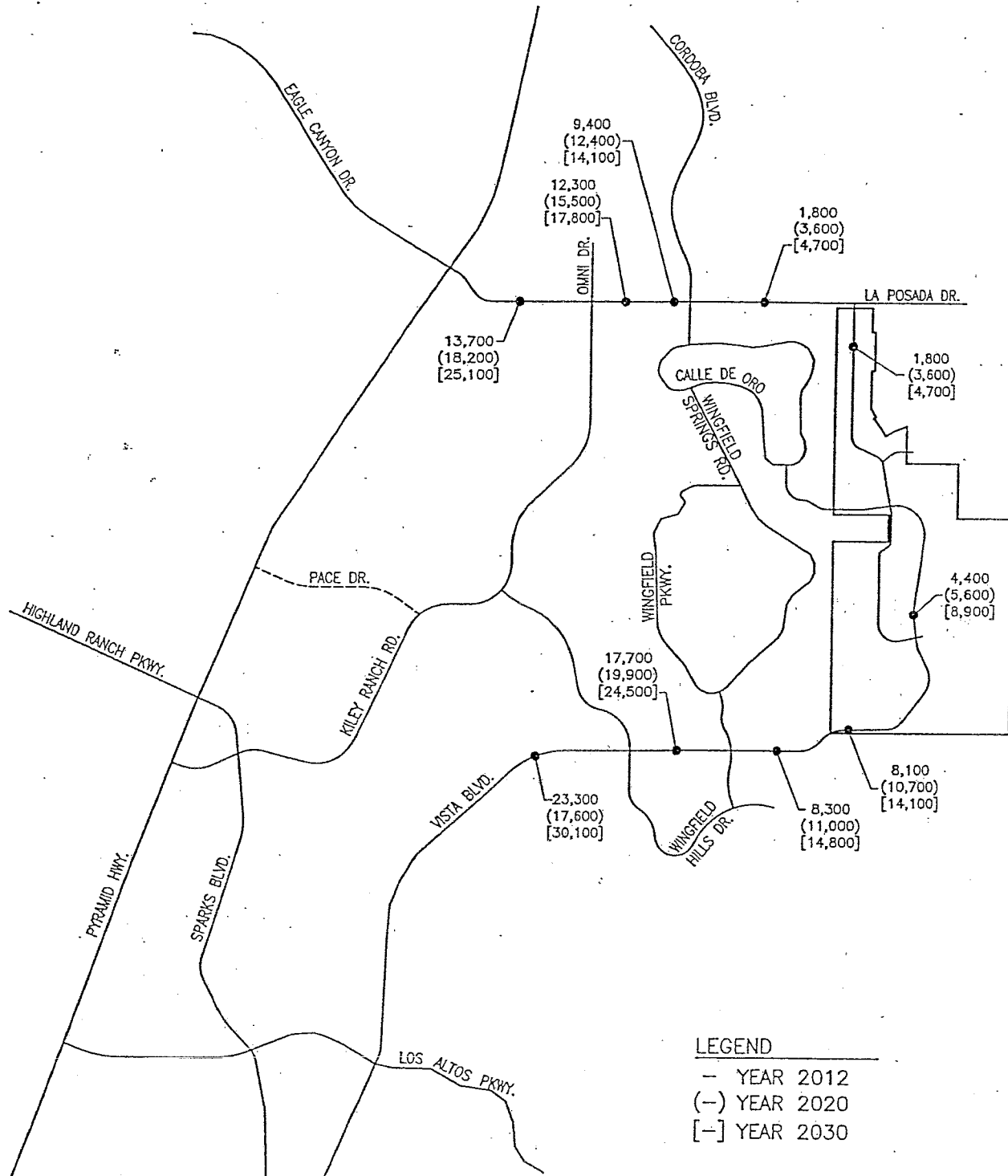
THE FOOTHILLS AT WINGFIELD SPRINGS
EXISTING PEAK HOUR TRAFFIC VOLUMES

LEGEND

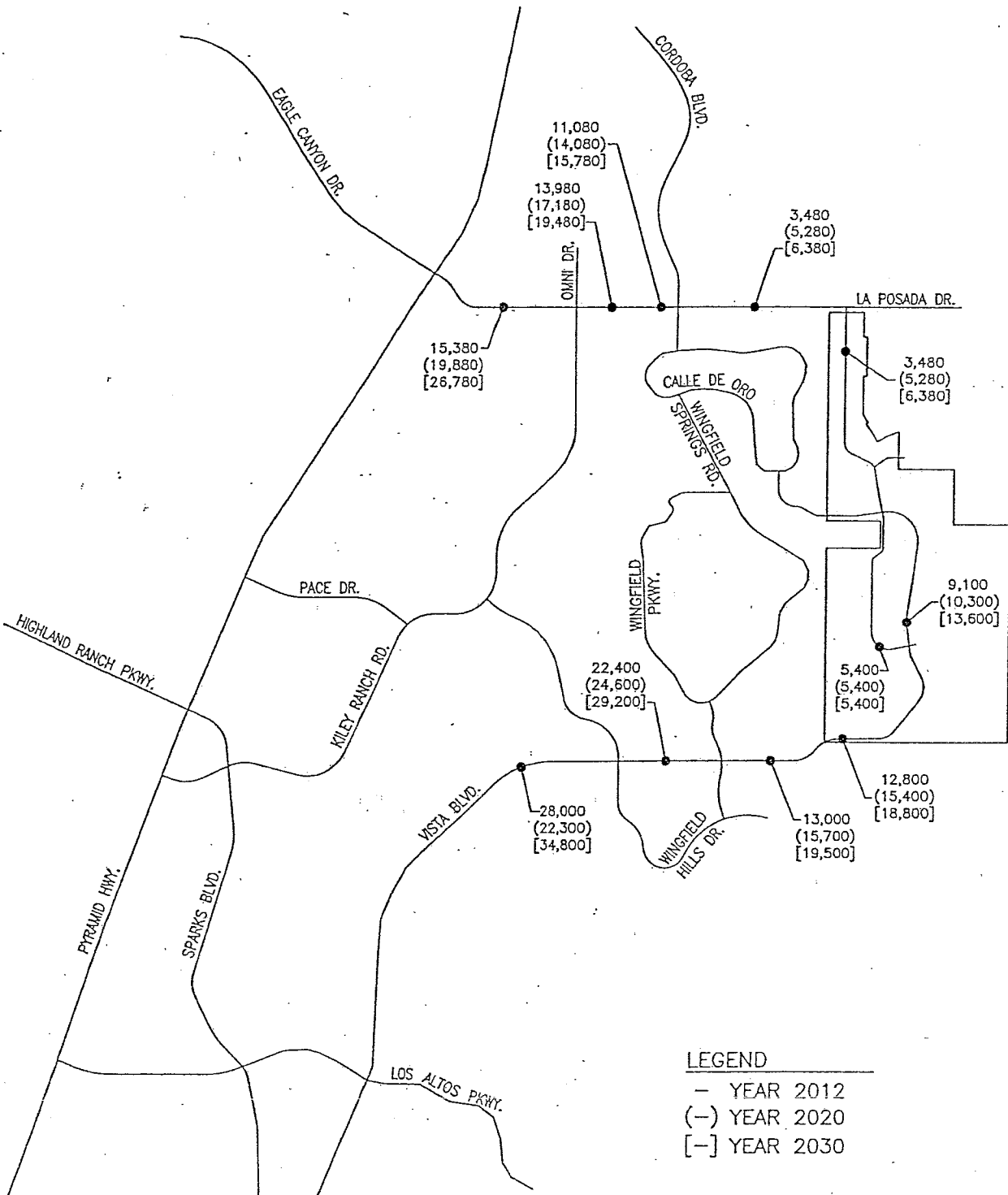
— AM PEAK HOUR
(-) PM PEAK HOUR



THE FOOTHILLS AT WINGFIELD SPRINGS
EXISTING PLUS PROJECT TRAFFIC VOLUMES



THE FOOTHILLS AT WINGFIELD SPRINGS
BASE AVERAGE DAILY TRAFFIC VOLUMES



THE FOOTHILLS AT WINGFIELD SPRINGS
ADJUSTED AVERAGE DAILY TRAFFIC VOLUMES
FIGURE 7

INTERSECTION CAPACITY ANALYSIS

The key intersections were analyzed for capacity based on procedures presented in the *Highway Capacity Manual* (2000), prepared by the Transportation Research Board, for unsignalized and signalized intersections.

The result of capacity analysis is a "level of service" rating for each signalized intersection and unsignalized intersection minor movement. "Level of Service" is a qualitative measure of traffic operating conditions where a letter grade "A" through "F", corresponding to progressively worsening traffic operation, is assigned to the intersection.

The Highway Capacity Manual defines "level of service" for stop controlled intersections in terms of computed or measured control delay for each minor movement. Level of service is not defined for the intersection as a whole. The unsignalized intersection LOS criteria are shown in Table 2.

TABLE 2
LOS CRITERIA FOR UNSIGNALIZED INTERSECTIONS

<u>LEVEL OF SERVICE</u>	<u>DELAY RANGE (SEC/VEH)</u>
A	≤ 10
B	> 10 and ≤ 15
C	> 15 and ≤ 25
D	> 25 and ≤ 35
E	> 35 and ≤ 50
F	> 50

The "level of service" for signalized intersections is stated in terms of the average control delay per vehicle for a peak 15 minute analysis period. The signalized intersection "level of service" criteria are shown in Table 3.

TABLE 3
LOS CRITERIA FOR SIGNALIZED INTERSECTIONS

<u>LEVEL OF SERVICE</u>	<u>CONTROL DELAY PER VEHICLE (SEC)</u>
A	≤ 10
B	> 10 and ≤ 20
C	> 20 and ≤ 35
D	> 35 and ≤ 55
E	> 55 and ≤ 80
F	> 80

A summary of "level of service" (L.O.S.) operation for the key intersections in this analysis is shown in Table 4.

TABLE 4
INTERSECTION LEVEL OF SERVICE AND DELAY RESULTS

<u>INTERSECTION</u>	<u>EXISTING</u>		<u>EXIST. + PROJECT</u>	
	<u>AM</u>	<u>PM</u>	<u>AM</u>	<u>PM</u>
Pyramid/La Posada				
Signalized				
Existing Lanes	E60.0	C31.8	F139	D38.6
Dual NB, WB Lefts & SB Right	C32.9	C26.1	C34.6	C30.3
Vista/Wingfield Hills				
Unsignalized				
Westbound Left-Thru	A7.6	A8.3	A8.3	B12.1
Northbound Left	C16.9	B14.1	F134	F101
Northbound Right	A9.2	B11.0	B10.8	C24.4
Vista/Wingfield				
Unsignalized				
Eastbound Left-Thru-Right	B10.2	B13.8	E43.1	F509
Westbound Left-Thru-Right	A8.3	A8.0	F400	D29.5
Northbound Left-Thru-Right	A8.5	A8.6	B13.8	B11.2
Southbound Left-Thru-Right	B14.0	A9.0	F110	B13.9
La Posada/Access Roadway				
Unsignalized				
Westbound Left-Thru	N/A	N/A	A7.4	A8.0
Northbound Left-Right	N/A	N/A	B11.2	B11.3

Pyramid Highway/La Posada Drive

The Pyramid Highway/La Posada Drive intersection was analyzed as a signalized intersection for the existing and existing plus project scenarios. The intersection currently operates at level of service E with a delay of 60.0 seconds per vehicle during the AM peak hour and level of service C with a delay of 31.8 seconds per vehicle during the PM peak hour. With the addition of project traffic, the intersection will operate at level of service F with a delay of 139.0 seconds per vehicle during the AM peak hour and level of service D with a delay of 38.6 seconds per vehicle for the PM peak hour. The intersection will operate at level of service C during the AM and PM peak hours for the existing and existing plus project traffic volumes with dual left turn lanes at the south and east approaches and an exclusive right turn lane at the north approach.

The existing traffic volumes for the left turn movements at the south and east approaches exceed the 300 vehicle per hour threshold for which dual left turn lanes should be considered. The existing traffic volumes for the right turn movement at the north approach also exceed the 100 vehicle per hour threshold for which exclusive right turn lanes should be considered. It is recommended that these intersection improvements at the Pyramid Highway/La Posada Drive intersection be constructed with future roadway widening projects. These improvements are scheduled by the Regional Transportation Commission in their Capital Improvements Plan.

Vista Boulevard/Wingfield Hills Drive

The Vista Boulevard/Wingfield Hills Drive intersection was analyzed as an unsignalized "T" intersection with stop sign control at the south approach for the existing and existing plus project scenarios. The intersection critical movements currently operate at level of service C or better during the AM and PM peak hours. For the existing plus project traffic volumes, the northbound left turn movement operates at level of service F during the AM and PM peak hours. Traffic signal warrant #3 for peak hour traffic volumes was reviewed at the intersection based on Figure 4C-4 of the Manual on Uniform Traffic Control Devices. The peak hour warrant is not met for the existing plus project traffic volumes. However, signalization of the intersection is ultimately anticipated with future development in the area. The Pioneer Meadows development will construct the north leg of the intersection.

Vista Boulevard/Wingfield Parkway

The Vista Boulevard/Wingfield Parkway intersection was analyzed as an unsignalized four-way stop controlled intersection with the existing approach lanes for the existing and existing plus project scenarios. The intersection approaches currently operate at level of service B or better during the AM and PM peak hours. For the existing plus project traffic volumes, the east, west and north approaches operate at level of service F. Traffic signal warrant #3 for peak hour traffic volumes was reviewed at the intersection based on Figure 4C-4 of the Manual on Uniform Traffic Control Devices. The peak hour warrant is met for the existing plus project traffic volumes based on the total minor street traffic volumes. The warrant is not met if the right turn volume at the north approach is excluded from the total approach volume. The intersection was subsequently analyzed as a signalized intersection for the existing plus project traffic volumes and operates at level of service C during the AM and PM peak hours. The signalized intersection was analyzed with one left turn lane, one through lane and a shared through-right turn lane at the east and west approaches, one left turn lane and a shared through-right turn lane at the south approach and a shared left turn-through lane and a right turn lane at the north approach.

It is recommended that traffic signal warrants continue to be reviewed at the Vista Boulevard intersections with Wingfield Hills Drive and Wingfield Parkway with future development and traffic signals be installed when warranted. The intersections will meet minimum quarter-mile RTC spacing requirements for moderate access control arterials.

La Posada Drive/Access Roadway

The La Posada Drive/Access Roadway intersection was analyzed as an unsignalized "T" intersection with stop sign control at the south approach for the existing plus project scenario. For the existing plus project traffic volumes, the intersection critical movements operate at level of service B or better during the AM and PM peak hours. The intersection was analyzed with single lanes at each approach. It is recommended that the La Posada Drive/Access Roadway intersection be constructed with a shared left turn-right turn lane and stop sign control at the south approach.

ROADWAY CAPACITY ANALYSIS

Vista Boulevard, La Posada Drive and the access roadway were reviewed for capacity for the 2012, 2020 and 2030 traffic volumes based on daily level of service thresholds established by the Regional Transportation Commission. As previously discussed, the base ADT volumes obtained from the Regional Transportation Commission's traffic forecasting model show 764 less dwelling units than the project is proposing. The roadway sections were therefore reviewed for the base RTC volumes that do not indicate full project buildout and for adjusted volumes that include the total number of project dwelling units. Vista Boulevard in the vicinity of the site and La Posada Drive between Pyramid Highway and Cordoba Boulevard are classified as a moderate access control arterials in the Regional Transportation Commission's 2030 Regional Transportation Plan. La Posada Drive east of Cordoba Boulevard and the project access roadway from La Posada Drive are not regional roadways but were reviewed as collector streets. Table 5 shows the RTC daily level of service thresholds for moderate access control arterials and collector streets.

TABLE 5
LEVEL OF SERVICE CRITERIA FOR ROADWAY SEGMENTS

<u>FACILITY/LANES</u>	<u>LOS A-C</u>	<u>AVERAGE DAILY TRAFFIC VOLUME</u>			<u>LOS F</u>
		<u>LOS D</u>	<u>LOS E</u>		
Moderate Access Control Arterial					
4 Lanes	≤28,700	28,701-33,500	33,501-36,100		>36,100
6 Lanes	≤44,400	44,401-51,400	51,401-54,600		>54,600
Collector Street					
2 Lanes	≤7,300	7,301-8,500	8,501-9,100		>9,100

Table 5 does not contain level of service thresholds for two-lane moderate access control arterials. It was therefore assumed that a two-lane moderate access control arterial would serve half the capacity of the four-lane arterial. A summary of the "Level of Service" (L.O.S.) operation for the key roadway segments in this analysis is shown in Table 6.

TABLE 6
ROADWAY SEGMENT LEVEL OF SERVICE RESULTS

ROADWAY	YEAR 2012		YEAR 2020		YEAR 2030	
	BASE	ADJ.	BASE	ADJ.	BASE	ADJ.
VISTA BOULEVARD						
West of Wingfield Hills	23,300	28,000	17,600	22,300	30,100	34,800
2 Lane Moderate	F	F	E	F	F	F
4 Lane Moderate	C	C	C	C	D	E
6 Lane Moderate	C	C	C	C	C	C
VISTA BOULEVARD						
East of Wingfield Hills	17,700	22,400	19,900	24,600	24,500	29,200
2 Lane Moderate	E	F	F	F	F	F
4 Lane Moderate	C	C	C	C	C	D
6 Lane Moderate	C	C	C	C	C	C
VISTA BOULEVARD						
East of Wingfield	8,300	13,000	11,000	15,700	14,800	19,500
2 Lane Moderate	C	C	C	D	D	F
4 Lane Moderate	C	C	C	C	C	C
VISTA BOULEVARD						
East of Property Line	8,100	12,800	10,700	15,400	14,100	18,800
2 Lane Moderate	C	C	C	D	C	F
4 Lane Moderate	C	C	C	C	C	C
LA POSADA DRIVE						
East of Pyramid	13,700	15,380	18,200	19,880	25,100	26,780
2 Lane Moderate	C	D	F	F	F	F
4 Lane Moderate	C	C	C	C	C	C
LA POSADA DRIVE						
East of Kiley Ranch	12,300	13,980	15,500	17,180	17,800	19,480
2 Lane Moderate	C	C	D	E	E	F
4 Lane Moderate	C	C	C	C	C	C
LA POSADA DRIVE						
West of Cordoba	9,400	11,080	12,400	14,080	14,100	15,780
2 Lane Moderate	C	C	C	C	C	D
4 Lane Moderate	C	C	C	C	C	C
LA POSADA DRIVE						
East of Cordoba	1,800	3,480	3,600	5,280	4,700	6,380
2 Lane Collector	C	C	C	C	C	C
ACCESS ROADWAY						
South of La Posada	1,800	3,480	3,600	5,280	4,700	6,380
2 Lane Collector	C	C	C	C	C	C

For the 2030 base traffic volumes, the four-lane section from Pyramid Highway to east of Kiley Ranch Drive and the two-lane section further east will operate at level of service C. For the 2030 adjusted traffic volumes, the section east of Kiley Ranch Drive to Cordoba Boulevard will need to be widened to four lanes in order to maintain level of service C operation. The 2030 Regional Transportation Plan indicates that La Posada Drive is planned to be widened to four lanes from Pyramid Highway to Cordoba Boulevard in the 2007 to 2012 timeframe.

Project Access Roadway

The project access roadway from La Posada Drive to Vista Boulevard will operate at level of service C for the 2012, 2020 and 2030 base and adjusted traffic volumes as a two-lane collector street. The adjusted volume on this roadway is sufficient to qualify it as a regional roadway. As a regional road it is eligible for impact fee credits.

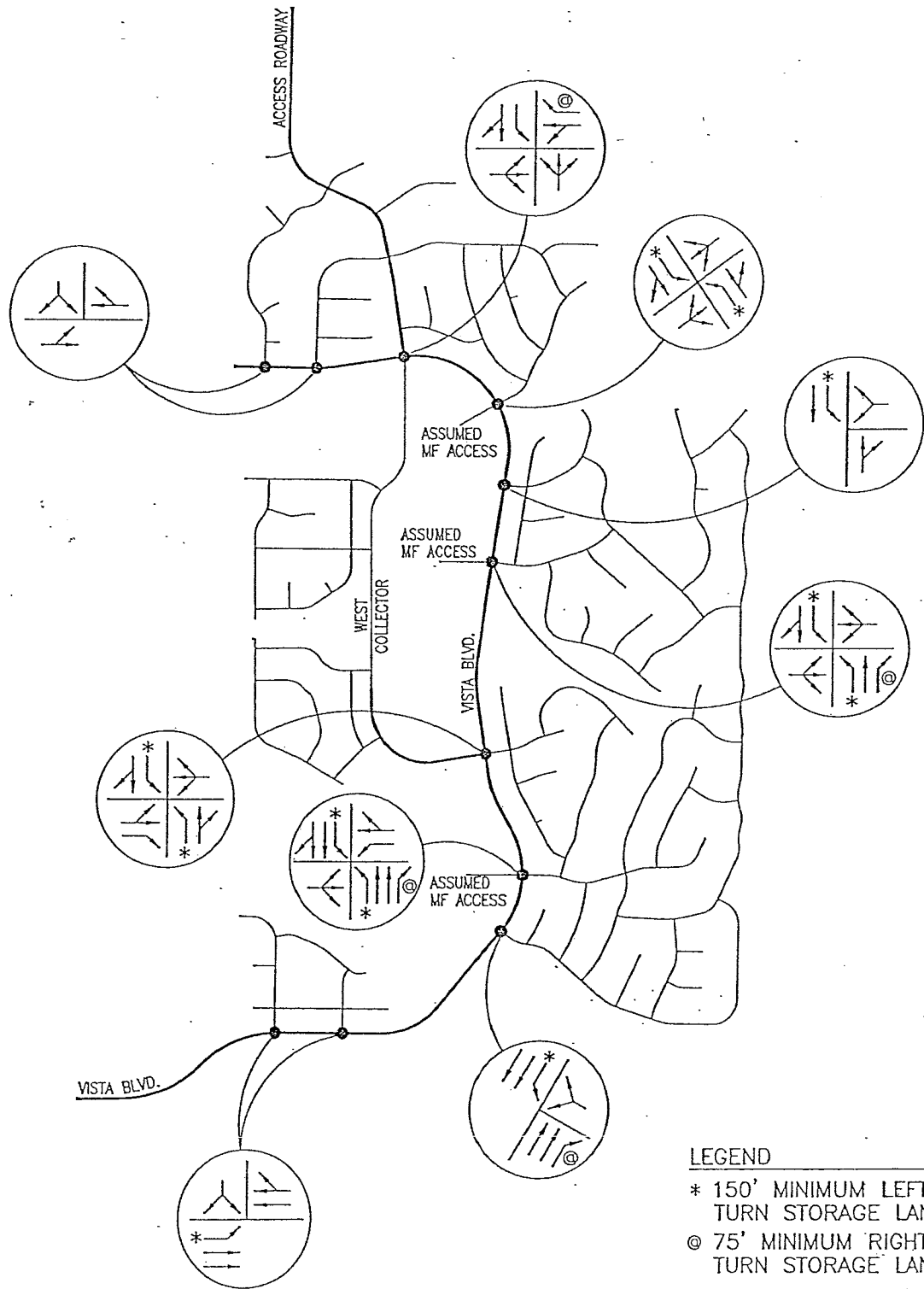
West On-Site Collector

The west on-site collector street will operate at level of service C for the 2012, 2020 and 2030 adjusted traffic volumes as a two lane collector street. The adjusted volume on the roadway is sufficient to qualify as a regional roadway for the south portion of the street. As a regional roadway it is eligible for impact fee credits.

