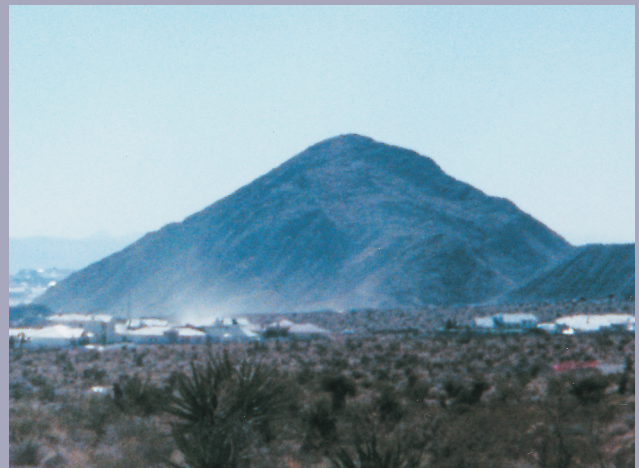


LONE MOUNTAIN WEST

MASTER DEVELOPMENT PLAN AND DESIGN STANDARDS

CITY OF LAS VEGAS



**Amended:
ORD-6020,
January 7, 2009**

**LONE MOUNTAIN
WEST
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AND DESIGN STANDARDS**

CITY OF LAS VEGAS

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**LONE MOUNTAIN WEST
MASTER DEVELOPMENT PLAN AND DESIGN STANDARDS**

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INTRODUCTION

1.1 Lone Mountain West Master Development Plan Concept

The Lone Mountain West Master Development Plan shall reflect the objectives set forth in the Planned Development (PD) District that is a Special Purpose District as adopted by the City of Las Vegas, February 5, 1997.

- 1.1.1 The intent of the Planned Development (PD) District is to permit and encourage comprehensively planned developments whose purpose is redevelopment, economic development, cultural enrichment, or to provide a single purpose or multi use planned development. The reclassification of property to the PD District may be deemed appropriate if the development proposed for the District can accomplish the goals as stated in the Ordinance mentioned above. Pedestrian access to and from residential and commercial areas is an integral component of all site plans including connection with the Northwest pedestrian systems. Essential to creating this sense of place is a commitment to the characteristics of development and design standards outlined in this document.

1.2 Purpose

The purpose of the Lone Mountain West Master Development Plan and Design Standards (or Lone Mountain West Standards) is to guide the physical development of land within the boundaries of the Plan area by:

- (a) Prescribing the land uses;
- (b) Establishing a process of development; and
- (c) Providing the criteria for project approval.

- 1.2.1 The Lone Mountain West Standards will direct the actions of all entities, participating builders, developers and individual business owners and homeowners, including their respective sub associations. The criteria contained in the document are binding on any person, or entity, which intends to construct, reconstruct or modify any permanent or temporary improvement within the Lone Mountain West Master Development Plan area. The enforcement of the Standards will ensure quality, visual continuity and consistency in design, as well as protection of property values.
- 1.2.2 The Lone Mountain West Master Plan comprises approximately 222 acres of land within an overall Planned Community District area of roughly 520 acres (see Figure 3). This Master Plan has established a comprehensive set of land uses, site development standards, architectural and landscape criteria, as well as residential design standards for the Lone Mountain West project.

The Master Developer of the Lone Mountain West Master Plan is charged with developing the community in a comprehensive manner. In order for this to occur, the Master Developer is committed to providing all necessary infrastructure and services needed for the Master Plan's development. The Master Developer has established an overall cost estimate for provision of all necessary services to the Lone Mountain West area, regardless of ownership, and has agreed to pay its fair share of the costs of providing services to its project.

Likewise, it is expected that all other owners of property within the approximately 297 acre area surrounding the Lone Mountain West Master Plan (see Figure 3) will also pay their fair share of the cost of providing infrastructure and services to their parcels when such parcels are proposed to be developed.

The City of Las Vegas shall require that all developers of property within the overall 520 acre area shown on Figure 3 pay their proportionate share of the cost of provision of infrastructure and services.

1.3 Project Location

The Lone Mountain West Master Development Plan encompasses numerous parcels totaling approximately 520 acres started approximately 660 feet south of Lone Mountain Road on the north, Cheyenne Avenue to the south, Puli Road to the west and the beltway to the east. The Plan area is immediately west of the Lone Mountain Master Plan area and is intended to be not only compatible with, but also a logical extension of, that plan. With that in mind, this document is intentionally similar to the Lone Mountain Plan. See Figure 1 – Lone Mountain West Master Development Plan Vicinity Map. See Appendix C: Legal Description.