SITE PLAN REVIEW

A copy of the preliminary site plan for The Foothills at Wingfield Springs is included with this submittal. Project access will be provided from an extension of Vista Boulevard to the southwest, a collector roadway intersecting La Posada Drive to the north and from connections to Wingfield Springs to the west and the Wyndham Hill Subdivision to the northeast. The proposed access roadway from La Posada Drive will extend southerly through the site and loop eastward before intersecting with Vista Boulevard. The northern portion of the access roadway is a tangential section approximately one-half mile in length. It is recommended that traffic calming measures be considered on this section of roadway in order to discourage speeding.

Vista Boulevard will enter the site at the southwest corner, loop northward and then extend westward to provide the connection to Wingfield Springs. The key intersections on the on-site Vista Boulevard section were subsequently reviewed for lane requirements. RTC access management criteria indicates that left turns are allowed on moderate access control arterials if a minimum of 500 feet of spacing exists between intersections. The on-site intersections on Vista Boulevard appear to meet this spacing requirement. Also, exclusive right turn lanes are required on moderate access control arterials if the right turn movement serve more than 60 vehicles per hour. Figure 8 shows the on-site Vista Boulevard intersection lane requirements.



THE FOOTHILLS AT WINGFIELD SPRINGS
VISTA BOULEVARD INTERSECTION LANE REQUIREMENTS

RECOMMENDATIONS

Traffic generated by the Foothills at Wingfield Springs will impact the area roadways and intersections. The following recommendations are made to mitigate project traffic impacts.

It is recommended that any required signing, striping, or traffic control improvements comply with City of Sparks requirements.

It is recommended that the Pyramid Highway/La Posada Drive intersection be improved to include dual left turn lanes at the south and east approaches and an exclusive right turn lane at the north approach. These improvements are currently scheduled for completion in the Regional Transportation Commission's Capital Improvements Plan.

It is recommended that traffic signal warrants continue to be reviewed at the Vista Boulevard intersections with Wingfield Hills Drive and Wingfield Parkway with future development and traffic signals be installed when warranted.

It is recommended that the Vista Boulevard on-site intersections be designed to include the approach lanes shown in Figure 8 on page 22.

It is recommended that Vista Boulevard ultimately be constructed as a four-lane moderate access control arterial from Wingfield Parkway to the southerly on-site Vista Boulevard/access roadway intersection.

It is recommended that the north project access roadway be constructed as a two-lane collector street from La Posada Drive to Vista Boulevard.

It is recommended that the remaining on-site streets be constructed per City of Sparks neighborhood street standards.

APPENDIX

Summary of Average Vehicle Trip Generation
 For 1457 Dwelling Units of Single Family Detached Housing
 June 02, 2003

	24 Hour Two-Way Volume	7-9 AM Pk Hour		4-6 PM Pk Hour	
		Enter	Exit	Enter	Exit
Average Weekday	12195	262	772	772	437

	24 hour Two-Way Volume	Peak Hour	
		Enter	Exit
Saturday	13404	699	597
Sunday	12851	597	525

Note: A zero indicates no data available.
 The above rates were calculated from these equations:

24-Hr. 2-Way Volume: $LN(T) = .92LN(X) + 2.707$, $R^2 = 0.96$
 7-9 AM Peak Hr. Total: $T = .7(X) + 9.477$
 $R^2 = 0.89$, 0.25 Enter, 0.75 Exit
 4-6 PM Peak Hr. Total: $LN(T) = .901LN(X) + .527$
 $R^2 = 0.91$, 0.64 Enter, 0.36 Exit
 AM Gen Pk Hr. Total: $T = .704(X) + 12.09$
 $R^2 = 0.89$, 0.25 Enter, 0.75 Exit
 PM Gen Pk Hr. Total: $LN(T) = .887LN(X) + .605$
 $R^2 = 0.91$, 0.64 Enter, 0.36 Exit
 Sat. 2-Way Volume: $LN(T) = .956LN(X) + 2.54$, $R^2 = 0.92$
 Sat. Pk Hr. Total: $T = .886(X) + 11.065$
 Sun. 2-Way Volume: $T = 8.832(X) + -11.604$, $R^2 = 0.94$
 Sun. Pk Hr. Total: $T = .756(X) + 23.815$
 $R^2 = 0.86$, 0.53 Enter, 0.47 Exit

Source: Institute of Transportation Engineers
 Trip Generation, 6th Edition, 1997.

TRIP GENERATION BY MICROTRANS

Summary of Average Vehicle Trip Generation
 For 1117 Dwelling Units of Apartments
 June 02, 2003

	24 Hour Two-Way Volume	7-9 AM Pk Hour		4-6 PM Pk Hour	
		Enter	Exit	Enter	Exit
Average Weekday	6825	89	469	413	201

	24 hour Two-Way Volume	Peak Hour	
		Enter	Exit
Saturday	8512	0	0
Sunday	7071	0	0

Note: A zero indicates no data available.

The above rates were calculated from these equations:

24-Hr. 2-Way Volume: $T = 5.994(X) + 134.114, R^2 = 0.88$
 7-9 AM Peak Hr. Total: $T = .497(X) + 3.238$
 $R^2 = 0.83, 0.16 \text{ Enter}, 0.84 \text{ Exit}$
 4-6 PM Peak Hr. Total: $T = .541(X) + 18.743$
 $R^2 = 0.75, 0.67 \text{ Enter}, 0.33 \text{ Exit}$
 AM Gen Pk Hr. Total: $T = .542(X) + 3.805$
 $R^2 = 0.82, 0.28 \text{ Enter}, 0.72 \text{ Exit}$
 PM Gen Pk Hr. Total: $T = .599(X) + 16.5$
 $R^2 = 0.8, 0.61 \text{ Enter}, 0.39 \text{ Exit}$
 Sat. 2-Way Volume: $T = 7.852(X) + -256.189, R^2 = 0.85$
 Sat. Pk Hr. Total: $T = .412(X) + 19.226$
 Sun. 2-Way Volume: $T = 6.418(X) + -101.116, R^2 = 0.82$
 Sun. Pk Hr. Total: 0
 $R^2 = 0, 0 \text{ Enter}, 0 \text{ Exit}$

Source: Institute of Transportation Engineers
 Trip Generation, 6th Edition, 1997.

TRIP GENERATION BY MICROTRANS

Summary of Average Vehicle Trip Generation
 For 70 T.G.L.A. of Shopping Center
 June 02, 2003

	24 Hour Two-Way Volume	7-9 AM Pk Hour		4-6 PM Pk Hour	
		Enter	Exit	Enter	Exit
Average Weekday	3004	44	28	126	136

	24 hour Two-Way Volume	Peak Hour	
		Enter	Exit
Saturday	3498	181	167
Sunday	1767	107	111

Note: A zero indicates no data available.
 Source: Institute of Transportation Engineers
 Trip Generation, 6th Edition, 1997.

TRIP GENERATION BY MICROTRANS

Summary of Average Vehicle Trip Generation
 For 8.68 Acres of City Park
 June 02, 2003

	24 Hour Two-Way Volume	7-9 AM Pk Hour		4-6 PM Pk Hour	
		Enter	Exit	Enter	Exit
Average Weekday	14	0	0	0	0
	24 hour Two-Way Volume	Peak Hour		Enter	Exit
Saturday	0	0		0	0
Sunday	139	0		0	0

Note: A zero indicates no data available.
 Source: Institute of Transportation Engineers
 Trip Generation, 6th Edition, 1997.

TRIP GENERATION BY MICROTRANS

HCS2000: Signalized Intersections Release 4.1c

Analyst: MSH Inter.: Pyramid & Eagle Canyon
 Agency: Soalegui Engineers Area Type: All other areas
 Date: 05/29/03 Jurisd: City of Sparks
 Period: AM Peak Hour Year : Existing
 Project ID: The Foothills at Wingfield Springs
 E/W St: La Posada Drive N/S St: Pyramid Highway

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	1	1	1	1	0	1	2	1	1	2	0
LGConfig	L	T	R	L	TR		L	T	R	L	TR	
Volume	92	96	530	339	85	23	221	201	106	17	692	183
Lane Width	12.0	12.0	12.0	12.0	12.0		14.0	12.0	12.0	12.0	12.0	
RTOR Vol			160			5			25			50

Duration 0.25 Area Type: All other areas

Signal Operations

Phase Combination		1	2	3	4	5	6	7	8
EB Left		A				NB Left	A	A	
Thru		A				Thru	A	A	
Right		A				Right	A	A	
Peds		X				Peds	X	X	
WB Left			A			SB Left	A		
Thru			A			Thru		A	
Right			A			Right		A	
Peds			X			Peds		X	
NB Right						EB Right			
SB Right						WB Right			
Green		23.0	18.0				3.0	8.0	28.0
Yellow		4.0	4.0				4.0	0.0	4.0
All Red		1.0	1.0				1.0	0.0	1.0

Cycle Length: 100.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group		Approach	
			v/c	g/c	Delay	LOS	Delay	LOS
Eastbound								
L	428	1863	0.23	0.23	31.5	C		
T	428	1863	0.24	0.23	31.6	C	80.3	F
R	364	1583	1.07	0.23	105.1	F		
Westbound								
L	335	1863	1.07	0.18	108.6	F		
TR	327	1814	0.33	0.18	36.3	D	91.9	F
Northbound								
L	318	1987	0.73	0.16	48.4	D		
T	1274	3539	0.17	0.36	21.8	C	33.5	C
R	570	1583	0.15	0.36	21.8	C		
Southbound								
L	56	1863	0.32	0.03	50.8	D		
TR	967	3454	0.90	0.28	45.7	D	45.8	D

Intersection Delay = 60.0 (sec/veh) Intersection LOS = E

HCS2000: Signalized Intersections Release 4.1c

Analyst: MSH
 Agency: Soalegui Engineers
 Date: 05/29/03
 Period: PM Peak Hour
 Project ID: The Foothills at Wingfield Springs
 E/W St: La Posada Drive

Inter.: Pyramid & La Posada
 Area Type: All other areas
 Jurisd: City of Sparks
 Year : Existing
 N/S St: Pyramid Highway

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	1	1	1	1	0	1	2	1	1	2	0
LGConfig	L	T	R	L	TR		L	T	R	L	TR	
Volume	67	82	158	138	116	46	421	523	485	22	201	94
Lane Width	12.0	12.0	12.0	12.0	12.0		14.0	12.0	12.0	12.0	12.0	
RTOR Vol			50			10			100			30

Duration 0.25 Area Type: All other areas

Signal Operations

Phase Combination		1	2	3	4	5	6	7	8
EB	Left		A			NB	Left	A	A
	Thru		A				Thru	A	A
	Right		A				Right	A	A
	Peds		X				Peds	X	X
WB	Left			A		SB	Left	A	
	Thru			A			Thru		A
	Right			A			Right		A
	Peds			X			Peds		X
NB	Right					EB	Right		
SB	Right					WB	Right		
Green		13.0	20.0				7.0	18.0	22.0
Yellow		4.0	4.0				4.0	0.0	4.0
All Red		1.0	1.0				1.0	0.0	1.0

Cycle Length: 100.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Intersection Performance Summary		Lane Group		Approach		
		Adj Sat Flow Rate (s)	Ratios		Delay	LOS	Delay	LOS
			v/c	g/C				
Eastbound								
L	230	1770	0.31	0.13	40.2	D		
T	242	1863	0.36	0.13	40.6	D	41.9	D
R	206	1583	0.55	0.13	44.0	D		
Westbound								
L	354	1770	0.41	0.20	35.6	D		
TR	359	1796	0.45	0.20	36.0	D	35.8	D
Northbound								
L	566	1888	0.78	0.30	39.1	D		
T	1416	3539	0.39	0.40	21.5	C	28.5	C
R	633	1583	0.64	0.40	26.4	C		
Southbound								
L	124	1770	0.19	0.07	44.5	D		
TR	751	3412	0.37	0.22	33.4	C	34.3	C

Intersection Delay = 31.8 (sec/veh) Intersection LOS = C

HCS2000: Signalized Intersections Release 4.1c

Analyst: MSH
 Agency: Soalegui Engineers
 Date: 05/29/03
 Period: AM Peak Hour
 Project ID: The Foothills at Wingfield Springs
 E/W St: La Posada Drive

Inter.: Pyramid & Eagle Canyon
 Area Type: All other areas
 Jurisd: City of Sparks
 Year : Existing + Project
 N/S St: Pyramid Highway

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	1	1	1	1	0	1	2	1	1	2	0
LGConfig	L	T	R	L	TR		L	T	R	L	TR	
Volume	92	109	530	603	124	36	221	201	185	22	692	183
Lane Width	12.0	12.0	12.0	12.0	12.0		14.0	12.0	12.0	12.0	12.0	
RTOR Vol			160			5			25			50

Duration 0.25 Area Type: All other areas

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	A				NB Left	A	A	
Thru	A				Thru	A	A	
Right	A				Right	A	A	
Peds	X				Peds	X	X	
WB Left		A			SB Left	A		
Thru		A			Thru		A	
Right		A			Right		A	
Peds		X			Peds		X	
NB Right					EB Right			
SB Right					WB Right			
Green	23.0	18.0			3.0	8.0	28.0	
Yellow	4.0	4.0			4.0	0.0	4.0	
All Red	1.0	1.0			1.0	0.0	1.0	

Cycle Length: 100.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group		Approach	
			v/c	g/C	Delay	LOS	Delay	LOS
Eastbound								
L	428	1863	0.23	0.23	31.5	C		
T	428	1863	0.27	0.23	31.9	C	79.2	E
R	364	1583	1.07	0.23	105.1	F		
Westbound								
L	335	1863	1.90	0.18	455.1	F		
TR	325	1807	0.50	0.18	38.3	D	369.5	F
Northbound								
L	318	1987	0.73	0.16	48.4	D		
T	1274	3539	0.17	0.36	21.8	C	32.3	C
R	570	1583	0.29	0.36	23.2	C		
Southbound								
L	56	1863	0.41	0.03	52.5	D		
TR	967	3454	0.90	0.28	45.7	D	45.9	D

Intersection Delay = 139.0 (sec/veh) Intersection LOS = F

HCS2000: Signalized Intersections Release 4.1c

Analyst: MSH
 Agency: Soalegui Engineers
 Date: 05/29/03
 Period: PM Peak Hour
 Project ID: The Foothills at Wingfield Springs
 E/W St: La Posada Drive

Inter.: Pyramid & La Posada
 Area Type: All other areas
 Jurisd: City of Sparks
 Year : Existing + Project
 N/S St: Pyramid Highway

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	1	1	1	1	0	1	2	1	1	2	0
LGConfig	L	T	R	L	TR		L	T	R	L	TR	
Volume	67	123	158	285	142	59	421	523	747	40	201	94
Lane Width	12.0	12.0	12.0	12.0	12.0		14.0	12.0	12.0	12.0	12.0	
RTOR Vol			50			10			200			30

Duration 0.25 Area Type: All other areas

Signal Operations

Phase Combination		1	2	3	4	5	6	7	8
EB Left		A				NB Left	A	A	
Thru		A				Thru		A	
Right		A				Right		A	
Peds		X				Peds		X	
WB Left			A			SB Left	A		
Thru			A			Thru			A
Right			A			Right			A
Peds			X			Peds			X
NB Right						EB Right			
SB Right						WB Right			
Green		13.0	20.0				7.0	18.0	22.0
Yellow		4.0	4.0				4.0	0.0	4.0
All Red		1.0	1.0				1.0	0.0	1.0

Cycle Length: 100.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group		Approach	
			v/c	g/C	Delay	LOS	Delay	LOS
Eastbound								
L	230	1770	0.31	0.13	40.2	D		
T	242	1863	0.53	0.13	42.9	D	42.7	D
R	206	1583	0.55	0.13	44.0	D		
Westbound								
L	354	1770	0.85	0.20	55.7	E		
TR	358	1790	0.56	0.20	38.1	D	48.6	D
Northbound								
L	566	1888	0.78	0.30	39.1	D		
T	1416	3539	0.39	0.40	21.5	C	35.3	D
R	633	1583	0.91	0.40	45.6	D		
Southbound								
L	124	1770	0.34	0.07	45.9	D		
TR	751	3412	0.37	0.22	33.4	C	35.1	D

Intersection Delay = 38.6 (sec/veh) Intersection LOS = D

HCS2000: Signalized Intersections Release 4.1c

Analyst: MSH	Inter.: Pyramid & Eagle Canyon
Agency: Soalegui Engineers	Area Type: All other areas
Date: 05/29/03	Jurisd: City of Sparks
Period: AM Peak Hour	Year : Existing
Project ID: The Foothills at Wingfield	Springs - Dual NBL & WBL, SBR
E/W St: La Posada Drive	N/S St: Pyramid Highway

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	1	1	2	1	0	2	2	1	1	2	1
LGConfig	L	T	R	L	TR		L	T	R	L	T	R
Volume	92	96	530	339	85	23	221	201	106	17	692	183
Lane Width	12.0	12.0	12.0	12.0	12.0		14.0	12.0	12.0	12.0	12.0	12.0
RTOR Vol			230			10			30			30

Duration	0.25	Area Type: All other areas
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Signal Operations

Signal Operations				Signal Operations				
Phase Combination	1	2	3	4	5	6	7	8
EB Left	A				NB Left	A	A	
Thru	A				Thru		A	A
Right	A				Right		A	A
Peds	X				Peds		X	X
WB Left		A			SB Left	A		
Thru		A			Thru			A
Right		A			Right			A
Peds		X			Peds			X
NB Right					EB Right			
SB Right					WB Right			
Green	20.0	18.0				3.0	2.0	22.0
Yellow	4.0	4.0				4.0	0.0	4.0
All Red	1.0	1.0				1.0	0.0	1.0

Cycle Length: 85.0 secs

Intersection Performance Summary

Intersection Performance Summary					Approach			
Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios v/c g/C		Lane Group Delay LOS		Approach Delay LOS	
Eastbound								
L	438	1863	0.22	0.24	26.5	C	39.6	D
T	438	1863	0.23	0.24	26.5	C		
R	372	1583	0.85	0.24	47.8	D		
Westbound								
L	765	3614	0.47	0.21	29.8	C	29.4	C
TR	386	1825	0.27	0.21	28.4	C		
Northbound								
L	454	3855	0.51	0.12	36.2	D	29.1	C
T	999	3539	0.21	0.28	23.4	C		
R	447	1583	0.18	0.28	23.2	C		
Southbound								
L	66	1863	0.27	0.04	42.2	D	33.1	C
T	916	3539	0.79	0.26	34.3	C		
R	410	1583	0.39	0.26	26.6	C		
Intersection Delay = 32.9 (sec/veh) Intersection LOS = C								

HCS2000: Signalized Intersections Release 4.1c

Analyst: MSH

Agency: Soalegui Engineers

Date: 05/29/03

Period: PM Peak Hour

Project ID: The Foothills at Wingfield Springs - Dual NBL & WBL, SBR

E/W St: La Posada Drive

Inter.: Pyramid & La Posada

Area Type: All other areas

Jurisd: City of Sparks

Year : Existing

N/S St: Pyramid Highway

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	1	1	2	1	0	2	2	1	1	2	1
LGConfig	L	T	R	L	TR		L	T	R	L	T	R
Volume	67	82	158	138	116	46	421	523	485	22	201	94
Lane Width	12.0	12.0	12.0	12.0	12.0		14.0	12.0	12.0	12.0	12.0	12.0
RTOR Vol			50			10			200			30

Duration 0.25

Area Type: All other areas

Signal Operations

Phase	Combination	1	2	3	4	5	6	7	8
EB Left	A					NB Left	A	A	
Thru	A					Thru	A	A	
Right	A					Right	A	A	
Peds	X					Peds	X	X	
WB Left		A				SB Left	A		
Thru		A				Thru		A	
Right		A				Right		A	
Peds		X				Peds		X	
NB Right						EB Right			
SB Right						WB Right			
Green		12.0	15.0				5.0	15.0	23.0
Yellow		4.0	4.0				4.0	0.0	4.0
All Red		1.0	1.0				1.0	0.0	1.0

Cycle Length: 90.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group		Approach	
			v/c	g/C	Delay	LOS	Delay	LOS
Eastbound								
L	236	1770	0.30	0.13	35.9	D		
T	248	1863	0.35	0.13	36.3	D	37.4	D
R	211	1583	0.54	0.13	39.2	D		
Westbound								
L	572	3433	0.25	0.17	32.9	C		
TR	299	1796	0.54	0.17	36.2	D	34.6	C
Northbound								
L	1017	3662	0.44	0.28	27.0	C		
T	1494	3539	0.37	0.42	17.9	B	21.3	C
R	668	1583	0.45	0.42	19.0	B		
Southbound								
L	98	1770	0.23	0.06	41.9	D		
T	904	3539	0.23	0.26	26.7	C	27.7	C
R	405	1583	0.17	0.26	26.2	C		

Intersection Delay = 26.1 (sec/veh) Intersection LOS = C

HCS2000: Signalized Intersections Release 4.1c

Analyst: MSH Inter.: Pyramid & Eagle Canyon
 Agency: Soalegui Engineers Area Type: All other areas
 Date: 05/29/03 Jurisd: City of Sparks
 Period: AM Peak Hour Year : Existing + Project
 Project ID: The Foothills at Wingfield Springs - Dual NBL & WBL, SBR
 E/W St: La Posada Drive N/S St: Pyramid Highway

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	1	1	2	1	0	2	2	1	1	2	1
LGConfig	L	T	R	L	TR		L	T	R	L	T	R
Volume	92	109	530	603	124	36	221	201	185	22	692	183
Lane Width	12.0	12.0	12.0	12.0	12.0		14.0	12.0	12.0	12.0	12.0	12.0
RTOR Vol			230			10			30			30

Duration 0.25 Area Type: All other areas

Signal Operations

Phase Combination		1	2	3	4	5	6	7	8
EB Left		A				NB Left	A	A	
Thru		A				Thru		A	A
Right		A				Right		A	A
Peds		X				Peds		X	X
WB Left			A			SB Left	A		
Thru			A			Thru			A
Right			A			Right			A
Peds			X			Peds			X
NB Right						EB Right			
SB Right						WB Right			
Green		20.0	18.0				3.0	2.0	22.0
Yellow		4.0	4.0				4.0	0.0	4.0
All Red		1.0	1.0				1.0	0.0	1.0

Cycle Length: 85.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group		Approach	
			v/c	g/C	Delay	LOS	Delay	LOS
Eastbound								
L	438	1863	0.22	0.24	26.5	C		
T	438	1863	0.26	0.24	26.8	C	39.3	D
R	372	1583	0.85	0.24	47.8	D		
Westbound								
L	765	3614	0.83	0.21	39.7	D		
TR	384	1815	0.41	0.21	29.6	C	37.7	D
Northbound								
L	454	3855	0.51	0.12	36.2	D		
T	999	3539	0.21	0.28	23.4	C	28.7	C
R	447	1583	0.36	0.28	24.9	C		
Southbound								
L	66	1863	0.35	0.04	43.2	D		
T	916	3539	0.79	0.26	34.3	C	33.2	C
R	410	1583	0.39	0.26	26.6	C		

Intersection Delay = 34.6 (sec/veh) Intersection LOS = C

HCS2000: Signalized Intersections Release 4.1c

Analyst: MSH

Agency: Soalegui Engineers

Date: 05/29/03

Period: PM Peak Hour

Project ID: The Foothills at Wingfield Springs - Dual NBL & WBL, SBR

E/W St: La Posada Drive

Inter.: Pyramid & La Posada

Area Type: All other areas

Jurisd: City of Sparks

Year : Existing + Project

Springs - Dual NBL & WBL, SBR

N/S St: Pyramid Highway

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	1	1	2	1	0	2	2	1	1	2	1
LGConfig	L	T	R	L	TR		L	T	R	L	T	R
Volume	67	123	158	285	142	59	421	523	747	40	201	94
Lane Width	12.0	12.0	12.0	12.0	12.0		14.0	12.0	12.0	12.0	12.0	12.0
RTOR Vol			50			10			200			30

Duration 0.25

Area Type: All other areas

Signal Operations

Phase Combination				1	2	3	4		5	6	7	8
EB	Left	A						NB	Left	A	A	
	Thru	A							Thru		A	
	Right	A							Right		A	
	Peds	X							Peds		X	X
WB	Left		A					SB	Left	A		
	Thru		A						Thru			A
	Right		A						Right			A
	Peds		X						Peds			X
NB	Right							EB	Right			
SB	Right							WB	Right			
Green		12.0	15.0							5.0	15.0	23.0
Yellow		4.0	4.0							4.0	0.0	4.0
All Red		1.0	1.0							1.0	0.0	1.0

Cycle Length: 90.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group		Approach	
			v/c	g/C	Delay	LOS	Delay	LOS
Eastbound								
L	236	1770	0.30	0.13	35.9	D		
T	248	1863	0.52	0.13	38.3	D	38.1	D
R	211	1583	0.54	0.13	39.2	D		
Westbound								
L	572	3433	0.52	0.17	35.1	D		
TR	298	1790	0.67	0.17	41.1	D	37.5	D
Northbound								
L	1017	3662	0.44	0.28	27.0	C		
T	1494	3539	0.37	0.42	17.9	B	26.7	C
R	668	1583	0.86	0.42	34.8	C		
Southbound								
L	98	1770	0.43	0.06	44.1	D		
T	904	3539	0.23	0.26	26.7	C	28.9	C
R	405	1583	0.17	0.26	26.2	C		

Intersection Delay = 30.3 (sec/veh) Intersection LOS = C

HCS2000: Unsignalized Intersections Release 4.1c

TWO-WAY STOP CONTROL SUMMARY

Analyst: MSH
 Agency/Co.: Solaegui Engineers
 Date Performed: 5/29/2003
 Analysis Time Period: AM Peak Hour
 Intersection: Vista & Wingfield Hills
 Jurisdiction: City of Sparks
 Units: U. S. Customary
 Analysis Year: Existing
 Project ID: The Foothills at Wingfield Springs
 East/West Street: Vista Boulevard
 North/South Street: Wingfield Hills Drive
 Intersection Orientation: EW Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street:	Approach Movement	Eastbound			Westbound		
		1 L	2 T	3 R	4 L	5 T	6 R
Volume		145	34		8	586	
Peak-Hour Factor, PHF		0.95	0.95		0.95	0.95	
Hourly Flow Rate, HFR		152	35		8	616	
Percent Heavy Vehicles		--	--		2	--	--
Median Type	Undivided						
RT Channelized?							
Lanes		1	0		0	1	
Configuration			TR			LT	
Upstream Signal?		No				No	

Minor Street:	Approach Movement	Northbound			Southbound		
		7 L	8 T	9 R	10 L	11 T	12 R
Volume		46		8			
Peak Hour Factor, PHF		0.95		0.95			
Hourly Flow Rate, HFR		48		8			
Percent Heavy Vehicles		2		2			
Percent Grade (%)			0			0	
Median Storage							
Flared Approach: Exists?	Storage						
RT Channelized?				No			
Lanes		1	1				
Configuration		L	R				

Delay, Queue Length, and Level of Service

Approach Movement Lane Config	EB	WB	Northbound			Southbound		
	1	4 LT	7 L	8	9 R	10	11	12
v (vph)		8	48		8			
C(m) (vph)		1387	351		874			
v/c		0.01	0.14		0.01			
95% queue length		0.02	0.47		0.03			
Control Delay		7.6	16.9		9.2			
LOS		A	C		A			
Approach Delay				15.8				
Approach LOS				C				

HCS2000: Unsignalized Intersections Release 4.1c

TWO-WAY STOP CONTROL SUMMARY

Analyst: MSH
 Agency/Co.: Solaegui Engineers
 Date Performed: 5/29/2003
 Analysis Time Period: PM Peak Hour
 Intersection: Vista & Wingfield Hills
 Jurisdiction: City of Sparks
 Units: U. S. Customary
 Analysis Year: Existing
 Project ID: The Foothills at Wingfield Springs
 East/West Street: Vista Boulevard
 North/South Street: Wingfield Hills Drive
 Intersection Orientation: EW Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street:	Approach Movement	Eastbound			Westbound		
		1 L	2 T	3 R	4 L	5 T	6 R
Volume			426	29	1	194	
Peak-Hour Factor, PHF			0.95	0.95	0.95	0.95	
Hourly Flow Rate, HFR			448	30	1	204	
Percent Heavy Vehicles			--	--	2	--	--
Median Type	Undivided						
RT Channelized?							
Lanes			1	0		0	1
Configuration				TR		LT	
Upstream Signal?			No			No	
Minor Street:	Approach Movement	Northbound			Southbound		
		7 L	8 T	9 R	10 L	11 T	12 R
Volume		28		1			
Peak Hour Factor, PHF		0.95		0.95			
Hourly Flow Rate, HFR		29		1			
Percent Heavy Vehicles		2		2			
Percent Grade (%)			0			0	
Median Storage							
Flared Approach: Exists?	Storage						
RT Channelized?				No			
Lanes		1		1			
Configuration		L		R			

Delay, Queue Length, and Level of Service

Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Config		LT	L		R			
v (vph)		1	29		1			
C(m) (vph)		1084	423		599			
v/c		0.00	0.07		0.00			
95% queue length		0.00	0.22		0.01			
Control Delay		8.3	14.1		11.0			
LOS		A	B		B			
Approach Delay				14.0				
Approach LOS				B				

HCS2000: Unsignalized Intersections Release 4.1c

TWO-WAY STOP CONTROL SUMMARY

Analyst: MSH
 Agency/Co.: Solaegui Engineers
 Date Performed: 5/29/2003
 Analysis Time Period: AM Peak Hour
 Intersection: Vista & Wingfield Hills
 Jurisdiction: City of Sparks
 Units: U. S. Customary
 Analysis Year: Existing + Project
 Project ID: The Foothills at Wingfield Springs
 East/West Street: Vista Boulevard
 North/South Street: Wingfield Hills Drive
 Intersection Orientation: EW Study period (hrs): 0.25

Vehicle Volumes and Adjustments							
Major Street:	Approach Movement	Eastbound			Westbound		
		1 L	2 T	3 R	4 L	5 T	6 R
Volume			390	34	8	1434	
Peak-Hour Factor, PHF			0.95	0.95	0.95	0.95	
Hourly Flow Rate, HFR			410	35	8	1509	
Percent Heavy Vehicles			--	--	2	--	--
Median Type	Undivided						
RT Channelized?							
Lanes			1	0	0	1	
Configuration				TR		LT	
Upstream Signal?			No			No	

Minor Street:	Approach Movement	Northbound			Southbound		
		7 L	8 T	9 R	10 L	11 T	12 R
Volume		46		9			
Peak Hour Factor, PHF		0.95		0.95			
Hourly Flow Rate, HFR		48		9			
Percent Heavy Vehicles		2		2			
Percent Grade (%)			0			0	
Median Storage							
Flared Approach: Exists?							
Storage							
RT Channelized?				No			
Lanes		1		1			
Configuration		L		R			

Delay, Queue Length, and Level of Service								
Approach Movement	EB	WB	Northbound			Southbound		
	1	4	7	8	9	10	11	12
Lane Config		LT	L		R			
v (vph)		8	48		9			
C(m) (vph)		1115	69		627			
v/c		0.01	0.70		0.01			
95% queue length		0.02	3.13		0.04			
Control Delay		8.3	133.7		10.8			
LOS		A	F		B			
Approach Delay				114.3				
Approach LOS				F				

HCS2000: Unsignalized Intersections Release 4.1c

TWO-WAY STOP CONTROL SUMMARY

Analyst: MSH
 Agency/Co.: Solaegui Engineers
 Date Performed: 5/29/2003
 Analysis Time Period: PM Peak Hour
 Intersection: Vista & Wingfield Hills
 Jurisdiction: City of Sparks
 Units: U. S. Customary
 Analysis Year: Existing + Project
 Project ID: The Foothills at Wingfield Springs
 East/West Street: Vista Boulevard
 North/South Street: Wingfield Hills Drive
 Intersection Orientation: EW Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street:	Approach Movement	Eastbound			Westbound		
		1 L	2 T	3 R	4 L	5 T	6 R
Volume			1251	29	4	649	
Peak-Hour Factor, PHF			0.95	0.95	0.95	0.95	
Hourly Flow Rate, HFR			1316	30	4	683	
Percent Heavy Vehicles			--	--	2	--	--
Median Type	Undivided						
RT Channelized?							
Lanes			1	0	0	1	
Configuration				TR		LT	
Upstream Signal?			No			No	
Minor Street:	Approach Movement	Northbound			Southbound		
		7 L	8 T	9 R	10 L	11 T	12 R
Volume		28		3			
Peak Hour Factor, PHF		0.95		0.95			
Hourly Flow Rate, HFR		29		3			
Percent Heavy Vehicles		2		2			
Percent Grade (%)			0			0	
Median Storage							
Flared Approach: Exists?							
	Storage						
RT Channelized?				No			
Lanes		1		1			
Configuration		L		R			

Delay, Queue Length, and Level of Service

Approach	EB	WB	Northbound			Southbound		
			1	7	8	9	10	11 12
Movement	1	4	7	8	9	10	11	12
Lane Config		LT	L		R			
v (vph)		4	29		3			
C(m) (vph)		512	64		189			
v/c		0.01	0.45		0.02			
95% queue length		0.02	1.77		0.05			
Control Delay		12.1	101.3		24.4			
LOS		B	F		C			
Approach Delay				94.1				
Approach LOS				F				

HCS2000: Unsignalized Intersections Release 4.1c

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ALL-WAY STOP CONTROL(AWSC) ANALYSIS

Analyst: MSH
 Agency/Co.: Solaegui Engineers
 Date Performed: 5/29/2003
 Analysis Time Period: AM Peak Hour
 Intersection: Vista & Wingfield
 Jurisdiction: City of Sparks
 Units: U. S. Customary
 Analysis Year: Existing
 Project ID: The Foothills at Wingfield Springs
 East/West Street: Vista Boulevard
 North/South Street: Wingfield Parkway

Worksheet 2 - Volume Adjustments and Site Characteristics

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Volume	138	4	11	0	1	1	27	10	0	2	15	566
% Thrus Left Lane												

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	LTR		LTR		LTR		LTR	
PHF	0.95		0.95		0.95		0.95	
Flow Rate	160		2		38		612	
% Heavy Veh	2		2		2		2	
No. Lanes	1		1		1		1	
Opposing-Lanes	1		1		1		1	
Conflicting-lanes	1		1		1		1	
Geometry group	1		1		1		1	
Duration, T	0.25 hrs.							

Worksheet 3 - Saturation Headway Adjustment Worksheet

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Flow Rates:								
Total in Lane	160		2		38		612	
Left-Turn	145		0		28		2	
Right-Turn	11		1		0		595	
Prop. Left-Turns	0.9		0.0		0.7		0.0	
Prop. Right-Turns	0.1		0.5		0.0		1.0	
Prop. Heavy Vehicle	0.0		0.0		0.0		0.0	
Geometry Group	1		1		1		1	
Adjustments Exhibit 17-33:								
hLT-adj	0.2		0.2		0.2		0.2	
hRT-adj	-0.6		-0.6		-0.6		-0.6	
hHV-adj	1.7		1.7		1.7		1.7	
hadj, computed	0.2		-0.3		0.2		-0.5	

Worksheet 4 - Departure Headway and Service Time

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Flow rate	160		2		38		612	
hd, initial value	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20
x, initial	0.14		0.00		0.03		0.54	
hd, final value	5.44		5.27		5.17		3.87	
x, final value	0.24		0.00		0.05		0.66	
Move-up time, m		2.0		2.0		2.0		2.0
Service Time	3.4		3.3		3.2		1.9	

Worksheet 5 - Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Flow Rate	160		2		38		612	
Service Time	3.4		3.3		3.2		1.9	
Utilization, x	0.24		0.00		0.05		0.66	
Dep. headway, hd	5.44		5.27		5.17		3.87	
Capacity	410		252		288		862	
Delay	10.16		8.29		8.47		14.01	
LOS	B		A		A		B	
Approach:								
Delay		10.16		8.29		8.47		14.01
LOS		B		A		A		B
Intersection Delay	12.98				Intersection LOS B			

HCS2000: Unsignalized Intersections Release 4.1c

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 ALL-WAY STOP CONTROL (AWSC) ANALYSIS

Analyst: MSH
 Agency/Co.: Solaegui Engineers
 Date Performed: 5/29/2003
 Analysis Time Period: PM Peak Hour
 Intersection: Vista & Wingfield
 Jurisdiction: City of Sparks
 Units: U. S. Customary
 Analysis Year: Existing
 Project ID: The Foothills at Wingfield Springs
 East/West Street: Vista Boulevard
 North/South Street: Wingfield Parkway

 Worksheet 2 - Volume Adjustments and Site Characteristics

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Volume	417	1	9	0	1	0	11	3	1	0	7	183
% Thrus Left Lane												

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	LTR		LTR		LTR		LTR	
PHF	0.95		0.95		0.95		0.95	
Flow Rate	448		1		15		199	
% Heavy Veh	2		2		2		2	
No. Lanes		1		1		1		1
Opposing-Lanes		1		1		1		1
Conflicting-lanes		1		1		1		1
Geometry group		1		1		1		1
Duration, T	0.25 hrs.							

 Worksheet 3 - Saturation Headway Adjustment Worksheet

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Flow Rates:								
Total in Lane	448		1		15		199	
Left-Turn	438		0		11		0	
Right-Turn	9		0		1		192	
Prop. Left-Turns	1.0		0.0		0.7		0.0	
Prop. Right-Turns	0.0		0.0		0.1		1.0	
Prop. Heavy Vehicle	0.0		0.0		0.0		0.0	
Geometry Group	1		1		1		1	
Adjustments Exhibit 17-33:								
hLT-adj	0.2		0.2		0.2		0.2	
hRT-adj	-0.6		-0.6		-0.6		-0.6	
hHV-adj	1.7		1.7		1.7		1.7	
hadj, computed	0.2		0.0		0.1		-0.5	

Worksheet 4 - Departure Headway and Service Time

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Flow rate	448		1		15		199	
hd, initial value	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20
x, initial	0.40		0.00		0.01		0.18	
hd, final value	4.64		5.01		5.43		4.50	
x, final value	0.58		0.00		0.02		0.25	
Move-up time, m		2.0		2.0		2.0		2.0
Service Time	2.6		3.0		3.4		2.5	

Worksheet 5 - Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Flow Rate	448		1		15		199	
Service Time	2.6		3.0		3.4		2.5	
Utilization, x	0.58		0.00		0.02		0.25	
Dep. headway, hd	4.64		5.01		5.43		4.50	
Capacity	698		251		265		449	
Delay	13.79		8.01		8.56		8.98	
LOS	B		A		A		A	
Approach:								
Delay		13.79		8.01		8.56		8.98
LOS		B		A		A		A
Intersection Delay	12.21		Intersection LOS		B			

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ALL-WAY STOP CONTROL(AWSC) ANALYSIS

Analyst: MSH
 Agency/Co.: Solaegui Engineers
 Date Performed: 5/29/2003
 Analysis Time Period: AM Peak Hour
 Intersection: Vista & Wingfield
 Jurisdiction: City of Sparks
 Units: U. S. Customary
 Analysis Year: Existing + Project
 Project ID: The Foothills at Wingfield Springs
 East/West Street: Vista Boulevard
 North/South Street: Wingfield Parkway

Worksheet 2 - Volume Adjustments and Site Characteristics

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Volume	138	250	11	1	849	16	27	10	1	10	15	566
% Thrus Left Lane												

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	LTR		LTR		LTR		LTR	
PHF	0.95		0.95		0.95		0.95	
Flow Rate	419		910		39		620	
% Heavy Veh	2		2		2		2	
No. Lanes		1		1		1		1
Opposing-Lanes		1		1		1		1
Conflicting-lanes		1		1		1		1
Geometry group		1		1		1		1
Duration, T	0.25 hrs.							

Worksheet 3 - Saturation Headway Adjustment Worksheet

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Flow Rates:								
Total in Lane	419		910		39		620	
Left-Turn	145		1		28		10	
Right-Turn	11		16		1		595	
Prop. Left-Turns	0.3		0.0		0.7		0.0	
Prop. Right-Turns	0.0		0.0		0.0		1.0	
Prop. Heavy Vehicle	0.0		0.0		0.0		0.0	
Geometry Group	1		1		1		1	
Adjustments Exhibit 17-33:								
hLT-adj	0.2		0.2		0.2		0.2	
hRT-adj	-0.6		-0.6		-0.6		-0.6	
hHV-adj	1.7		1.7		1.7		1.7	
hadj, computed	0.1		0.0		0.2		-0.5	

Worksheet 4 - Departure Headway and Service Time

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Flow rate	419		910		39		620	
hd, initial value	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20
x, initial	0.37		0.81		0.03		0.55	
hd, final value	7.49		7.24		9.64		6.66	
x, final value	0.87		1.83		0.10		1.15	
Move-up time, m		2.0		2.0		2.0		2.0
Service Time	5.5		5.2		7.6		4.7	

Worksheet 5 - Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Flow Rate	419		910		39		620	
Service Time	5.5		5.2		7.6		4.7	
Utilization, x	0.87		1.83		0.10		1.15	
Dep. headway, hd	7.49		7.24		9.64		6.66	
Capacity	480		910		289		620	
Delay	43.10		399.47		13.76		110.20	
LOS	E		F		B		F	
Approach:								
Delay		43.10		399.47		13.76		110.20
LOS		E		F		B		F
Intersection Delay	226.58							
				Intersection LOS	F			

HCS2000: Unsignalized Intersections Release 4.1c

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ALL-WAY STOP CONTROL(AWSC) ANALYSIS

Analyst: MSH
 Agency/Co.: Solaegui Engineers
 Date Performed: 5/29/2003
 Analysis Time Period: PM Peak Hour
 Intersection: Vista & Wingfield
 Jurisdiction: City of Sparks
 Units: U. S. Customary
 Analysis Year: Existing + Project
 Project ID: The Foothills at Wingfield Springs
 East/West Street: Vista Boulevard
 North/South Street: Wingfield Parkway

Worksheet 2 - Volume Adjustments and Site Characteristics

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Volume	417	828	9	3	459	19	11	3	4	25	7	183
% Thrus Left Lane												

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	LTR		LTR		LTR		LTR	
PHF	0.95		0.95		0.95		0.95	
Flow Rate	1318		506		18		225	
% Heavy Veh	2		2		2		2	
No. Lanes	1		1		1		1	
Opposing-Lanes	1		1		1		1	
Conflicting-lanes	1		1		1		1	
Geometry group	1		1		1		1	
Duration, T	0.25 hrs.							