1.4 Relationship to Other Documents

1.4.1 The Lone Mountain West Master Development Plan and Design Standards is the primary document for use by all entities undertaking any improvements, participating builders, individual business owners and homeowners, including their respective subassociations. Other documents relating to the physical development of the property include the following:

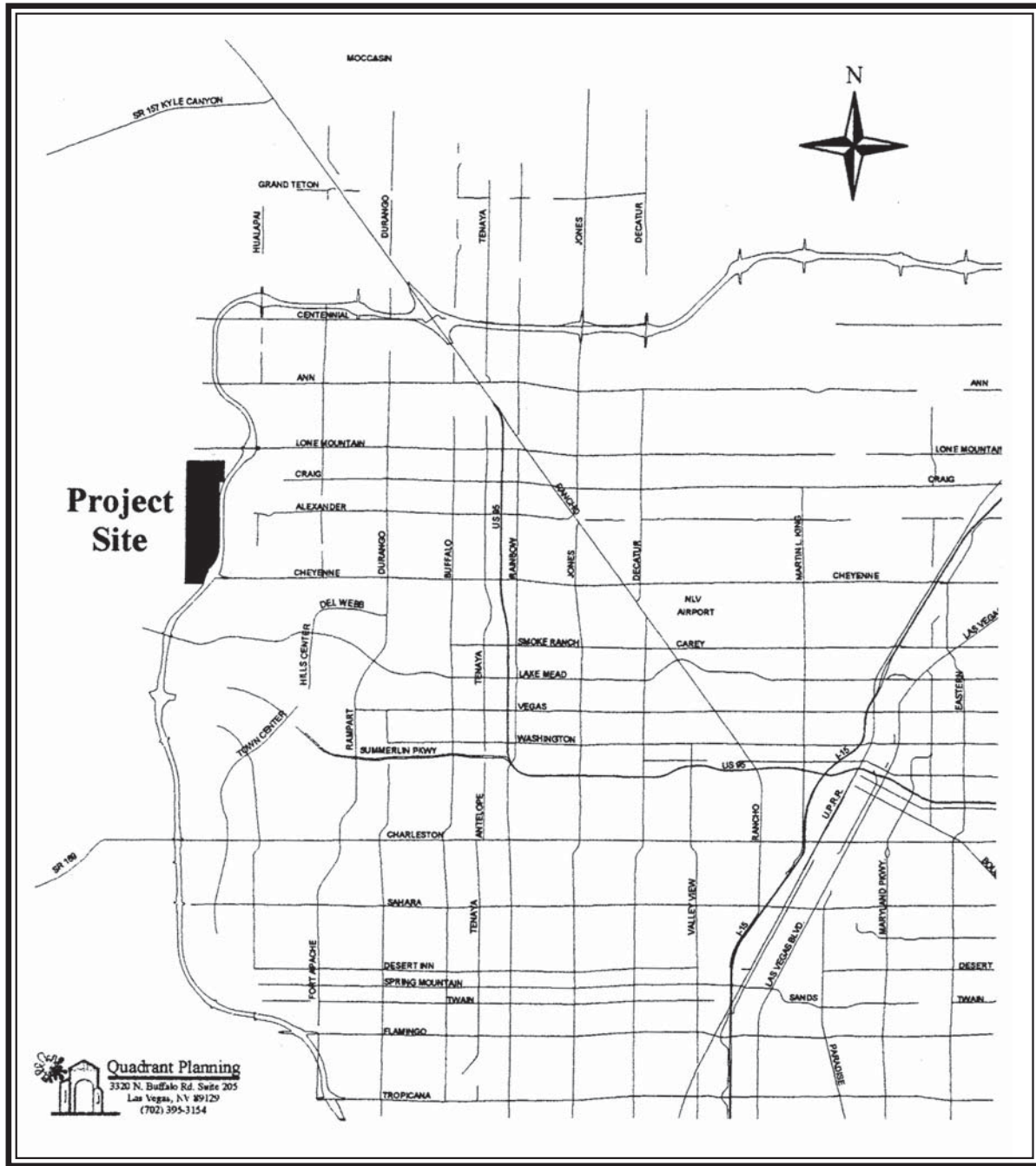
- Comprehensive Plan and Master Development Plan: On December 18, 1996, an amendment to the General Plan was approved by the City Council. The amendment addresses conceptual master planning issues establishing the location, extent, and nature of proposed land uses, the provision of public facilities and services and basic infrastructure needs for the Lone Mountain West Master Development Plan area.
- All development plans shall comply with the adopted Lone Mountain West Standards as well as all other applicable regulations in the city, county, state, and federal jurisdictions. These Standards are not intended to override or contradict the City of Las Vegas codes or requirements. Where differences occur, the most stringent standards shall apply in all cases.