Worksheet 3 - Saturation Headway Adjustment Worksheet

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Flow Rates:								
Total in Lane	1318		506		18		225	
Left-Turn	438		3		11		26	
Right-Turn	9		20		4		192	
Prop. Left-Turns	0.3		0.0		0.6		0.1	
Prop. Right-Turns	0.0		0.0		0.2		0.9	
Prop. Heavy Vehicle	0.0		0.0		0.0		0.0	
Geometry Group	1		1		1		1	
Adjustments Exhibit 17-33:								
hLT-adj	0.2		0.2		0.2		0.2	
hRT-adj	-0.6		-0.6		-0.6		-0.6	
hHV-adj	1.7		1.7		1.7		1.7	
hadj, computed	0.1		0.0		0.0		-0.5	

Worksheet 4 - Departure Headway and Service Time

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Flow rate	1318		506		18		225	
hd, initial value	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20
x, initial	1.17		0.45		0.02		0.20	
hd, final value	5.70		5.81		7.90		6.51	
x, final value	2.09		0.82		0.04		0.41	
Move-up time, m		2.0		2.0		2.0		2.0
Service Time	3.7		3.8		5.9		4.5	

Worksheet 5 - Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Flow Rate	1318		506		18		225	
Service Time	3.7		3.8		5.9		4.5	
Utilization, x	2.09		0.82		0.04		0.41	
Dep. headway, hd	5.70		5.81		7.90		6.51	
Capacity	1318		616		268		475	
Delay	509.21		29.50		11.22		13.91	
LOS	F		D		B		B	
Approach:								
Delay		509.21		29.50		11.22		13.91
LOS		F		D		B		B
Intersection Delay	333.53							
				Intersection LOS	F			

HCS2000: Unsignalized Intersections Release 4.1c

TWO-WAY STOP CONTROL SUMMARY

Analyst: MSH
 Agency/Co.: Solaegui Engineers
 Date Performed: 5/29/2003
 Analysis Time Period: AM Peak Hour
 Intersection: La Posa & Access Road
 Jurisdiction: City of Sparks
 Units: U. S. Customary
 Analysis Year: Existing + Project
 Project ID: The Foothills at Wingfield Springs
 East/West Street: La Posada Drive
 North/South Street: Access Road
 Intersection Orientation: EW

Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street:	Approach Movement	Eastbound			Westbound		
		1 L	2 T	3 R	4 L	5 T	6 R
Volume			11	97	0	29	
Peak-Hour Factor, PHF			0.95	0.95	0.95	0.95	
Hourly Flow Rate, HFR			11	102	0	30	
Percent Heavy Vehicles			--	--	2	--	--
Median Type	Undivided						
RT Channelized?							
Lanes			1	0	0	1	
Configuration				TR		LT	
Upstream Signal?			No			No	

Minor Street:	Approach Movement	Northbound			Southbound		
		7 L	8 T	9 R	10 L	11 T	12 R
Volume		316		0			
Peak Hour Factor, PHF		0.95		0.95			
Hourly Flow Rate, HFR		332		0			
Percent Heavy Vehicles		2		2			
Percent Grade (%)			0			0	
Median Storage							
Flared Approach: Exists?			No				
Storage							
RT Channelized?							
Lanes		0		0			
Configuration			LR				

Delay, Queue Length, and Level of Service

Approach Movement Lane Config	EB	WB	Northbound			Southbound		
	1	4	7	8	9	10	11	12
		LT		LR				
v (vph)		0		332				
C(m) (vph)		1476		908				
v/c		0.00		0.37				
95% queue length		0.00		1.69				
Control Delay		7.4		11.2				
LOS		A		B				
Approach Delay				11.2				
Approach LOS				B				

HCS2000: Unsignalized Intersections Release 4.1c

TWO-WAY STOP CONTROL SUMMARY

Analyst: MSH
 Agency/Co.: Solaegui Engineers
 Date Performed: 5/29/2003.
 Analysis Time Period: PM Peak Hour
 Intersection: La Posa & Access Road
 Jurisdiction: City of Sparks
 Units: U. S. Customary
 Analysis Year: Existing + Project
 Project ID: The Foothills at Wingfield Springs
 East/West Street: La Posada Drive
 North/South Street: Access Road
 Intersection Orientation: EW

Study period (hrs): 0.25

Vehicle Volumes and Adjustments							
Major Street:	Approach Movement	Eastbound			Westbound		
		1 L	2 T	3 R	4 L	5 T	6 R
Volume		32	321		0	16	
Peak-Hour Factor, PHF		0.95	0.95		0.95	0.95	
Hourly Flow Rate, HFR		33	337		0	16	
Percent Heavy Vehicles		--	--		2	--	--
Median Type	Undivided						
RT Channelized?							
Lanes		1	0		0	1	
Configuration			TR			LT	
Upstream Signal?		No				No	

Minor Street:	Approach Movement	Northbound			Southbound		
		7 L	8 T	9 R	10 L	11 T	12 R
Volume		186		0			
Peak Hour Factor, PHF		0.95		0.95			
Hourly Flow Rate, HFR		195		0			
Percent Heavy Vehicles		2		2			
Percent Grade (%)			0			0	
Median Storage							
Flared Approach: Exists?			No				
Storage							
RT Channelized?							
Lanes		0		0			
Configuration			LR				

Delay, Queue Length, and Level of Service								
Approach Movement	EB	WB	Northbound			Southbound		
			7	8	9	10	11	12
Lane Config	1	4 LT		LR				
v (vph)		0		195				
C(m) (vph)		1189		770				
v/c		0.00		0.25				
95% queue length		0.00		1.00				
Control Delay		8.0		11.3				
LOS		A		B				
Approach Delay				11.3				
Approach LOS				B				

HCS2000: Unsignalized Intersections Release 4.1c

TWO-WAY STOP CONTROL SUMMARY

Analyst: MSH
 Agency/Co.: Solaegui Engineers
 Date Performed: 5/29/2003
 Analysis Time Period: AM Peak Hour
 Intersection: Vista & Wingfield Hills
 Jurisdiction: City of Sparks
 Units: U. S. Customary
 Analysis Year: Existing + Project
 Project ID: The Foothills at Wingfield Springs - Two EB and WB Thrus
 East/West Street: Vista Boulevard
 North/South Street: Wingfield Hills Drive
 Intersection Orientation: EW Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street:	Approach Movement	Eastbound			Westbound		
		1 L	2 T	3 R	4 L	5 T	6 R
Volume			390	34	8	1434	
Peak-Hour Factor, PHF			0.95	0.95	0.95	0.95	
Hourly Flow Rate, HFR			410	35	8	1509	
Percent Heavy Vehicles			--	--	2	--	--
Median Type	Undivided						
RT Channelized?							
Lanes			2	0	1	2	
Configuration			T	TR	L	T	
Upstream Signal?			No			No	

Minor Street:	Approach Movement	Northbound			Southbound		
		7 L	8 T	9 R	10 L	11 T	12 R
Volume		46		9			
Peak Hour Factor, PHF		0.95		0.95			
Hourly Flow Rate, HFR		48		9			
Percent Heavy Vehicles		2		2			
Percent Grade (%)			0			0	
Median Storage							
Flared Approach: Exists?	Storage						
RT Channelized?				No			
Lanes		1		1			
Configuration		L		R			

Delay, Queue Length, and Level of Service

Approach Movement	EB	WB	Northbound			Southbound		
	1	4	7	8	9	10	11	12
Lane Config		L	L		R			
v (vph)		8	48		9			
C(m) (vph)		1112	177		782			
v/c		0.01	0.27		0.01			
95% queue length		0.02	1.05		0.03			
Control Delay		8.3	32.7		9.7			
LOS		A	D		A			
Approach Delay				29.1				
Approach LOS				D				

TWO-WAY STOP CONTROL SUMMARY

Vehicle Volumes and Adjustments

Delay, Queue Length, and Level of Service

Approach	EB		WB		Northbound		Southbound	
	1	4	7	8	9	10	11	12
Movement								
Lane Config		L	L		R			
v (vph)		4	29		3			
C(m) (vph)		508	85		398			
v/c		0.01	0.34		0.01			
95% queue length		0.02	1.31		0.02			
Control Delay		12.1	67.9		14.1			
LOS		B	F		B			
Approach Delay				62.8				
Approach LOS				F				

HCS2000: Unsignalized Intersections Release 4.1c

TWO-WAY STOP CONTROL SUMMARY

Analyst: MSH
 Agency/Co.: Solaegui Engineers
 Date Performed: 5/29/2003
 Analysis Time Period: AM Peak Hour
 Intersection: Vista & Wingfield
 Jurisdiction: City of Sparks
 Units: U. S. Customary
 Analysis Year: Existing + Project
 Project ID: The Foothills at Wingfield Springs
 East/West Street: Vista Boulevard
 North/South Street: Wingfield Parkway
 Intersection Orientation: EW

Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street:	Approach Movement	Eastbound			Westbound		
		1 L	2 T	3 R	4 L	5 T	6 R
Volume		138	250	11	1	849	16
Peak-Hour Factor, PHF		0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR		145	263	11	1	893	16
Percent Heavy Vehicles		2	--	--	2	--	--
Median Type	Undivided						
RT Channelized?							
Lanes		1	2	0	1	2	0
Configuration		L	T	TR	L	T	TR
Upstream Signal?		No			No		

Minor Street:	Approach Movement	Northbound			Southbound		
		7 L	8 T	9 R	10 L	11 T	12 R
Volume		27	10	1	10	15	566
Peak Hour Factor, PHF		0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR		28	10	1	10	15	595
Percent Heavy Vehicles		2	2	2	2	2	2
Percent Grade (%)			0			0	
Median Storage							
Flared Approach: Exists?	No						
Storage							
RT Channelized?							
Lanes		0	1	0	0	1	0
Configuration		LTR			LTR		

Delay, Queue Length, and Level of Service

Approach Movement Lane Config	EB	WB	Northbound			Southbound		
	1 L	4 L	7 L	8 L	9 L	10 L	11 L	12 L
v (vph)	145	1		39			620	
C(m) (vph)	745	1286		0			464	
v/c	0.19	0.00					1.34	
95% queue length	0.72	0.00					27.85	
Control Delay	11.0	7.8					190.3	
LOS	B	A		F			F	
Approach Delay							190.3	
Approach LOS							F	

HCS2000: Unsignalized Intersections Release 4.1c

TWO-WAY STOP CONTROL SUMMARY

Analyst: MSH
 Agency/Co.: Solaegui Engineers
 Date Performed: 5/29/2003
 Analysis Time Period: PM Peak Hour
 Intersection: Vista & Wingfield
 Jurisdiction: City of Sparks
 Units: U. S. Customary
 Analysis Year: Existing + Project
 Project ID: The Foothills at Wingfield Springs
 East/West Street: Vista Boulevard
 North/South Street: Wingfield Parkway
 Intersection Orientation: EW

Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street:	Approach Movement	Eastbound			Westbound		
		1 L	2 T	3 R	4 L	5 T	6 R
Volume		417	828	9	3	459	19
Peak-Hour Factor, PHF		0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR		438	871	9	3	483	20
Percent Heavy Vehicles		2	--	--	2	--	--
Median Type	Undivided						
RT Channelized?							
Lanes		1	2	0	1	2	0
Configuration		L	T	TR	L	T	TR
Upstream Signal?		No			No		

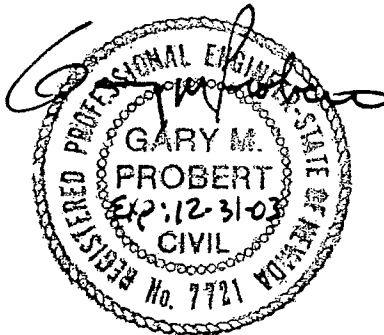
Minor Street:	Approach Movement	Northbound			Southbound		
		7 L	8 T	9 R	10 L	11 T	12 R
Volume		11	3	4	25	7	183
Peak Hour Factor, PHF		0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR		11	3	4	26	7	192
Percent Heavy Vehicles		2	2	2	2	2	2
Percent Grade (%)			0			0	
Median Storage							
Flared Approach: Exists?		No			No		
Storage							
RT Channelized?							
Lanes		0	1	0	0	1	0
Configuration		LTR			LTR		

Delay, Queue Length, and Level of Service

Approach Movement Lane Config	EB	WB	Northbound			Southbound		
	1 L	4 L	7 L	8 LTR	9	10 L	11 LTR	12
v (vph)	438	3		18			225	
C(m) (vph)	1058	764		19			159	
v/c	0.41	0.00		0.95			1.42	
95% queue length	2.06	0.01		2.54			14.19	
Control Delay	10.8	9.7		467.1			273.2	
LOS	B	A		F			F	
Approach Delay				467.1			273.2	
Approach LOS				F			F	

**APPENDIX G ~ WOOD RODGERS
SANITARY SEWER STUDY**

Preliminary Sanitary Sewer Study
for
The Foothills
At Wingfield Springs



9-4-03

June 2003

Prepared By:



WOOD RODGERS
ENGINEERING • PLANNING • MAPPING • SURVEYING
121 Vesta Street
Reno, NV 89502
Tel: 775.337.0770
Fax: 775.337.6650

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Purpose

The purpose of this report is to analyze the existing sanitary sewer lines to the project site to determine the maximum Equivalent Residential Units (ERU's) that the lines can serve. There are two existing sewer lines stubbed to the site to serve the proposed development. The northern sewer line is the 8" sewer line located in Wingfield Springs Unit 9C and known as the "BH" line per the "Spanish Springs Interceptor" Improvement Plans prepared by Pyramid Engineers in association with Roy H. Hibdon, Civil Engineering Consultants, Ltd., dated August 2, 1995, herein after referred to as the "Pyramid Plans". The southern sewer line is the 12" sewer line located in Wingfield Springs Unit 8 and known as the "T" line per the above plan set. The analysis will concentrate on the capacity of the existing sewer mains and will check the capacities to the 12" interceptor main located in Spanish Springs Road.

Project

The project is located in portions of Sections 6 and 7, Township 20 North, Range 21 East, M.D.M., Washoe County. The project is comprised of the land formerly known as the Tucker property and is located east of Wingfield Springs and Cimarron Planned Developments. The project consists of approximately 690 acres. The project will consist of approximately the following land uses:

Residential	485.62 acres
Commercial	8.12 acres
Parks	8.68 acres
Open Space	152.84 acres

The open space and parks will not contribute to the sewer facilities. The project is located entirely within the Northern Sparks Sphere of Influence (NSSOI).

The site consists of minimal sloping land along the western side of the project and the slope increase to moderate slopes to the eastern boundary of the project.

Background

The City of Sparks commissioned the "Wastewater Facilities Plan and Environmental Assessment for Spanish Springs Valley, Nevada, Final Version" prepared by Pyramid Engineers in association with Roy H. Hibdon Civil Engineering Consultants, Ltd. Dated January 13, 1995, herein after referred to as the "Facilities Plan, to determine the best method to provide sanitary sewer to East Spanish Springs. The "Facilities Plan" projected peak sewerage flow estimates for various portions of the valley and lower uplands. The flows were used to determine the infrastructure required to provide sewer service to the valley. The flows to the east of Wingfield Springs are those represented by the proposed project and offsite contributions.

Methodology

The City of Sparks does not have an official design criteria requirement for sanitary sewer design flow determination. The method proposed is to use the City of Reno's values for peak flows, occupancy rates, and flow depths. The design criteria has been revised for this application and approved by staff at Citiworks. The following design criteria will be used for the preparation of this report:

Manning's Roughness Coefficient (n value)	.010
Depth of flow (d/D)	0.70
8" sewer residential	350 gal/day/capita
10" sewer residential	250 gal/day/capita
single family residential occupancy rate	3.0 capita/d.u.
multi family occupancy rate	2.0 capita/d.u.
commercial flow ate	3,333 gal/ac/day
commercial peaking factor	3.0

The ERU's were calculated by determining the pipe capacity using the above data. The maximum ERU's were then determined by dividing 350 gallons per day per capita and 3.0 capita per day.

Sewerage from existing and known proposed projects upstream of The Foothills has been taken into account for the analysis of the sewer capacity. There are 25 existing parcels on septic systems which have a potential to be hooked up to the sewer system, thus generating 25 ERU's. Cimarron East (a.k.a. Whyndham Hill) has an ERU of 228 and the Oppio property has an ERU of 251. The total offsite sewerage contribution is 504 ERU's.

Project Sewerage Generation

The following table describes the sewerage being generated by the project. The total generation of sewage is 770,000 gallons per day. This is a total of 2,200 Equivalent Residential Units.

PROJECT SEWERAGE GENERATION The Foothills

Village Number	No. of Units per Village	North Basin (Lots)	South Basin (Lots)	Zoning Type	North Basin (ERU's)	South Basin (ERU's)
1	112	112		SFR	112	
2	104	104		SFR	104	
3	140	65	75	SFR	65	75
4	78		78	SFR		78
5	162		162	SFR		162
6	133		133	SFR		133
7	128		128	SFR		128
8	185		185	SFR		185
9	179		179	SFR		179
10	80		80	SFR		80
11	241		241	MF		241
12	170		170	MF		170
13	237		237	SFR		237
14	146		146	SFR		146
15	165		165	SFR		165
Totals	2,260	281	1,979		281	1,842
Commercial Number	Area (acres)	North Basin (area)	South Basin (area)	Zoning Type	North Basin (ERU's)	South Basin (ERU's)
VC	8.12		8.12	COM		77
Total	8.12		8.12			77
Totals					281	1,919

Total Equivalent Residential Units: 2,200

Existing Sanitary Sewer Facilities

The project is bordered on the west by Cimarron and Wingfield Springs. As previously described, two sanitary sewer stubs exist for the proposed project. Both sewer mains are located in Wingfield Springs and are in Units 9C and 8. The sewer mains were constructed as a part of the "Spanish Springs Interceptor, Phase 1, Northeast Sanitary Sewer Interceptor" plans. The northern line or "BH" line is an existing 8" PVC sanitary sewer line with a minimum slope of 0.0041. The southern line or "T" line is an existing 12" PVC sanitary sewer line with a minimum slope of 0.0040. Both lines tie into the existing 12" sanitary sewer interceptor line located in Spanish Springs Road.

The predicted peak design sewerage flows for the northern connection location (8" main) was identified in the report as 960 ERU's. The total proposed contributions to the northern main, including The Foothills and all offsite contributions, is 785 ERU's (see Table B), which is less than the predicted flows. Table C summarizes the flows and ERU's in the "BH" Line. The reach with the minimum capacity (BH1-BH2) consist of the 8" sewer line with a slope of 0.0041. The capacity of this line at .7d/D is 516 ERU's. Because the capacity of the "BH" Line is less than the Facilities Plan predicted flow, the only contributions to the "BH" Line will be those from Cimarron East and The Foothills. The total contribution is 509 ERU's which is less than the capacity of 516 ERU's. The proposed Oppio and existing Eagle Nest projects will require improvements to the "BH" Line to make for additional capacity. No additional improvements or studies should be required for the "BH" Line with The Foothills.

The predicted peak design sewerage flows per the "Facilities Plan" for the southern connection location (12" main) know as the "T" line was 1060 ERU's. The total proposed contributions to the southern main or "T" Line is 1,919 ERU's. The "T" Line consists of six reaches from Spanish Springs Road to the western boundary of The Foothills. All the reaches consist of 12" PVC sewer main with a slope of 0.0040. The design capacity of the pipe with the above criteria is 2,445 ERU's. The ERU's contributing at this location (1,919 ERU's) can be conveyed with the existing pipe.

Proposed Sanitary Sewer Facilities

The project is divided into two sewerage tributary areas, the northern and the southern areas. Refer to the map titled Exhibit A Sewerage Tributary Areas at the end of the report for the delineation of the tributary areas. The Villages will be designed at final design stage using the above design criteria along with minimum velocities of 2 fps and maximum velocities of 10 fps. A conceptual

layout is shown on the map titled Exhibit B Preliminary Sewer Layout. All of the proposed mains as shown on the attached Exhibit B are 8" except for the line going through the southern portion of Village 14 to Village 6 and noted on Exhibit B as a 10" sewer main.

Conclusion

The northern existing main ("BH" Line) was identified in the Facilities Report to have a capacity of 960 ERU's. The total ERU's for The Foothills, Cimarron East, existing 25 lots in Eagle Nest and the proposed Oppio project is 785 ERU's, less than the 960 ERU's slated at the connection point. Unfortunately, the existing 8" sewer main has a capacity of only 518 ERU's, not the design capacity of 960 ERU's (it appears that a 10" line was required to handle the 960 ERU's, and not the 8" line installed). The total lots (and ERU count) for Cimarron East and The Foothills is 509. Thus, the existing "BH" Line has the capacity for the proposed Foothills project. Improvements to the "BH" Line will be required with the proposed Oppio project and the existing Eagle Nest lots.

The sewerage flows at the southern existing main ("T" Line) are greater than those proposed in the "Facilities Report", although the "T" Line has the capacity to carry the total build out condition. No additional work shall be required for this line.

Appendix

THE FOOTHILLS - T LINE .7d/D
Worksheet for Circular Channel

Project Description	
Project File	c:\haestad\fmw\foothill.fm2
Worksheet	THE FOOTHILLS - T LINE .5d/D
Flow Element	Circular Channel
Method	Manning's Formula
Solve For	Discharge

Input Data	
Mannings Coefficient	0.010
Channel Slope	0.004000 ft/ft
Depth	8.4 in
Diameter	12.00 in

Results	
Discharge	1.585024 mgd
Flow Area	0.59 ft ²
Wetted Perimeter	1.98 ft
Top Width	0.92 ft
Critical Depth	0.67 ft
Percent Full	70.00
Critical Slope	0.004486 ft/ft
Velocity	4.18 ft/s
Velocity Head	0.27 ft
Specific Energy	0.97 ft
Froude Number	0.92
Maximum Discharge	3.15 cfs
Full Flow Capacity	2.93 cfs
Full Flow Slope	0.002804 ft/ft
Flow is subcritical.	

= 1,585,024 gpd

SINGLE
FAMILY

1,166 lots
250 gpd
3.0 peak

874,500 gpd

MULTI
FAMILY

950 units
250 gpd
2.0 peak

475,000 gpd

TOTAL

1,349,500 gpd.



THE FOOTHILLS - BH LINE .7d/D
Worksheet for Circular Channel

Project Description	
Project File	c:\haestad\fmw\foothill.fm2
Worksheet	BH LINE
Flow Element	Circular Channel
Method	Manning's Formula
Solve For	Discharge

Input Data	
Mannings Coefficient	0.010
Channel Slope	0.004100 ft/ft
Depth	5.6 in
Diameter	8.00 in

Results	
Discharge	0.544278 mgd
Flow Area	0.26 ft ²
Wetted Perimeter	1.32 ft
Top Width	0.61 ft
Critical Depth	0.43 ft
Percent Full	70.00
Critical Slope	0.004980 ft/ft
Velocity	3.23 ft/s
Velocity Head	0.16 ft
Specific Energy	0.63 ft
Froude Number	0.87
Maximum Discharge	1.08 cfs
Full Flow Capacity	1.01 cfs
Full Flow Slope	0.002874 ft/ft
Flow is subcritical.	

= 544,278 gpd = 518 LOTS

803 LOTS

350 gpd

3.0 peak

843,150 gpd.

EXHIBIT A Preliminary Sewer Layout



LEGEND
 8" SEWER MAIN
 10" SEWER MAIN
 EXISTING 8" SEWER MAIN
 DIRECTION OF FLOW



WOOD RODGERS
 Consulting Engineers & Architects
 10000 Lakeside Lane, Suite 100, Dallas, Texas 75243
 Tel: 972.382.2000 Fax: 972.382.2001

Table A

ESTIMATED SEWERAGE GENERATION

The Foothills
(without peaking factor)

Single Family Residential (350 gal/day)	1,849 lots	647,150 gal
Multi Family Residential (250 gal/day/units)	411 units	102,750 gal
Commercial (3,333 gal/acre)	8.12 acres	27,064 gal
Total Estimated Flow (gpd)		776,964 gal/day

ESTIMATED SEWERAGE GENERATION

For The Foothills
(In Equivalent Residential Units (ERU's))

Single Family Residential - North (350 gal/day/lot)	281 lots	281 ERU's
Single Family Residential - South (350 gal/day/lot)	1,568 lots	1,568 ERU's
Multi Family Residential (250 gal/day/units)	411 units	274 ERU's
Commercial	27,064 gal	77 ERU's
Total Estimated Flow (ERU's)		2,200 ERU's

Table B

ESTIMATED NORTHERN SEWERAGE GENERATION AT THE CONNECTION POINT ("BH" Line) (In Equivalent Residential Units (ERU's))

The Foothills – North	281 ERU's
Cimarron East	228 ERU's
Oppio (Future Cimarron East)	251 ERU's
Existing Parcels	25 ERU's
Total	785 ERU's

Table c

Downstream capacity in Spanish Springs Road

"BH" Line – 8" Line

REACH #	SLOPE	Q Max (.7d/D)	GPD	MAX ERU's
E21-BH1	.0181	1.77	1,143,780	1,089
BH1-BH2	.0041	0.84	542,811	516
BH2-BH3	.0072	1.12	723,748	689
BH3-BH4	.0074	1.13	730,210	695
BH4-BH5	.0137	1.54	995,153	947
BH5-BH6	.0047	0.90	581,583	553

(d/D=0.7=5.6")

"T" Line – 12" Line

REACH #	SLOPE	Q Max (.7d/D)	GPD	MAX ERU's
T1-T6	0.0040	2.46	1,585,024	1,510

(d/D=.70=8.4")

DOC # 2985696

APN (Not required per NRS 111.312(1))

When recorded, mail to
City of Sparks
P.O. Box 857
Sparks, NV 89432-0857
Attn: City Clerk

Conformed Copy
01/27/2004 10:53A Fee:86.00
RPTT 0.00
BK1
Requested By
FOOTHILLS AT WINGFIELD
Washoe County Recorder
Kathryn L. Burke - Recorder

COPY - has not been compared
with the Original Document - WCR

NOTICE OF DEVELOPMENT AGREEMENT
with covenants running with the land
(Foothills at Wingfield Planned Development)

As authorized by NRS 278.0201, on November 24, 2003, the City Council of the City of Sparks enacted Bill No. 2371, Ordinance Number 2198, approving a "Development Agreement and establishment of real covenants running with the land (Foothills at Wingfield Planned Development)" which includes agreements regarding the permitted uses of the land and entitlements.

A copy of the ordinance and Development Agreement is attached. The land is described in Exhibit A to the Development Agreement.

Dated this 27th day of January, 2004

CITY OF SPARKS, NEVADA

By Deborine J. Dolan
Deborine J. Dolan
City Clerk



COUNTY OF WASHOE)

STATE OF NEVADA)

Acknowledgement in representative capacity
(NRS 240.1665)

This instrument was acknowledged before me on January 27, 2004 by
DEBORINE J. DOLAN as City Clerk of the City of Sparks, Nevada.

Linda Z. Azcarate
Notary Public



LEDA Z. AZCARATE
Notary Public - State of Nevada
Appointment Recorded in Washoe County
No: 93-0100-2 - Expires November 13, 2005

BILL NO. 2371

INTRODUCED BY COUNCIL

ORDINANCE NO. 2198.

AN ORDINANCE APPROVING A DEVELOPMENT AGREEMENT WITH FOOTHILLS AT WINGFIELD, LLC AND LOEB ENTERPRISES, LLC, REGARDING THE DEVELOPMENT OF THE FOOTHILLS AT WINGFIELD PLANNED DEVELOPMENT IN NORTHEAST SPARKS, AND OTHER MATTERS PROPERLY RELATING THERETO.

WHEREAS NRS 278.0201 provides that a governing body of a city may enter into an agreement with the owner of land concerning the development of the land, and if the agreement is consistent with the Master Plan, may approve it by ordinance;

WHEREAS Foothills at Wingfield, LLC as the owner of the land has applied to this Council to enter into such an agreement; and

WHEREAS it has been recommended to this Council by the Planning Commission that the agreement is consistent with the Master Plan;

NOW THEREFORE, THE CITY COUNCIL OF THE CITY OF SPARKS DOES ORDAIN:

Section 1. Business Impact. Prior to enactment of the following provisions, the Council had considered and does hereby determine that this ordinance is made under the provisions of NRS Chapter 278, and therefore is not a "rule" within the meaning of NRS Chapter 237.

Section 2. Approval of Development Agreement. The attached "DEVELOPMENT AGREEMENT and establishment of real covenants running with the land (Foothills at Wingfield Planned Development)" together with its exhibits is approved, except that Exhibit B is approved as to form only.

Section 3. Effective Date. This ordinance shall be effective upon passage and publication of title in accordance with Sparks City Charter 2.080.

Section 4. Repealer and General Provisions. Any ordinance or resolution which conflicts with this ordinance is hereby repealed. The officers of the City are hereby authorized and directed to take all action necessary to effectuate the provisions of this ordinance. The City Clerk is authorized to make editorial changes hereto consistent with the intentions of this ordinance. The provisions of this ordinance shall be liberally construed to effectively carry out its purposes. In the event that any provision in this ordinance is deemed void, invalid or unenforceable by a court of competent jurisdiction, then such offending provision shall be severed from this resolution and all the remaining provisions (including the repealer provision) shall remain in full

CITY OF SPARKS
OFFICE OF THE CITY CLERK

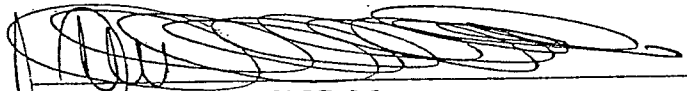
OCT 29 2003

force and effect.

PASSED AND ADOPTED on this 24 day of November, 2003 by the following vote of the Council:

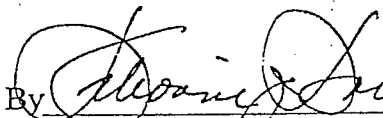
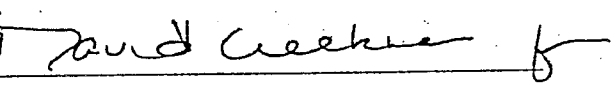
AYES	MAYER, SALERNO, MARTINI, CARRIGAN, SCHMITT
NAYS	NONE
ABSENT	NONE
ABSTAIN	NONE

APPROVED this 24 day of Nov., 2003


TONY ARMSTRONG, Mayor

ATTEST:

APPROVED AS TO FORM AND LEGALITY

By   and 
City Clerk City Attorney

CITY OF SPARKS
OFFICE OF THE CITY CLERK

OCT 29 2003

(Rev 10-2-03)

DEVELOPMENT AGREEMENT
and establishment of real covenants running with the land
(Foothills at Wingfield Planned Development)

Effective Date: November 24, 2003

Art 1 PARTIES AND DEFINITIONS

§1.01 THIS AGREEMENT, is by and between the following parties and their respective successors and assigns:

City	City of Sparks, Nevada, a municipal corporation 431 Prater Way Sparks, Nevada 89432-0857 Attn: Community Development Director
Foothills	Foothills at Wingfield, LLC a Nevada limited liability company 6295 Wingfield Springs Road Sparks, Nevada 89436 ATTN: Harvey Whittemore
Loeb	Loeb Enterprises, LLC A Nevada limited liability company 6295 Wingfield Springs Road Sparks, Nevada 89436 ATTN: J.L. (Skylo) Dangler

§1.02 The following definitions apply to this agreement.

Applicable Law is defined in ¶3.02.B.

City Council means the City Council for the City of Sparks.

Current Law means any ordinance, resolution, statute or regulation, in force at the time an approval is given or an action is taken, and which is applicable pursuant to the terms of this agreement.

Development means the Foothills at Wingfield Planned Development as defined below.

CITY OF SPARKS
OFFICE OF THE CITY CLERK

OCT 29 2003

Development Approvals means all actions and decisions taken or made by the City (including the Community Development Director and staff, the Planning Commission, the Building Official and all building inspectors, the City Council, and any board or commission of the City) as a part of any of the following approvals or procedures: (i) all procedures, decisions, and approvals set forth in the Foothills Handbook, (ii) subdivision and parcel maps, (iii) variances, (iv) site plan reviews, (v) special use permits, (vi) grading and building permits, (vii) inspections and code enforcement proceedings, and (ix) any other approval required by land use, zoning, or subdivision law.

Development Property means that real property described in Exhibit A hereto.

Foothills Development or Foothills at Wingfield Planned Development means all proposed development to be constructed on the Development Property as described in the Foothills Handbook.

Foothills Handbook means the Foothills at Wingfield Development Standards Handbook as approved by the Planning Commission and City Council for the City of Sparks and subsequently recorded in the Official Records of Washoe County.

Planning Commission means the Planning Commission for the City of Sparks.

Wingfield Springs Planned Development means that development described in the Wingfield Development Agreement and Wingfield Handbook.

Wingfield Springs Development Agreement means the Development Agreement between the City of Sparks and Loeb Enterprises Limited Liability Company approved by the City and recorded in Book 4207 beginning at page 0702 as file number 1855532, Official Records of Washoe County, together with all amendments and supplemental agreements which have been duly approved.

Wingfield Springs Handbook means the Design Standards Handbook for Wingfield Springs recorded as Exhibit C to the Wingfield Springs Development Agreement on December 9, 1994 in book 4207 beginning at page 722, together with all amendments and supplements thereto.

Art 2 RECITALS

A. Since 1994, Loeb has been building the Wingfield Springs Planned Development, in accordance with the Wingfield Springs Development Agreement and Wingfield Springs Handbook. A substantial portion of the development has been built, including two golf courses, a commercial complex, and 26 villages including over 1,500 residences. The unique design standards and characteristics set forth in the Wingfield Springs Handbook have yielded great value to the properties therein, and in order to preserve such values, Loeb desires to extend such design standards and characteristics to adjacent planned developments.

B. Foothills is affiliated with Loeb through a common owner and manager and a management and service agreement, and has acquired the Development Property and desires to develop it substantially in accordance with the standards and characteristics set forth in Wingfield Springs Handbook in order to preserve the ambiance and enhance the values of both planned developments. To assure the preservation of the Wingfield development standards, and for valuable consideration identified below, Foothills desires to establish a servitude by real covenant over the Development Property providing that changes to the Foothills Handbook will require the approval of Foothills and Loeb.

C. As good and valuable consideration for the servitude, including the assignment of certain benefits inuring to Loeb under various agreements with the City and other valuable consideration provided to Foothills by Loeb, and because the employment of similar standards enhances the value of the Wingfield Springs Development, the parties believe and desire that the real covenants running with the Development Property established herein shall touch and concern the Wingfield Springs Planned Development and Loeb.

D. Foothills has applied to the City to (i) annex the Development Property into the City; (ii) to change the Master Plan for the Development Property; (iii) to rezone the Development Property as a "New Urban Development;" and (iv) to approve this agreement and adopt the Foothills Handbook by ordinance which agreement and handbook shall, when recorded, become the zoning and subdivision regulations for the Development Property in accordance with NRS 278.0201 and NRS Chapter 278A.570.

E. On May 27, 2003, the City Council enacted Bill No. 2340 annexing the Development Property into the City, and Bill 2341 re-zoning the Development Property to "NUD" (New Urban Development).

F. On September 18, 2003, the Planning Commission, following a public hearing, by minute action, (i) approved the change in the Master Plan for the Development Property, subject to and in accordance with NRS 278.210 (ii) recommended that the City Council tentatively approve the Foothills Handbook in accordance with NRS 278A.490.

G. It is anticipated that the Foothills Handbook shall be tentatively approved by the City Council under NRS 278A.440 through 278A. 510, and then finally approved, certified and recorded as required by NRS 278A.530 through 278A. 530 through 278A. 570.

H. The development of the Foothills Development will take place over a number of years. Foothills intends to act as a master developer and will convey portions of the Development Property to project developers. In order to reduce regulatory uncertainty and to ensure economic values associated with the uniformity of development contemplated hereby, Foothills desires to enter into an agreement with the City under NRS 278.0201 establishing a fixed "Applicable Law" governing Development

Approvals for the development of the Foothills Development notwithstanding changes in zoning or subdivision regulations by City over the years.

NOW THEREFORE, in exchange for the mutual considerations and undertakings, the parties agree as follows.

Art 3 DEVELOPMENT RIGHTS AND OBLIGATIONS OF FOOTHILLS.

§3.01 Entitlement.

¶3.01.A When this agreement and the Foothills Handbook are each approved by ordinance and recorded, Foothills shall be entitled to develop the Development Property in accordance with this agreement and the Foothills Handbook, subject to the terms and conditions herein and subject to all Development Approvals, and as provided in NRS 278A.570, all zoning and subdivision regulations otherwise applicable to the Development Property cease to apply.

¶3.01.B As required by NRS 278.0201.1, the permitted uses of the land, the density or intensity of its use, the maximum height and size of proposed buildings and any provisions for the dedication of any portion of land for public use, shall be as set forth in Foothills Handbook, which is incorporated as if set forth in full herein.

§3.02 Establishment of Applicable Law.

¶3.02.A. Applicable Law controls. In accordance with NRS 278.0201 (2), and subject to the provisions in this agreement, City agrees that Foothills may build the Foothills Development in accordance with Applicable Law as defined below. Except as otherwise specifically provided herein, City, shall not apply to the Foothills Development any City Law or Current Law that is in conflict with Applicable Law or that reduces rights provided in this agreement unless agreed to in writing by Foothills. "City Law" includes any action of the City Council or otherwise, or by initiative, referendum, and whether through the exercise of City's police powers or its taxing power, and any ordinance, resolution, rule, regulation, standard, directive, condition or other measure. A City Law or Current Law shall be deemed to be in conflict with Applicable Law, or to reduce rights provided by Applicable Law if the City Law or Current Law would (i) reduce the number of residential units permitted to be developed or revise the distribution of those units by density as provided by Applicable Law (ii) otherwise limit or reduce the density or intensity of the Foothills Development or any part thereof, or otherwise require any reduction in the size, square footage or number of lots, proposed buildings or other improvements; (iii) otherwise change any land use designation or permitted use of the Foothills Development than as specified in Applicable Law, (iv) limit or control the location of buildings, structures, grading, or other improvements of the Foothills Development in a manner that is inconsistent with or more restrictive than the limitations contained in Applicable Law; (v) limit or control the rate, timing, phasing or sequencing of the approval, development or construction of all or any part of the Foothills

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Development; (vi) require the issuance of additional permits or approvals by the City other than those required by Applicable Law; or (vii) except as otherwise provided in this agreement, establish, enact, or increase in any manner applicable to the Foothills Development or impose against it any rules, regulations, policies or standards that were not in effect on the Effective Date or otherwise impose against the Foothills Development any condition, dedication or other exaction not specifically authorized by Applicable Law and not made necessary by the Foothills Development.

¶3.02.B Definition of Applicable Law "Applicable Law" means (i) the Foothills Handbook, and implementing ordinance, as amended from time to time, (ii) this agreement, as amended from time to time, (iii) all approving ordinances and approvals described in the recitals above, (iv) all statutes, ordinances, codes, regulations and resolutions which govern the permitted uses, the density and standards for design, improvements and construction which are in effect on the Effective Date set forth above.

¶3.02.C Exception for cost based fees. Notwithstanding any provision herein, City may amend any "cost based" fees, including building permit fees, plan check fees, impact fees, special assessments, inspection fees, government services fees, and maintenance district fees, and may charge such fees in accordance with the fee schedule in effect at the time the fees are collected. "Cost based fees" are those which are based on actual costs to the City and are uniformly applied to all development and construction subject to the City's jurisdiction.

¶3.02.D Exception for building codes. Notwithstanding any provision herein, the construction of all buildings and improvements in the Foothills Development shall be in accordance the Orange Book (for public infrastructure facilities), and all building codes, electrical codes, plumbing codes, historic preservation codes, energy codes and the like in effect at the time a building permit is issued. Further, City may impose any construction standards which are applicable to all other developers if such changed or additional standards are required to prevent a condition dangerous to the health or safety of City residents.

¶3.02.E Changes to Applicable Law to comply with superior law. Notwithstanding any provision herein, if any Applicable Law now or hereafter conflicts with any county, state or federal ordinance, statute or regulation, City may change the Applicable Law to conform to any such ordinance, statute or regulation and as amended, the Applicable Law shall apply to any portion of the Foothills Development subsequently started. For purposes of this paragraph, the term "conflicts with" means that such county, state, or federal ordinance, statute or regulation prevents or precludes the enforcement of an Applicable Law. If a change in Applicable law is necessary under this paragraph, the parties agree as follows:

1. Either party, upon learning of such a matter, will provide the other party with written notice thereof and provide a copy of any such law.

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2. The parties shall, within 30 days, meet and confer in good faith and attempt to modify or amend this agreement to bring it into compliance with any such county, state or federal law within 90 days after the first meeting.

3. Before approving any such modification or amendment, the City Council shall hold a public hearing.

4. Any decision to modify or amend Applicable Law as it would apply to the Foothills Development shall be subject to judicial review according to the procedures and standards set forth in the Administrative Procedures Act (NRS Chapter 233B) or other procedure and standards agreed upon by the parties.

¶3.02.F Subject to NRS Chapters 278, 278A. Notwithstanding any provision herein, this section is subject to and can only be enforced to the extent permitted by NRS Chapters 278 and 278A.

§3.03 Time and sequence of construction.

¶3.03.A. Except as provided below, Foothills shall construct or cause the construction of the Foothills Development in phases as set forth in the Foothills Handbook.

¶3.03.B If, however, the City determines in its sole legislative or administrative discretion that certain construction is required contemporaneously with development of particular phases or projects to insure that public safety standards are met, Foothills shall complete such construction in a manner and at a time as required. Otherwise, Foothills shall have complete discretion as to the time of commencement, construction, phasing and completion of any and all development of the Foothills Development.

§3.04 (Intentionally Deleted)

§3.05 Changes to Foothill Handbook or this Agreement.

¶3.05.A General; covenant running with land. Foothills on behalf of itself and all of its successors and assigns and all subsequent owners of the Development Property irrevocably agrees that it will not cause, suffer or allow any changes to the Foothills Handbook without first obtaining the written permission of Loeb. It is the intention of the parties that this agreement shall constitute a covenant running with the Development Property. Foothills agrees to make a notation on the face of the Handbook reflecting this covenant, and to include this covenant in all sale agreements, leases or other conveyances of any portion of the Development Properties.

¶3.05.B Exceptions; Dissolution of Covenant. Notwithstanding anything to the contrary herein, the following exceptions apply to the covenant stated in ¶3.05.A.

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1. The following changes to this agreement or the Foothills Handbook shall not require the prior consent of Loeb:

(a) Any change which is required by City in its legislative or administrative discretion or in connection with any Development Approval.

(b) The assignment of any entitlements or rights under the Foothills Handbook.

(c) Any change regarding the construction of any public facility, public works project, or public infrastructure or involving public safety.

(d) Any change required to conform to any subsequently enacted ordinance, statute, or regulation.

(e) Any change mandated by regulatory action or court order.

2. If Loeb defaults under any term of this agreement, so long as such default remains uncured, no consent of Loeb is required for any change to this agreement or the Foothills Handbook.

3. The covenant and obligation to obtain the consent of Loeb to any change to this agreement or the Foothills Handbook dissolves and is no longer applicable if any of the following events or circumstances occurs:

(a) If Loeb dissolves or otherwise ceases to exist.

(b) If Loeb no longer holds any property in the Wingfield Springs Development.

(c) Any change to this agreement or the Foothills Handbook that occurs after the termination of this agreement for any reason.

4. The benefit of the covenant is not assignable by Loeb.

¶3.05.C Rights and obligations of Loeb.

1. Loeb agrees to render and deliver a written decision to consent or withhold consent within 30 days after receiving a written request. If Loeb fails to do so, then Loeb shall be deemed to have consented to the proposed change. If Loeb withholds or denies consent, it shall identify the particular proposed change to which it objects, state the reason why and under what conditions it would approve the proposed change. All proposed changes not specifically rejected as provided in the preceding sentence shall be deemed approved.

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2. Loeb shall have sole discretion to reject any change relating to the density (except as provided in subparagraph 3.04.B.1.(b)), permitted uses, and standards for design, improvements and construction of any portion of the Foothills Development. For any other change, Loeb shall not unreasonably withhold approval.

¶3.05.D Procedures for changes to Foothills Handbook. All changes to the Foothills Handbook shall be governed by the Handbook, Applicable Law, including NRS chapter 278A. and SMC Chapters 20.18 and 20.19.

§3.06 Dedication and construction of public facilities.

¶3.06.A Foothills agrees to dedicate all property and construct all public facilities identified in the Foothills Handbook. In the event that Foothills dedicates land for a neighborhood park or constructs and dedicates park facilities as those terms are defined in NRS 278.4983.8, City agrees to enter into an agreement with Foothills providing for credits against the residential construction tax contemplated by NRS 278.4983 substantially in the form attached hereto as Exhibit B. Foothills must request such an agreement prior to the dedication of the land or the commencement of construction of the facility.

¶3.06.B With respect to all construction of public facilities, Foothills represents, warrants and agrees (unless otherwise provided in a subsequent agreement relating to the construction):

1. That all improvements constructed by Foothills hereunder (i) shall be built in accordance with plans and specifications approved by the City, and in accordance with the standards and specifications in the Orange Book in effect at the time of construction, (ii) shall be built in compliance with building codes in effect at the time of construction; (iii) shall be constructed in a workmanlike manner, (iv) shall be built with new materials (unless otherwise agreed) which shall be free from faults and defects, and (v) shall be free from the release of hazardous substances as defined NRS 40.504 and 40.505. The "Orange Book" means the latest edition of the "Standard Specifications for Public Works Construction" sponsored and distributed by the Regional Transportation Commission in conjunction with the City and other local government entities.

2. Foothills shall follow best management practices regarding the management of the staging, storage and work sites and shall at all times keep the premises free from accumulation of waste materials, and at the completion of the work shall remove all waste materials, rubbish, tools, supplies and equipment.

3. Foothills shall obtain and continuously maintain all licenses (including contractor's licenses, business licenses etc) and permits (including building permits, storm water pollution prevention permits and other environmental permits) required to do the work and to do business in the State of Nevada, County of Washoe,

and City of Sparks.

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4. In addition to complying with Applicable Law with respect to the Project, Foothills shall pay all required taxes, fees, unemployment premiums, industrial insurance premiums or payments, and to comply with all laws of the State of Nevada, County of Washoe, and City of Sparks.

§3.07 Estoppel certificates and lender cooperation. To accommodate financing of any portion of the Development Property City agrees to provide to any potential lenders estoppel certificates or letters indicating (i) the status of this agreement (ii) the status of any liens City has on the property or that the City has no liens on the property being financed, (iii) that, pursuant to §4.01 and subject to the reservation therein, the City would recognize the purchaser at a duly held foreclosure sale on any Development Property as a successor in interest to Foothills with all the rights and benefits hereunder. Nothing herein, however, shall be deemed to relieve Foothills or its successors of its obligations under this agreement or its liability for failure to perform its obligations under this agreement.

§3.08 Procedures and deadlines for Development Approvals. This agreement is intended to be a development agreement under NRS 278.0201 – 278.0207. The characteristics of the Foothills Development (the permitted uses of the land, the density or intensity of its use, the maximum height and size of buildings and provisions for dedication of land for public use) shall be in accordance with the Foothills Handbook. Development Approvals shall be in accordance with the Foothills Handbook and Applicable Law, and to the extent that Applicable Law conflicts with the Handbook, the Handbook shall control. All deadlines and timetables provided in the Foothills Handbook are hereby incorporated herein by reference with the intent of implementing the provisions of NRS 278.0201.4.

§3.09 Maintenance of site facilities

§3.02.A General; Definitions.

1. Unless a different maintenance schedule or obligation is specified in the Foothills Handbook, Foothills and the City agree as follows with respect to the maintenance of site facilities in the Foothills Development.

2. For purposes of this section,

(i) "facilities" means any site features, signs and sign structures, lighting, landscaping and any other items which Foothills is obligated to repair, replace and maintain hereunder;

(ii) "Foothills" includes any homeowner's association organized to maintain common elements, and any contractor of Foothills or such homeowner's association; and

(iii) "maintenance area" means any area containing facilities to be maintained by Foothills hereunder.

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¶3.09.B Foothills maintenance obligations. Foothills, at its sole cost and expense, shall repair, replace and maintain, in good and safe condition, the following items in the Foothills Development:

1. Site features: all stone columns, walls, decorations, architectural features and fencing installed as a part of the construction of the Foothills Development as defined in the Declaration, or within the public right of way within an area for which a license for maintenance has been granted.

2. Signs and sign structures: except for traffic control devices and signs owned by the City, all signs and sign structures in the Foothills Development including directional signs, entry signs and Development identification signs.

3. Lighting: all nonstandard light fixtures and standards. "Nonstandard" means fixtures which are not used by Sierra Pacific Power Company (SPPCO) or the City in other areas and for which SPPCO or the City does not keep an inventory of replacement and repair parts.

4. Landscape areas: all landscaping (i) in all public street rights of way, and (ii) in all common elements and common areas, except landscaping to be maintained by the City as set forth herein, including ¶3.09.1.(ii) below.

¶3.09.C City license; indemnifications; design standards.

1. If any maintenance area lies in City property or right of way, City hereby grants to Foothills a nonexclusive license to enter upon City property or right of way for the purpose of repairing, replacing and maintaining the facilities thereon. Foothills (including any homeowners association or contractor) shall indemnify City as provided in §5.05 for each use of this license.

2. Foothills shall comply with all the requirements, standards and guidelines in the Foothills Handbook, and within that limitation shall have sole discretion as to the design and composition of the facilities. Except as it deems necessary to preserve public health or safety, the City shall not alter any facilities.

¶3.09.D City maintenance obligations.

1. Except as provided in ¶3.09.B and elsewhere herein, or in the Foothills Handbook or Applicable Law, City shall, at its sole expense, repair, replace and maintain:

(i) all facilities that are located on land that has been dedicated to and

accepted by the City, and

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(ii) all facilities located in storm drain facilities located on land which has been dedicated to and accepted by City or for which City has a written and recorded easement.

2. City shall be solely responsible for the design and content of any facilities it is obligated to maintain.

¶3.09.E Homeowners Association obligations.

Foothills shall (i) form a homeowners association under Chapter 116 of Nevada Revised Statutes, (ii) provide in its enabling documents that the homeowners association shall maintain all common elements, facilities and land which have not been conveyed to private owners or dedicated to the City, and (iii) assure that adequate fees and assessments will be collected to provide sufficient revenues to cover the costs of such maintenance.

Art 4 ADMINISTRATION AND ENFORCEMENT OF THIS AGREEMENT.

§4.01 Assignment and binding effect.

¶4.01.A Pursuant to NRS 278A.570, when this agreement and the Foothills Handbook are approved by ordinance and recorded, they supplant zoning and subdivision regulations otherwise applicable to the Development Property. Thus, the benefits and burdens run with the land and shall inure to all successors in interest to Foothills or its assigns, subject, however, to the provisions of §3.05 in this agreement regarding changes to the Foothills Handbook.

¶4.01.B If another government entity obtains jurisdiction over the Development Property, the benefits and burdens of City inure to that successor.

¶4.01.C Loeb may not assign any right under this agreement without the consent of City, which consent is in its sole and absolute discretion.

¶4.01.D This agreement shall be binding on and inure to the benefit of the parties, their respective successors and any assignees or delegates if the assignment or delegation is permitted and the assignee assumes all obligations under this agreement as to the property transferred to the assignee. Unless otherwise specifically identified in this agreement, there are no third party beneficiaries intended by this agreement and no third parties have any standing to enforce any of the provisions of this agreement.

§4.02 Review every 24 months. As required by NRS 278.0205, this agreement shall be reviewed by the City Council every 24 months. Failure to conduct such a review promptly does not constitute a waiver of the right or obligation, and once a review is conducted, this agreement shall be again reviewed within 24 months from the date of review. Foothills shall initiate the review process by submitting a report to the

Community Development Department listing and discussing the development activities of Foothills and its successors and assigns on the Development Property as well as any development activity anticipated within six months from the date of the report. The first report shall be due on October 31, 2005, and each successive report shall be due on the last business day of the 24th month following the conclusion of each review. If, as a result of the review, City intends to amend or cancel any portion of this agreement, it shall provide the notice requirements and provisions of NRS 278.0205.2

§4.03 Expiration of this Agreement. This agreement expires and automatically terminates on December 31, 2033.

§4.04 Early termination. This Agreement may be terminated before its expiration as specifically provided in NRS 278.0205 or as provided herein.

§4.05 Obligations on expiration or termination; survival.

¶4.05.A. In addition to any other specific provision in this agreement, upon expiration or early termination of this Agreement, the parties agree to execute and record a notice of termination. If a party fails or refuses to join in the execution of such a notice, any remaining party may execute and record it.

¶4.05.B. The following provisions survive the expiration or early termination of this Agreement:

(i) Provisions regarding conflicts of interest and nonhiring of affiliates of the parties.

(ii) Provisions regarding remedies, attorneys fees, governing law and jurisdiction.

(iii) As specifically provided herein.

§4.06 Excuse due to force majeure.

¶4.06.A. Except as provided elsewhere herein, if a "force majeure" makes performance of an obligation or cure of a breach or default impossible, such performance or cure is excused for the duration of the force majeure provided that the obligated party (i) within a reasonable time after the commencement of the force majeure notifies the other party of the nature of the force majeure, when it commenced, why it makes performance or cure impossible, and the expected duration (if known), and (ii) agrees to and does in fact diligently pursue remediation of the effects of the force majeure, and (iii) agrees to notify the other party immediately when it becomes possible to commence efforts to cure the default.

¶4.06.B A "force majeure" is defined as (i) without the fault of and beyond the reasonable control of the obligated party, a war; insurrection; riot; flood; earthquake; fire; CITY OF SPARKS; act of God; act of a public enemy; quarantine restriction or other effect of

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epidemic or disease; freight embargo; weather-caused delay; lack of transportation attributable to any of these; or a lawsuit challenging the validity or approval of this agreement if an order is entered prohibiting performance by the obligated party, and so long as the obligated party defends such lawsuit with reasonable diligence; or (ii) labor strikes, boycotts or picketing (unless the labor action is taken because of a violation of the prevailing wage provisions in this Agreement, if any); (iii) provided, however, that if the breach or default is the failure to pay money, the force majeure must actually prevent access to or payment from a bank account or payment mechanism, such as during a banking holiday, moratorium, or sabotage of wire or automated transfer systems. A force majeure does not include general economic or market conditions, or the financial condition of a party even if they are influenced by any of the foregoing.

¶4.06.C. A force majeure is deemed to cease for purposes of this Agreement and a party is deemed to be in breach of an obligation or cure when it becomes possible for the obligated party to commence to perform the obligation or cure.

§4.07 Default, notice and right to cure.

¶4.07. A. Default. Subject to §4.06, a default occurs when (i) any representation of a material fact expressed herein was false at the time it was made, or, if a continuing representation, becomes false as a result of a subsequent event or occurrence; (ii) any warranty made herein is breached at the time made or, if a continuing warranty, is breached as a result of a subsequent event or occurrence; (iii) any party repudiates, breaches or fails to perform any covenant, material term or provision in this Agreement; (iv) an event required to occur does not occur by the time required; (v) any party misrepresents a material fact, or omits to state a material fact, for the purpose of inducing another party to act or which is relied on by another party in deciding a course of action during the administration of this agreement; or (vi) any other event or circumstance otherwise described in this agreement as a breach or default.

¶4.07.B. Notice and right to cure.

1. If the City determines that the terms or conditions of this agreement are not being complied with and desires to amend or cancel this agreement pursuant to NRS 278.0205, City shall provide notice and opportunity for hearing as provided therein. City may also provide the notices and opportunity to cure as provided herein.

2. In the event of the default, the non-defaulting party shall provide notice and the defaulting party shall have THIRTY DAYS or such other time frame agreed upon between the parties from the date that the notice is deemed given to cure the default.

§4.08 Remedies.

¶4.08.A. Remedies by City:

1. If the event of a default of Foothill or Loeb and not cured within the period of time specified, City may, subject to any specific provision regarding remedies herein, (i) suspend any counter-performance due hereunder; (ii) terminate or amend this Agreement pursuant to NRS 278.0205; and/or (iii) bring an action for damages or injunctive relief; or (iv) pursue any other remedy specifically provided in this Agreement or afforded by law.

2. If City terminates or unilaterally amends this agreement under NRS 278.0205, it shall follow the notice and procedural requirements set in NRS 278.0205.2 and the decision to amend or terminate shall be subject to judicial review following substantially the same procedures and standards set forth in NRS chapter 233B except that the following types of evidence may be introduced before the court: (i) offers of proof or proposed evidence offered by Foothills and either rejected or disallowed by the City Council, and (ii) newly discovered or acquired evidence of which became known to the offering party after the hearing before the City Council.

¶4.08.B. Remedies by Foothill or Loeb In the event of a default by City which is not cured within the time specified, Foothills or Loeb may, subject to any specific provision regarding remedies herein, (i) suspend any counter performance due hereunder, (ii) terminate this Agreement; (iii) bring an action for damages or injunctive relief; or (iv) pursue any other remedy specifically provided in this agreement or by law.

¶4.08.C. Remedies cumulative. All remedies stated in this agreement are cumulative with each other and with any remedy afforded in law or equity. The election of any remedy does not constitute a waiver of any other remedy.

§4.09 **Waivers.** Any forbearance, inaction, or failure to promptly pursue any remedy (whether intentional or negligent) shall not be deemed a waiver of any default or remedy. Waivers must be expressed in writing signed by the waiving party, and a waiver of a default is limited to the specific default identified in the written waiver and does not constitute a course of dealing or implication that similar defaults will be waived in the future.

Art 5 GENERAL TERMS.

§5.01 **Representations and warranties of Foothills and Loeb.**

¶5.01.A. To induce the other parties to enter into and perform this Agreement, Foothills and Loeb each presently and continuously represents warrants and agrees as follows.

1. That it is duly organized and in good standing as a limited liability company in the state of Nevada, and has made all registrations, paid all fees and obtained all licenses and permits to transact business in the State of Nevada and the City of Sparks.

2. To the best of its knowledge, there are no suits, other proceedings or investigations pending or threatened against it that it reasonably believes would prevent it from performing its duties and obligations hereunder or would have a material adverse effect on the its financial condition.

3. That neither it nor any individual performing any duties under this agreement has been convicted of a crime or has had a civil judgment entered against him involving dishonesty, fraud, embezzlement, obtaining money under false pretenses, misrepresentation, or theft.

4. That it and all its officers, agents and contractors will comply with all federal, state and local statutes, ordinances and regulations governing it and its conduct hereunder.

5. That it is adequately covered by insurance (including general liability, property damage, workman's compensation, and auto) for all activities it performs under this agreement (including those performed in the City).

6. That all required limited liability company and corporate actions have been taken to approve this agreement, that the person signing this agreement has actual authority to execute it and bind the corporation; that this agreement is binding on the company.

7. That it has the full power and authority to enter into this agreement and fully perform all of its requirements, and the execution of and performance under this agreement does not constitute a violation, breach or default under any company restriction, agreement, indenture, decree, or order to which it is bound.

8. That neither the company nor any material part of its assets is involved in any bankruptcy or decedent's estate or trust enforcement proceeding which, if decided adversely, would affect the company's ability to enter into or perform this agreement.

§5.02 Warranties and representations of City.

§5.02.A. City warrants, represents and agrees:

1. City is duly organized and validly existing as a municipal corporation.

2. That this agreement has been duly approved and executed by an authorized agent and is enforceable in accordance with its terms, and, to the best of its

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knowledge, the execution and delivery hereof shall not, with due notice or the passage of time, constitute a default under or violate the terms of any indenture, agreement or other instrument to which City is a party.

§5.03 No conflicts of interest; hiring of employees and affiliates

¶5.03.A. For the purposes of inducing City to enter into this Agreement and to consummate the transactions contemplated hereby, Loeb and Foothills hereby represents, warrants and agrees as of the date hereof, and continuously throughout the term of this agreement and for one year after the expiration or termination of this agreement, that except as specifically disclosed to and approved in writing by the City Council, no City Affiliate (i) now is or will be permitted to become a member of the limited liability company; (ii) now has or will be permitted to have any contractual relationship with the limited liability company; (iii) now has or will have any direct or indirect interest in this agreement; (iv) has been paid or given and will not be paid or given any money or other consideration in connection with this agreement; (v) now has or will be permitted to have any interest in either the Wingfield Springs Development or the Foothills Development.

¶5.03.B. Foothills and Loeb each agree not to employ on a full time basis any City Affiliate for a period of one year following the expiration or termination of employment with the City, except as approved by the City Council.

¶5.03.C For purposes of this section, a "City Affiliate" is any employee or officer of the City (including elected officials), any consultant who has provided advice to the City with respect to feasibility or advisability of this agreement, and any person related within the second degree of consanguinity to any such employee, officer or consultant.

§5.04 Non-liability of individual officers or employees of parties

No member, official or employee of any party shall be personally liable to any other party, or any successor in interest, in the event of any default or breach by a party, or for any amount which may become due to a party or its successor, or on any obligation under the terms of this agreement, except (i) if the officer commits fraud or misrepresentation or a criminal act outside the scope of employment, or (ii) as provided under the laws of Nevada relating to limited liability companies.

§5.05 Indemnifications

¶5.05.A. By Foothills and Loeb. To the fullest extent permitted by law, Foothills and Loeb shall indemnify, hold harmless and defend the indemnified parties from and against all liability arising out of actions taken in the administration of this agreement and caused in whole or in part by an act or omission of Foothills or Loeb or a related party. "Indemnified parties" includes the other parties to this agreement and their related parties. "Arising out of actions taken in the administration of this agreement"

means the performance of any task or responsibility contemplated under this agreement including any travel or site visits.

¶5.05.B. By City To the fullest extent provided by law, and subject to the conditions, limitations and immunities contained in NRS 41.0305 through NRS 41.039, as amended from time to time, City shall indemnify, hold harmless and defend the indemnified parties from and against all liability arising out of the administration of this agreement and caused in whole or in part by an act or omission of City or a related party. "Indemnified parties" includes the Foothills and Loeb and their related parties. "Arising out of the administration of this agreement" includes any travel or site visits, but does not include any legislative or administrative acts of discretion by City or a related party in connection with the exercise of police powers or regulatory powers over land use planning unless such exercise is in breach of this agreement.

¶5.05.C. Definitions. "Liability" includes all claims, actions, damages, losses, judgments, injuries, costs and expenses, including but not limited to attorneys' fees and costs, including those related to bodily injury, sickness, disease or death or to injury to or destruction of tangible property (other than the work itself), including the loss of use resulting therefrom. "An act or omission" includes any act, negligence, or omission. A "related party" includes all officers, employees, agents, contractors and subcontractors of the party who are acting within the scope of their assigned and lawful duties, as well as anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable.

¶5.05.D. Limitations and Conditions. The current laws of Nevada limiting liability due to the comparative or contributory negligence shall apply. The obligations of each indemnifying party hereunder shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity which would otherwise exist as to any party or person described in this section. The indemnification shall not be diminished or limited in any way to the total limits of insurance required in this contract or otherwise available to the indemnifying party. If the liability is asserted by an employee of an indemnifying party, the indemnification herein is not limited to damages, compensation or benefits payable by or for the indemnifying party under worker's compensation acts, disability benefit acts or other employee benefit acts. Each indemnifying party shall be permitted to participate, if it chooses, in the defense of any action claiming liability, even if the indemnified party is indemnified hereunder. Either party may set off any of its rights under this subsection against any consideration it provides under this agreement. The obligations to indemnify and save harmless herein survive the expiration or termination of this Agreement with respect to any act or omission which occurred before expiration or early termination.

§5.06 Immunity for computer date errors. As required by NRS 41.0321 (2), notwithstanding any provision in this Agreement to the contrary, City shall be immune from any liability for breach of contract that is caused by an incorrect date being produced, calculated or generated by a computer or other information system that is owned by City regardless of the cause of the error.

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§5.07 **Discretion of City.** The Planning Commission and City Council are public bodies and their decisions are legislative, administrative or quasi-judicial and are subject to public hearings and input, and City, except as otherwise provided herein, shall have sole and absolute discretion to approve or disapprove any matter submitted to it for any reason.

§5.08 **Notices; when deemed sufficiently given**

¶5.08.A. Formal notices, demands and communications between the parties must be in writing and must be sent to the addresses or facsimile numbers stated in Article 1 above, or to any address or number subsequently communicated to the sending party in writing, and copies must also be delivered to:

For notices to City:

Office of the City Attorney
431 Prater Way
Sparks, Nevada 89432-0857
Fax (775) 353-1688

For notices to Foothills:

No additional notice requirements.

For notices to Loeb:

No additional notice requirements.

¶5.08.B Notices to successors shall be made either to the addresses on file with City or to the resident agents on record with the Nevada Secretary of State.

¶5.08.C. If notice is sent by regular mail to the correct address, it will be deemed sufficiently given only when actually received by the correct addressee.

¶5.08.D. If notice is sent by registered or certified mail to the correct address, postage prepaid, it will be deemed sufficiently given when actually received by the addressee or three business days after it is received by the U.S. Post Office as indicated on the receipt, whichever is earlier.

¶5.08.E If notice is sent by courier, or overnight delivery service (Federal Express, UPS Overnight, U.S. Postal Priority Mail), it will be deemed sufficiently given when delivered to the address as indicated in the records of the courier or service.

¶5.08.F. If notice is sent by facsimile, properly addressed to the addressee specified in Article 1 and is actually sent to the correct facsimile number, it will be

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deemed sufficiently given when receipt is confirmed by either the receiving or sending facsimile machine, provided that the confirmation is in writing and sufficiently identifies the document, and indicates the time and date that the document was received by the receiving facsimile machine. Any facsimile received on a weekend, holiday or after 5:00 p.m. on a business day shall be deemed to have been received on the next business day.

§5.09 Further documents Each party agrees to honor any reasonable requests by the other party to complete, execute and deliver any document necessary to accomplish the purposes hereof at the expense of the requesting party.

§5.10 Approvals not to be unreasonably withheld Unless otherwise specified (such as with the words "sole discretion") wherever this Agreement requires the approval of a party, or any of a party's officers, agents or employees, such approval shall not be unreasonably withheld.

§5.11 Attorney's fees & costs If any party hereto institutes any action or proceeding (including arbitration, if authorized, or litigation) against the other or others arising out of or relating to this Agreement, attorney's fees and costs may be awarded to the prevailing party, as determined by or otherwise allocated at the discretion of the Court.

§5.12 Time of Essence; days and time when performance due; effect of obligations that become due on nonbusiness days. Time is of the essence in the performance of this Agreement. Unless otherwise specified, the term "days" means calendar days. If a deadline falls on a weekend, holiday or day when the recipient of performance is not open for business, then performance is due on the first business day of the recipient thereafter. Unless otherwise specified, performance is due by the later of 5 p.m. local time or close of business of the recipient on the day it is due.

§5.13 Applicable law; jurisdiction and venue. The laws of the State of Nevada, without regard to conflicts of law principles, shall govern the interpretation and enforcement of this Agreement. All actions brought to enforce this Agreement shall be brought in either the United States District Court for the District of Nevada located in Reno, Nevada, or the Second Judicial District Court for the State of Nevada in and for Washoe County.

§5.14 Severability

§5.14.A. Each term and provision of this agreement shall be valid and shall be enforced to the extent permitted by law, taking into account permissible waivers or provisions which may be upon agreement of the parties. If any term or provision of this agreement or the application thereof shall be deemed by a court of competent jurisdiction to be in violation of law or public policy, then it shall be deemed modified, ipso facto, to bring it within the limits of validity or enforceability, but if it cannot be so modified, then it shall be excised from this agreement and the remainder of this agreement, or the application of such term or provision to circumstances other than those to which it is

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invalid or unenforceable, shall not be affected.

¶5.14.B To prevent windfall or unintended consideration, if any term or provision of this agreement is deemed invalid or unenforceable or enforceable only to a limited extent, the parties agree to negotiate in good faith to adjust any counter-performance, condition, or corresponding consideration.

§5.15 Construction of Agreement.

¶5.15.A Titles and headlines of this agreement are intended for editorial convenience and are not to be construed as a part of this agreement.

¶5.15.B The word "include" or "including" is not intended as a limitation and shall be construed to include the words "but not limited to."

¶5.15.C Any reference to the masculine genders includes, where appropriate in the context, the feminine gender. Any term in the singular includes, where appropriate in the context, the plural.

¶5.15.D The parties hereto were each advised by counsel in drafting and negotiating this agreement, and both parties contributed to its contents. No presumptions against or in favor of either party are appropriate based on who drafted this agreement or any provision herein.

§5.16 Modifications and Amendments. This agreement may be modified or amended only by a writing signed by an authorized agent of the party to be bound by the modification or amendment. All modifications and amendments must be approved by the City Council following the procedures established by law.

§5.17 Authority to execute. Each person who signs this Agreement below warrants and represents that he or she has the legal capacity to enter into this agreement and if signing in a representative capacity, has the actual authority to bind the principal for which he or she signs and that his or her signature has the effect of binding the principal.

§5.18 Entire Agreement; Attachments; recording

¶5.18.A This Agreement (together with attachments and documents incorporated by reference) integrates all of the terms and conditions mentioned herein or incidental hereto, and supersedes all negotiations or previous agreements between the parties with respect to all or any part of the subject matter hereof.

¶5.18.B All attachments hereto and/or referred to in this Agreement are incorporated herein as though set forth in full.

CITY OF SPARKS
OFFICE OF THE CITY CLERK Exhibit A: Development Property Description

OCT 29 2003

Exhibit B: Sample Residential Construction Tax Agreement

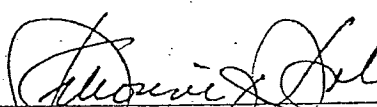
¶5.18.C This agreement shall be recorded in its entirety together with the ordinance approving it and the Foothills Handbook.

EXECUTED on the dates indicated but with the effective date indicated above.

City
City of Sparks, Nevada, a municipal corporation.

By  Date 11-24-03
Tony Armstrong, Mayor

Attest

By  Date 11-24-03
Deborah J. Dolan, City Clerk

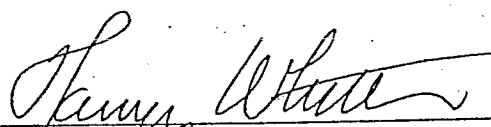


Approved

 Date 11-21-03
Chester Adams, City Attorney

Foothills

Foothills at Wingfield, LLC, a Nevada limited liability company

By  Date 11-24-03
Harvey Whittermore, Manager

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Loeb

Loeb Enterprises, LLC, a Nevada limited liability company

By J. L. (Skylo) Dangler, manager
JL (Skylo) Dangler, Manager

Date 11-24-03

State of Nevada)

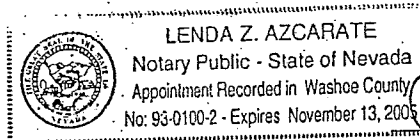
)

Acknowledgement in representative capacity

County of Washoe)

(NRS 240.1665)

This instrument was acknowledged before me on NOVEMBER 24, 2003
by HARVEY WHITEMORE as MANAGER
of FOOTHILLS AT WINGFIELD.



Lenda Z. Azcarate
Notary Public

State of Nevada)

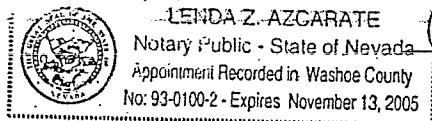
)

Acknowledgement in representative capacity

County of Washoe)

(NRS 240.1665)

This instrument was acknowledged before me on NOVEMBER 24, 2003
by J. L. (SKYLO) DANGLER as MANAGER
of LOEB ENTERPRISES, LLC.



Lenda Z. Azcarate
Notary Public

CITY OF SPARKS
OFFICE OF THE CITY CLERK

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State of Nevada)
County of Washoe)

This instrument was acknowledged before me on NOVEMBER 24, 2003
by TONY ARMSTRONG & DEBORINE J. DOLAN as MAYOR & CITY CLERK
of CITY OF SPARKS.



State of Nevada)
)
County of Washoe)

This instrument was acknowledged before me on _____
by _____ as _____
of _____.

Notary Public

OCT 29 2003



Land Information Solutions

TRI STATE SURVEYING, LTD.

1925 E. Prater Way
Sparks, Nevada 89434

Telephone (775) 358-9491 ♦ FAX (775) 358-3664
Toll Free: 1-800-411-3752

THE FOOTHILLS AT WINGFIELD PARCEL DESCRIPTION

All that certain parcel of land situate within portions of Sections 6 and 7, Township 20 North, Range 21 East, M.D.M., Washoe County, State of Nevada, being all of Parcels 1, 2, 3 and 4 as shown and so designated on Parcel Map No. 4082, File No. 2918994 in the Official Records of Washoe County, Nevada and being more particularly described as follows:

BEGINNING at the Northwest corner of said Section 6;

THENCE from the POINT OF BEGINNING, along the northerly line of said Section 6, South $89^{\circ}25'21''$ East, 872.59 feet;

THENCE, departing said northerly line, South $00^{\circ}36'38''$ West, 252.00 feet;

THENCE, South $89^{\circ}21'39''$ East, 80.00 feet;

THENCE South $00^{\circ}36'38''$ West, 1152.53 feet;

THENCE North $89^{\circ}21'38''$ West, 80.00 feet;

THENCE South $00^{\circ}36'38''$ West, 927.25 feet;

THENCE South $32^{\circ}56'24''$ East, 226.08 feet;

THENCE South $57^{\circ}03'36''$ West, 57.69 feet;

THENCE South $32^{\circ}56'24''$ East, 510.00 feet;

THENCE North $57^{\circ}03'36''$ East, 237.00 feet;

THENCE North $68^{\circ}33'47''$ East, 339.80 feet;

THENCE South $00^{\circ}38'15''$ West, 846.77 feet;

THENCE South 89°14'13" East, 1318.96 feet;

THENCE South 00°41'54" West, 1320.24 feet to the section line common to Sections 6 and 7;

THENCE along said section line, South 89°19'19" East, 1317.62 feet to the Northeast corner of said Section 7;

THENCE along the easterly line of said Section 7, South 00°40'47" West, 2631.06 feet;

THENCE continuing along said easterly line, South 00°41'04" West, 2635.95 feet to the southeast corner;

THENCE along the southerly line of said Section 7, North 89°23'56" West, 2641.66 feet;

THENCE continuing along said southerly line, North 89°20'14" West, 1712.72 feet to the southwest corner;

THENCE along the westerly line of said Section 7, North 01°34'45" East, 2198.68 feet;

THENCE continuing along said westerly line, North 00°34'30" West, 2413.79 feet;

THENCE departing said westerly line, South 89°18'57" East, 1328.98 feet;

THENCE North 00°34'30" West, distance of 660.00 feet;

THENCE North 89°18'57" West, 1320.00 feet to a point on the westerly line of the above-mentioned Section 6;

THENCE along said westerly line, North 00°39'28" East, 2237.10 feet;

THENCE continuing along said westerly line, North 00°34'54" East, 1614.59 feet;

THENCE departing said west line, North 82°31'38" East, 50.50 feet;

THENCE North 00°34'54" East, 86.84 feet;

THENCE North 89°04'08" West, 50.00 feet;

THENCE North 00°34'54" East, 938.62 feet to the POINT OF BEGINNING.

Said Parcel as described above contains 688.03 acres, more or less.

EXCEPTING THEREFROM the following describe portion of land:

COMMENCING at the Southwest quarter of the above-mentioned Section 6;

THENCE along the westerly line of said Section 6, North $0^{\circ}39'28''$ East, 1613.00 feet;

THENCE departing said westerly line, North $89^{\circ}20'32''$ East, 335.76 feet to the POINT OF BEGINNING;

THENCE from the POINT OF BEGINNING North $0^{\circ}05'57''$ West, 50.15 feet;

THENCE North $90^{\circ}00'00''$ East, 83.33 feet;

THENCE South $0^{\circ}05'57''$ East, 83.00 feet;

THENCE North $90^{\circ}00'00''$ West, 83.33 feet;

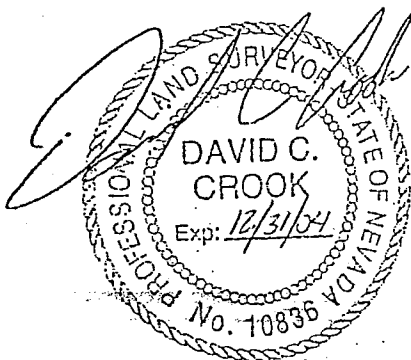
THENCE North $0^{\circ}05'57''$ West, 32.85 feet to the POINT OF BEGINNING.

Said Exception Parcel as described above contains 6916 square feet, more or less.

The Foothills at Wingfield contains 687.87 acres, more or less.

The BASIS OF BEARINGS for this description is identical to Parcel Map No. 4082, File No. 2918994 in the Official Records of Washoe County, Nevada.

Prepared by Tri State Surveying, Ltd.



10/9/03
David C. Crook, P.L.S.
Nevada Certificate No. 10836

CITY OF SPARKS
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LINE	BEARING	DISTANCE
T1	S89°25'21"W	872.59'
T2	N00°36'38"W	252.00'
T3	S89°21'39"W	80.00'
T4	S89°21'39"E	80.00'
T5	N32°56'24"W	226.08'
T6	N57°03'36"E	57.69'
T7	N32°56'24"W	510.00'
T8	S57°03'36"W	237.00'
T9	S86°33'47"W	339.80'
T10	N82°31'38"E	50.50'
T11	N00°34'54"E	86.84'
T12	S89°04'08"W	50.00'
T13	S89°20'32"E	335.76'
T14	N00°40'07"E	415.52'
T15	N00°34'30"W	246.38'

LINE	BEARING	DISTANCE
T1	S89°25'21"W	872.59'
T2	N00°36'38"W	252.00'
T3	S89°21'39"W	80.00'
T4	S89°21'39"E	80.00'
T5	N32°56'24"W	226.08'
T6	N57°03'36"E	57.69'
T7	N32°56'24"W	510.00'
T8	S57°03'36"W	237.00'
T9	S86°33'47"W	339.80'
T10	N82°31'38"E	50.50'
T11	N00°34'54"E	86.84'
T12	S89°04'08"W	50.00'
T13	S89°20'32"E	335.76'
T14	N00°40'07"E	415.52'
T15	N00°34'30"W	246.38'

TRI STATE SURVEYING, LTD
1925 E. PRATER WAY
SPARKS, NEVADA 89434
(775) 358-9491 FAX # 358-3664

DRAWN BY OCC
CHECKED BY GGL DATE 10/9/03

CITY OF SPARKS
OFFICE OF THE CITY CLERK

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(Rev 10/22/03)

RESIDENTIAL CONSTRUCTION TAX CREDIT AGREEMENT

(Foothills at Wingfield Project)

Dated as of November 24, 2003

Art. 1 PARTIES, RECITALS DEFINITIONS.

§1.01 Parties. This agreement is by and between:

Developer Foothills at Wingfield, LLC
 A Nevada limited liability company
 6295 Wingfield Springs Road
 Sparks, Nevada 89436
 ATTN: Harvey Whittemore

City City of Sparks, Nevada
 A municipal corporation
 432 Prater Way
 P.O. Box 857
 Sparks, Nevada 89432-0857

§1.02 Recitals (capitalized terms are defined below)

A. Developer is planning to develop the Foothills Development, a planned unit development, which, if built as provided in the Foothills Handbook, may include the construction of 2,260 residential dwelling units (including multifamily, cluster and cottage units) which will be serviced by four neighborhood parks to be constructed by Developer.

B. Under NRS 278.2983 the City Council of City may, by ordinance, impose a residential construction tax, and on December 26, 1995, the City Council enacted Ordinance 1886 imposing such a tax on the privilege of constructing apartment houses and residential dwelling units and developing mobile home lots within the City of Sparks. The purpose of the tax is to raise revenue to enable the City to provide neighborhood parks and facilities for parks which are required by the residents of the apartment houses, mobile homes and residences. Under NRS 278.4985 and Ordinance 1886, the residential construction tax applies to planned unite developments such as Foothills.

C. Under SMC 15.12.0040 and 15.12.0060, the City Council may allow a credit against the amount of the residential construction tax for the amount and value of open space or neighborhood parks constructed by developers and dedicated to the City under conditions stated therein.

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D. Developer desires to construct four neighborhood parks, as indicated below, and City desires to provide credits against the residential construction tax if the parks are built and dedicated to the City's satisfaction.

NOW THEREFORE, the parties agree as follows.

§1.03 **Definitions.** The following definitions apply to this agreement.

Administrative Guidelines means the "Administrative Guidelines for Credit Against Residential Construction Tax Planned Unit Development in the City of Sparks" adopted by Resolution 1809 on November 13, 1984.

City Council means the City Council of the City of Sparks, Nevada.

Development means the Foothills at Wingfield Planned Development as defined below.

Foothills Handbook means the Foothills at Wingfield Development Standards Handbook as approved by the Planning Commission and City Council for the City of Sparks and subsequently recorded in the Official Records of Washoe County.

Parks Director means the Director of Parks and Recreation for the City of Sparks, or city official who has been appointed to administer the city's parks.

Residential Construction Tax means the residential construction tax imposed by Ordinance 1866 as authorized by NRS 278.4983 and 278.4985 as amended.

Art. 2 PARKS TO BE CONSTRUCTED; TAX CREDITS AUTHORIZED.

§2.01 **Construction Schedule, maximum amount of tax credits.** Developer agrees, at its own expense and risk, to start and complete construction on and convey the neighborhood parks as indicated below, and if all of the terms and conditions herein have been met, City agrees to award tax credits for the lesser of (i) the actual value of the land and improvements dedicated to the City, or (ii) the following amounts:

Park	Construction start *	Construction completion*	Size	Maximum amount of credit
I	583 building permits	6 months	2.24 acres	\$530,000
II	1,292 building permits	6 months	2.73 acres	\$645,000
III	1,709 building permits	6 months	1.60 acres	\$380,000
IV	2,000 building permits	6 months	2.10 acres	\$500,750

* Construction on the park must start immediately following the issuance of the indicated number of building permits in the Development, and must be completed within the time frame under "Construction Completion."

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§2.02 Credit Adjustments; provisional credits.

¶2.02.A Adjustments. Credits are subject to audit and change. Once the park design and specifications have been reviewed and approved by the Parks Director, either party may request new appraisals or cost estimates for the capital improvements to said park site and amend this agreement to adjust the tax credits accordingly.

¶2.02.B Provisional Credits. So long as Developer is not in default under this Agreement, and subject to a requirement that completion bonds be posted, if Developer has actually started construction on a park, the Developer may claim residential construction tax credits in the amount specified above for that park against building permit fees, it being understood that such credits are provisional and may be revoked if Developer subsequently defaults under this Agreement. If provisional credits are revoked, Developer must pay to the City in cash the amount of the provisional credits.

¶2.02.C Final Adjustment; cap. At the final dedication and conveyance of the park Developer shall submit all appraisals and invoices to determine the actual value of the land and cost of the improvements. Tax credits shall be adjusted to reflect that final value and cost, up to but not to exceed the maximum amount stated in ¶2.01 above. If the actual value and costs exceeds provisional credits already issued, Developer agrees to reimburse the difference to the City in cash within 30 days from demand.

¶2.02.D Credit book; transfer of credits. A credit book shall be established and maintained and kept in the possession of Developer, but all entries must be approved by the City in order to be effective. Credits are transferable provided that the transferee assumes all responsibilities under this agreement with respect to the park for which the credits are being transferred, and both Developer and transferee execute documentation satisfactory to the City.

§2.03 Construction requirements.

¶2.03.A Location and size. The parks shall be built in the locations specified in the Foothills Handbook and shall be the size as specified above or as otherwise approved, in sole discretion, by the Parks Director, which approval may involve an adjustment to the maximum credit amount.

¶2.03.B Prior approvals; changes and assignments. Prior to commencement of construction of each facility, Developer shall submit detailed plans and specifications submit for approval by the Parks Director.

¶2.03.C Completion and payment bonds. If provisional credits are used, or if progress payments are authorized, the Parks Director may require the posting of completion and a payment bonds (or a builder control arrangement in lieu of a payment bond) before the before construction starts.

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¶2.03.D Pursuit of construction; change orders; risks.

1. Developer agrees to commence and complete construction in accordance with the schedule above or as otherwise approved by the Parks Director. Developer agrees to diligently pursue construction at all times, and if construction is commenced and then stops for more than 120 days, City may declare a default as provided below. Developer agrees to confer with the Parks Director from time to time regarding the progress being made so that the Parks Director may plan accordingly.

2. Developer assumes all risks associated with cost overruns and change orders, neither of which need be approved by the Parks Director, it being understood that Developer shall construct the park in accordance with the plans approved by the Parks Director.

3. All risks of loss or destruction of work or facilities in progress shall be borne by Developer.

¶2.03.E Inspections; final inspection; lien releases; warranties; final amounts of credits or reimbursement, transfer of ownership.

1. Developer agrees that City may periodically inspect the construction of the improvements.

2. Upon completion of construction, Developer shall offer the improvements for final inspection by the Parks Director and to complete all "punch list" items reasonably required by the Parks Director.

3. Upon completion of the "punch list," Developer shall submit proof of the actual costs of construction and the Parks Director shall determine a final payment amount for the improvement which shall not exceed the amount specified above.

4. Prior to the award of final credits, Developer shall grant or arrange for a one year warranty regarding covering all park improvements to the satisfaction of the Parks Director.

5. Prior to the award of final credits Developer shall furnish lien releases from all subcontractors, laborers, and materialmen who supplied equipment or materials to the project.

6. Prior to final payment or award of final credits, Developer shall deliver all deeds, bills of sale, maps or other documents (including a Grant, Bargain and Sale Deed) conveying title to the improvements to City. Developer shall deliver to City all drawings, blueprints, plans and specifications which shall become the property of the City.

CITY OF SPARKS
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¶ 2.03.F Construction standards, practices and indemnification.

1. Developer warrants, represents and agrees that all improvements constructed by Developer hereunder (i) shall be built in accordance with plans and specifications approved by the Parks Director, and in accordance with the standards and specifications in the Orange Book in effect at the time of construction, (ii) shall be built in compliance with Applicable Law, (iii) shall be constructed in a workmanlike manner, (iv) shall be built with new materials (unless otherwise agreed) which shall be free from faults and defects, and (v) shall be free from the release of hazardous substances as defined NRS 40.504 and 40.505. The "Orange Book" means the latest edition of the "Standard Specifications for Public Works Construction" sponsored and distributed by the Regional Transportation Commission in conjunction with the City and other local government entities.

2. Developer shall follow best management practices regarding the management of the staging, storage and work sites and shall at all times keep the premises free from accumulation of waste materials, and at the completion of the work shall remove all waste materials, rubbish, tools, supplies and equipment.

3. To the fullest extent permitted by law, Developer shall indemnify, hold harmless and defend the indemnified parties from and against all liability arising out of or resulting from the work and caused in whole or in part by an act or omission of Developer or a related party. "Indemnified parties" includes the City, its officers, employees, agents and contractors. "Liability" includes all claims, actions, damages, losses, judgments, injuries, costs and expenses, including but not limited to attorneys' fees and costs, including those related to bodily injury, sickness, disease or death or to injury to or destruction of tangible property (other than the work itself), including the loss of use resulting therefrom. "Arising out of the work" includes all construction activities for all improvements constructed by Developer or a related party. "An act or omission" includes any act, negligence, or omission. "Of Developer or a related party" includes Developer and all officers (including managers and members), employees, agents, contractors, subcontractors and suppliers of Developer, including but not limited to the manufacturers and distributors of equipment installed in the parks, as well as anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable. The obligations of Developer hereunder shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity which would otherwise exist as to any party or person described in this section. The indemnification shall not be diminished or limited in any way to the total limits of insurance required in this contract or otherwise available to Owner or subcontractors. If the liability is asserted by an employee of Developer or a related party, the indemnification herein is not limited to damages, compensation or benefits payable by or for the Developer or related party under worker's compensation acts, disability benefit acts or other employee benefit acts. City shall be permitted to participate, if it chooses, in the defense of any action claiming liability, even if City is indemnified hereunder. City may set off any of its rights under

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¶2.03.H Public Works requirements. Due to the nature of the financing and other circumstances, the parties do not contemplate that the work constitutes a public work under NRS Chapter 338, but in the event that any portion of the work is determined to be a public works project or is otherwise covered by NRS Chapter 338, this Agreement may be cancelled by either party. If it is not cancelled, Owner agrees to comply with all applicable provisions of NRS Chapter 338, including, but not limited to, paying prevailing wages, and following employment practices prescribed therein.

¶2.03.I No agency, partnership or joint venture. It is specifically understood and agreed to by and between the parties that (i) the any improvements made hereunder are private and the city has no interest in or responsibilities for, or due to, third parties concerning any improvements until such time, and only until such time, that City accepts the dedication of such improvements in accordance with Nevada law, (ii) Developer shall have full power over and exclusive control over them, and (iii) City and Developer hereby renounce the existence of any form of agency relationship, joint venture, partnership or other co-relationship and agree that nothing contained herein or in any document executed in connection herewith shall be construed as creating any such relationship between City and Developer.

§2.04 Dedication requirements, water rights.

¶2.04.A Water rights included in Dedication; adjustments to credits. Unless otherwise agreed in writing, in addition to deeding the land for the neighborhood park, Developer must deed to the City sufficient water rights to operate the neighborhood park as it is built. The cost of water rights has been included in the maximum amount specified above. If the actual cost of water rights exceeds the estimated amount, additional tax credits shall be awarded.

¶2.04.B Maintenance of Park until dedication accepted. Developer shall maintain the neighborhood park in good order until it is dedicated and the dedication is accepted by the City.

¶2.04.B Preliminary Title Report. Prior to the award of final credits Developer shall provide a preliminary title report furnished by a title company satisfactory to the Parks Director, who shall review the title report and determine the "permitted exceptions" acceptable to the City.

¶2.04.C Included in deed. Unless specifically excluded and the exclusion is approved by the Parks Director in its sole discretion, the deed shall include all tenements, hereditaments, and appurtenances (including water rights, permits and mineral rights) belonging to such property or in any way pertaining, and all improvements, buildings, and fixtures thereon.

¶2.04.D. Warranties, representations, agreements. With the delivery of the deed, Developer warrants and represents to City:

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1. That, except as disclosed in the Preliminary Title Report approved by City, Developer holds good and marketable title to the property in fee simple without encumbrances, liens, restrictions, covenants, conditions, rights of redemption, or other title exceptions. There are no leases or tenants or persons occupying the property. There are no boundary disputes involving or encroachments upon or by any adjacent properties.

2. That Developer deeds the property free and clear of all liens (including but not limited to mechanics liens), encumbrances, and conditions except for the permitted exceptions approved by City.

3. That Developer has the authority to deed the property and has obtained all approvals and consents and all required parties have joined in the instrument dedicating the property under (i) Developer's enabling documents (corporate charter, partnership agreement, operating agreement or the like), (ii) Nevada's community property laws, (iii) any court order, contract, trust agreement, or regulatory requirement binding on Owner, and (iii) the laws of Nevada and the state in which Developer has its principal office.

4. That to the best of Developer's knowledge, there is no existing or pending litigation regarding the condition or ownership of the property, and there are no claims, no condemnations or sales in lieu thereof, no foreclosures or deeds in lieu of foreclosure, and no environmental or health regulatory actions in progress involving the property dedicated, nor, to the knowledge of Developer, nor has any such action, suit, proceeding or claim been threatened.

5. That Developer is not a debtor under any bankruptcy law and the property is not part of any bankruptcy estate.

6. That Developer has complied with all Environmental Laws with respect to the property and has not, and has no knowledge of any release of any Hazardous Substance on or about the property. Except as otherwise disclosed, Developer has no knowledge that the property contains an underground storage tank. "Environmental Laws" means all city or county ordinances, all federal or state statutes relating to the protection of health, safety and the indoor and outdoor environment; the conservation, management or use of natural resources and wildlife; the protection or use of surface water or ground water; or the management, manufacture, possession, presence, use generation, transportation, treatment of Hazardous Substances, including but not limited to laws identified in NRS 40.504 as those laws are amended from time to time. "Hazardous Substance" has the meaning set out in NRS 40.504 as now existing or hereafter amended, and includes, without limitation, asbestos, polychlorinated biphenyls and petroleum. "Release" has the meaning ascribed in NRS 40.505.

7. That Developer has no actual knowledge of any dangerous or hazardous condition of the property which may cause damage or harm to persons using it in accordance with the purposes of the dedication, or which may frustrate the purposes of using the property as a public park except as disclosed to City prior to the deed.

8. That the property currently has direct and unimpeded access to a public street.

9. That Developer has paid all taxes and assessments (including special assessments and assessments by common interest communities) which are or may become liens on the Property as they have become due, and has not received any notices from any taxing or assessment authority that taxes or assessments have not been paid.

10. That Developer agrees to hold harmless, defend (at Developer's expense) and indemnify City from all liability or loss of title or property rights arising out of the breach of any of the foregoing.

§2.05 Compliance with Administrative Guidelines; Appeals of decisions of Parks Director.

¶2.05.A Compliance with Guidelines. The award and use of residential construction tax credits shall be in accordance with the Administrative Guidelines, except that if a provision in the Administrative Guidelines directly conflicts with an express provision herein, the express provision herein shall control.

¶2.05.B Project Eligibility. City agrees that the "Eligibility" and "Project Evaluation" requirements of the Administrative Guidelines have been met.

¶2.05.C Appeals to Parks and Recreation Commission. All decisions of the Parks Director are subject to appeal to the Parks and Recreation Commission in accordance with this procedure. Developer shall submit a written request to the Parks Director to appeal a decision within ten calendar days after the decision was communicated to Developer. The Parks Director shall place the appeal on the agenda for the next regularly scheduled meeting of the Parks and Recreation Commission for which the agenda deadline can be met. After hearing the statements and information presented by Developer and the Parks Director, and after conducting a public hearing on the matter, the Parks and Recreation Commission shall either affirm, reverse or modify the decision of the Parks Director. If the dispute involves the amount of a tax credit, the Parks and Recreation Commission may adjust the amount only based on substantial evidence as to actual costs, and may not increase the amount of the tax credits beyond the amount agreed upon in this Agreement. If the dispute involves a fee, the Parks and Recreation Commission may not negotiate or decide the fee amount except in the limited circumstance where the calculation of the fee is based on an objective standard and the Developer produces substantial evidence that the Parks Director did not correctly calculate the fee according to those standards.

¶2.05.D Appeals to City Council. All decisions of the Parks and Recreation Commission are subject to appeal to the Sparks City Council, in accordance with the Rules of the Council, provided, however, that a notice of appeal must be filed with the

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City Clerk within 18 calendar days from the date of the meeting that the decision was made.

¶2.05.E Judicial Review. Decisions of the City Council are considered to be final on the date of the meeting at which the decision was made, and are subject to judicial review in accordance with procedures set by the City Council, or if no procedures are set, then in accordance with the procedures similar to those set forth in NRS Chapter 233B.

Art 3. TERM, DEFAULT, NOTICE AND REMEDIES.

§3.01 **Expiration of this Agreement.** This agreement expires and automatically terminates on December 31, 2033.

§3.02 **Early termination.** This Agreement may be terminated before its expiration as specifically provided herein.

§3.03 **Obligations on expiration or termination; survival.**

¶3.03.A. Developer must reimburse City in cash within 30 days for all provisional credits used by Developer regarding any park which has not been completed as of the date of early termination, unless otherwise agreed.

¶3.03.B. The provisions regarding warranties and representations, indemnifications, remedies, attorneys fees, governing law and jurisdiction survive the termination of this agreement.

§3.04 **Excuse due to force majeure.**

¶3.04.A. Except as provided elsewhere herein, if a "force majeure" makes performance of an obligation or cure of a breach or default impossible, such performance or cure is excused for the duration of the force majeure provided that the obligated party (i) within a reasonable time after the commencement of the force majeure notifies the other party of the nature of the force majeure, when it commenced, why it makes performance or cure impossible, and the expected duration (if known), and (ii) agrees to and does in fact diligently pursue remediation of the effects of the force majeure, and (iii) agrees to notify the other party immediately when it becomes possible to commence efforts to cure the default.

¶3.04.B A "force majeure" is defined as (i) without the fault of and beyond the reasonable control of the obligated party, a war; insurrection; riot; flood; earthquake; fire; casualty; act of God; act of a public enemy; quarantine restriction or other effect of epidemic or disease; freight embargo; weather-caused delay; lack of transportation attributable to any of these; or a lawsuit challenging the validity or approval of this agreement if an order is entered prohibiting performance by the obligated party, and so long as the obligated party defends such lawsuit with reasonable diligence; or (ii) labor

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strikes, boycotts or picketing (unless the labor action is taken because of a violation of the prevailing wage provisions in this Agreement, if any); (iii) provided, however, that if the breach or default is the failure to pay money, the force majeure must actually prevent access to or payment from a bank account or payment mechanism, such as during a banking holiday, moratorium, or sabotage of wire or automated transfer systems. A force majeure does not include general economic or market conditions, or the financial condition of a party even if they are influenced by any of the foregoing.

¶3.04.C. A force majeure is deemed to cease for purposes of this Agreement and a party is deemed to be in breach of an obligation or cure when it becomes possible for the obligated party to commence to perform the obligation or cure.

§3.05 Default, notice and right to cure.

¶3.05. A. Default. Subject to §3.04, a default occurs when (i) any representation of a material fact expressed herein was false at the time it was made, or, if a continuing representation, becomes false as a result of a subsequent event or occurrence; (ii) any warranty made herein is breached at the time made or, if a continuing warranty, is breached as a result of a subsequent event or occurrence; (iii) any party repudiates, breaches or fails to perform any covenant, material term or provision in this Agreement; (iv) an event required to occur does not occur by the time required; (v) any party misrepresents a material fact, or omits to state a material fact, for the purpose of inducing another party to act or which is relied on by another party in deciding a course of action during the administration of this agreement; or (vi) any other event or circumstance otherwise described in this agreement as a breach or default.

¶3.05.B. Notice and right to cure.

In the event of the default, the non-defaulting party shall provide notice and the defaulting party shall have THIRTY DAYS or such other time frame agreed upon between the parties from the date that the notice is deemed given to cure the default.

§3.06 Remedies.

¶3.06.A. Remedies by City:

If the event of a default by Developer, City may (i) terminate this agreement and demand repayment of all provisional credits used by the Developer for parks which have not been completed as of the date of the termination, (ii) suspend any counter-performance due hereunder; and/or (iii) bring an action for damages or injunctive relief; or (iv) pursue any other remedy specifically provided in this Agreement or afforded by law.

¶3.06.B. Remedies by Developer. In the event of a default by City which is not cured within the time specified, Developer may (i) suspend any counter performance due hereunder, (ii) terminate this Agreement; (iii) bring an action for damages or

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injunctive relief; or (iv) pursue any other remedy specifically provided in this agreement or by law.

¶3.06.C. Remedies cumulative. All remedies stated in this agreement are cumulative with each other and with any remedy afforded in law or equity. The election of any remedy does not constitute a waiver of any other remedy.

§3.07 **Waivers.** Any forbearance, inaction, or failure to promptly pursue any remedy (whether intentional or negligent) shall not be deemed a waiver of any default or remedy. Waivers must be expressed in writing signed by the waiving party, and a waiver of a default is limited to the specific default identified in the written waiver and does not constitute a course of dealing or implication that similar defaults will be waived in the future.

Art 4. GENERAL TERMS

§4.01 **Assignment and Binding Effect.** This agreement shall be binding on and inure to the benefit of the parties, their respective successors and any assignees or delegates if the assignment or delegation is permitted and the assignee assumes all obligations under this agreement as to the property transferred to the assignee. Unless otherwise specifically identified in this agreement, there are no third party beneficiaries intended by this agreement and no third parties have any standing to enforce any of the provisions of this agreement.

§4.02 **Discretion of City.** The Planning Commission and City Council are public bodies and their decisions are legislative, administrative or quasi-judicial and are subject to public hearings and input, and City, except as otherwise provided herein, shall have sole and absolute discretion to approve or disapprove any matter submitted to it for any reason.

§4.03 **Notices; when deemed sufficiently given**

¶4.03.A. Formal notices, demands and communications between the parties must be in writing and must be sent to the addresses or facsimile numbers stated in Article 1 above, or to any address or number subsequently communicated to the sending party in writing, and copies must also be delivered to:

For notices to City:

Office of the City Attorney
431 Prater Way
Sparks, Nevada 89432-0857
Fax (775) 353-1688

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For notices to Developer:

No additional notice requirements.

¶4.03.B Notices to successors shall be made either to the addresses on file with City or to the resident agents on record with the Nevada Secretary of State.

¶4.03.C If notice is sent by regular mail to the correct address, it will be deemed sufficiently given only when actually received by the correct addressee.

¶4.03.D If notice is sent by registered or certified mail to the correct address, postage prepaid, it will be deemed sufficiently given when actually received by the addressee or three business days after it is received by the U.S. Post Office as indicated on the receipt, whichever is earlier.

¶4.03.E If notice is sent by courier, or overnight delivery service (Federal Express, UPS Overnight, U.S. Postal Priority Mail), it will be deemed sufficiently given when delivered to the address as indicated in the records of the courier or service.

¶4.03.F If notice is sent by facsimile, properly addressed to the addressee specified in Article 1 and is actually sent to the correct facsimile number, it will be deemed sufficiently given when receipt is confirmed by either the receiving or sending facsimile machine, provided that the confirmation is in writing and sufficiently identifies the document, and indicates the time and date that the document was received by the receiving facsimile machine. Any facsimile received on a weekend, holiday or after 5:00 p.m. on a business day shall be deemed to have been received on the next business day.

§4.04 **Further documents** Each party agrees to honor any reasonable requests by the other party to complete, execute and deliver any document necessary to accomplish the purposes hereof at the expense of the requesting party.

§4.05 **Approvals not to be unreasonably withheld** Unless otherwise specified (such as with the words "sole discretion") wherever this Agreement requires the approval of a party, or any of a party's officers, agents or employees, such approval shall not be unreasonably withheld.

§4.06 **Attorney's fees & costs**

¶4.06.A Appeals and Judicial Review. In the event of an appeal or petition for judicial review under §2.05, each party shall bear its own attorneys fees regardless of the outcome of the proceeding. Costs, however, may be awarded as determined by the presiding judge.

¶4.06.B All other matters. Except as provided in ¶4.06.A above, if any party hereto institutes any action or proceeding (including arbitration, if authorized, or litigation) against the other or others arising out of or relating to this Agreement,

attorney's fees and costs may be awarded to the prevailing party, as determined by or otherwise allocated at the discretion of the Court.

§4.07 Timing provisions. Time is of the essence in the performance of this Agreement. Unless otherwise specified, the term "days" means calendar days. If a deadline falls on a weekend, holiday or day when the recipient of performance is not open for business, then performance is due on the first business day of the recipient thereafter. Unless otherwise specified, performance is due by the later of 5 p.m. local time or close of business of the recipient on the day it is due.

§4.08 Applicable law; jurisdiction and venue. The laws of the State of Nevada, without regard to conflicts of law principles, shall govern the interpretation and enforcement of this Agreement. All actions brought to enforce this Agreement shall be brought in either the United States District Court for the District of Nevada located in Reno, Nevada, or the Second Judicial District Court for the State of Nevada in and for Washoe County.

§4.09 Severability

¶4.09.A. Each term and provision of this agreement shall be valid and shall be enforced to the extent permitted by law, taking into account permissible waivers or provisions which may be upon agreement of the parties. If any term or provision of this agreement or the application thereof shall be deemed by a court of competent jurisdiction to be in violation of law or public policy, then it shall be deemed modified, ipso facto, to bring it within the limits of validity or enforceability, but if it cannot be so modified, then it shall be excised from this agreement and the remainder of this agreement, or the application of such term or provision to circumstances other than those to which it is invalid or unenforceable, shall not be affected.

¶4.09.B To prevent windfall or unintended consideration, if any term or provision of this agreement is deemed invalid or unenforceable or enforceable only to a limited extent, the parties agree to negotiate in good faith to adjust any counter-performance, condition, or corresponding consideration.

§4.10 Construction of Agreement.

¶4.10.A Titles and headlines of this agreement are intended for editorial convenience and are not to be construed as a part of this agreement.

¶4.10.B The word "include" or "including" is not intended as a limitation and shall be construed to include the words "but not limited to."

¶4.10.C Any reference to the masculine genders includes, where appropriate in the context, the feminine gender. Any term in the singular includes, where appropriate in the context, the plural.

¶4.10.D. The parties hereto were each advised by counsel in drafting and negotiating this agreement, and both parties contributed to its contents. No presumptions against or in favor of either party are appropriate based on who drafted this agreement or any provision herein.

§4.11 Modifications and Amendments. This agreement may be modified or amended only by a writing signed by an authorized agent of the party to be bound by the modification or amendment. All modifications and amendments must be approved by the City Council following the procedures established by law.

§4.12 Authority to execute. Each person who signs this Agreement below warrants and represents that he or she has the legal capacity to enter into this agreement and if signing in a representative capacity, has the actual authority to bind the principal for which he or she signs and that his or her signature has the effect of binding the principal.

§4.13 Entire Agreement; Attachments; recording

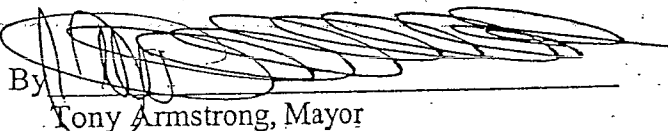
¶4.13.A This Agreement (together with attachments and documents incorporated by reference) integrates all of the terms and conditions mentioned herein or incidental hereto, and supersedes all negotiations or previous agreements between the parties with respect to all or any part of the subject matter hereof.

¶4.13.B. All attachments hereto and/or referred to in this Agreement are incorporated herein as though set forth in full.

¶4.13.C This agreement shall be recorded in its entirety together with the ordinance approving it and the Foothills Handbook.

EXECUTED on the dates indicated but with the effective date indicated above.

City
City of Sparks, Nevada, a municipal corporation.

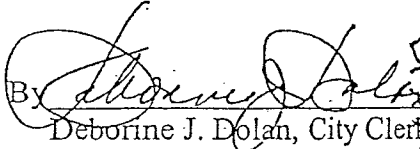
By 
Tony Armstrong, Mayor

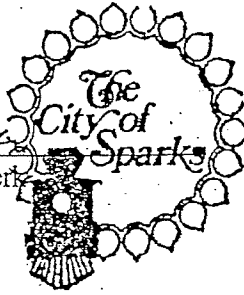
Date 11-24-03

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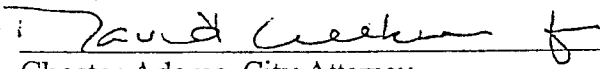
Attest

By 
Deborah J. Dolan, City Clerk



Date 11-24-03

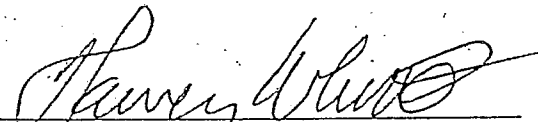
Approved


Chester Adams, City Attorney

Date 11-21-03

Developer

Foothills at Wingfield, LLC, a Nevada limited liability company

By 
Harvey Whittemore, Manager

Date 11-26-03

State of Nevada)

)

Acknowledgement in representative capacity

County of Washoe)

(NRS 240.1665)

This instrument was acknowledged before me on NOVEMBER 24, 2003
by TONY ARMSTRONG & DEBORINE J. DOLAN as MAYOR & CITY CLERK
of THE CITY OF SPARKS.



LEND A Z. AZCARATE
Notary Public - State of Nevada
Appointment Recorded in Washoe County
No. 93-0100-2 - Expires November 13, 2005


Notary Public

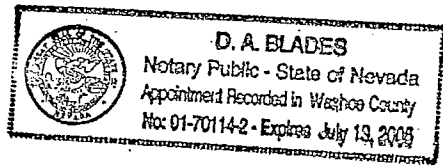
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State of Nevada)
)
County of Washoe)

Acknowledgement in representative capacity
(NRS 240.1665)

This instrument was acknowledged before me on November 26, 2003
by Henry Whittemore as Manager
of The Footfalls at Wingsfield



D. A. Blades
Notary Public

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