1.5 Amendment and Modification Procedures

The Lone Mountain West Master Development Plan and Design Standards may be amended from time to time by ordinance or by resolution of the City Council.

- 1.5.1 Proposed amendments to the text, development standards or design standards, up until the time they are ready for adoption by the City Council pursuant to Subsection 1.5, shall be processed as in the case of a Title 19 text amendment.
- 1.5.2 Proposed modifications to land use designations on Figure 3 of the Plan, up until the time they are ready for adoption by the City Council pursuant to Subsection 1.5, shall be processed as in the case of Major Modification, utilizing the procedures for a general plan amendment under Title 19.

Figure 1 – LONE MOUNTAIN WEST MASTER DEVELOPMENT PLAN VICINITY MAP



2. LAND USE

2.1 Purpose

The purpose of this section is to identify the land use categories and the uses permitted within each as defined by the City of Las Vegas Subdivision and Zoning Codes.

- 2.1.1 In general, the land use categories are those which are allowed under the current City of Las Vegas Codes; additional uses are prohibited. Use permits and conditional use restrictions apply to some land uses. See the City Codes. At the discretion of the Planning Director, and if in compliance with applicable covenants, conditions and restrictions, other uses not specifically indicated herein may be approved if noted on the specific project's tentative map and approved by the City Council.
- 2.1.2 Upon approval of the Lone Mountain West Master Development Plan, requests for land uses shall conform to the recommended land uses shown on Figure 3, however if a request does not conform to the recommended land uses shown on Figure 3, then at a minimum the request must adhere to the goals and objectives of the City of Las Vegas General Plan and related documents.
- 2.1.3 The Lone Mountain West Master Plan comprises approximately 222 acres of land within an overall Planned Community District area of roughly 520 acres. This Master Plan has established a comprehensive set of land uses, site development standards, architectural and landscape criteria, as well as residential design standards for the Lone Mountain West project

Planned land uses for the approximately 222 acres comprising the Lone Mountain West Master Plan are shown within the dashed boundary on Figure 3. This is the area the Master Developer has annexed to the City of Las Vegas and rezoned to Planned District (PD). Projects within this area will be developed according to the land uses shown on Figure 3.

Furthermore, Figure 3 also recommends land uses for the remaining approximately 297 acres that surround the Lone Mountain West Master Plan (the area outside the dashed boundary). Unlike the Lone Mountain West Master Plan, this area was not annexed to the City of Las Vegas or rezoned when the Lone Mountain West Master Plan was approved by the City of Las Vegas.

The City of Las Vegas will rely upon the recommendations of the Lone Mountain West Master Development Plan (Figure 3) when considering future requests for annexation and rezoning of parcels within the Lone Mountain West Master Development Plan area. Initial City of Las Vegas staff review of proposed future projects in the area and subsequent staff recommendations on the adequacy of these projects will be based upon the planned land uses shown on Figure 3 and summarized in Table 3 – General Land Use Designations for Parcels Surrounding the Project Area of the Lone Mountain West Master Plan.

Furthermore, approval of such projects will be subject to all of the site development standards, architectural and landscape criteria, as well as the residential design standards of the Lone Mountain West Master Plan. As part of the approval of said projects, the City of Las Vegas shall require that all developers of property within the 297 acre area shown on Figure 3 pay their proportionate share of the cost of provision of infrastructure and services.

2.2 Development Parcels

Tables 1 and 2 refer specifically to the initial Lone Mountain West Master Plan project area. See Table 3 for a breakdown of planned land uses for the 297-acre area surrounding the initial Lone Mountain West Master Plan project area. Table 4 shows the Lone Mountain West Master Development Plan area as a whole and reflects the various parcel additions and designation changes as of December 3, 2008.

Table 1 – LONE MOUNTAIN WEST DEVELOPMENT PARCELS

Phase	Development Parcel	Land Use	Max. DU/AC	Actual DU/AC	Total Acres	Total Units
1	A	Low Density Residential	6	5.5	60.02	330.1
1	B	Low Density Residential	6	5.5	16.6	91.3
1	C	Medium-Low Density Res.	12	10	20.5	205
2	D	Multi-Family Medium Res.	25	18	21.35	385
2	E	Multi-Family Medium Res.	25	18	20.72	373
2	F	Multi-Family Medium Res.	25	18	15.2	273.6
3	G	Neighborhood Commercial			10.76	
3	H	Village Commercial			5.15	
3	I	Village Commercial			5.05	
3	J	Village Commercial			2.6	
Totals:					177.95	1657

Figure 2 – DEVELOPMENT PARCELS

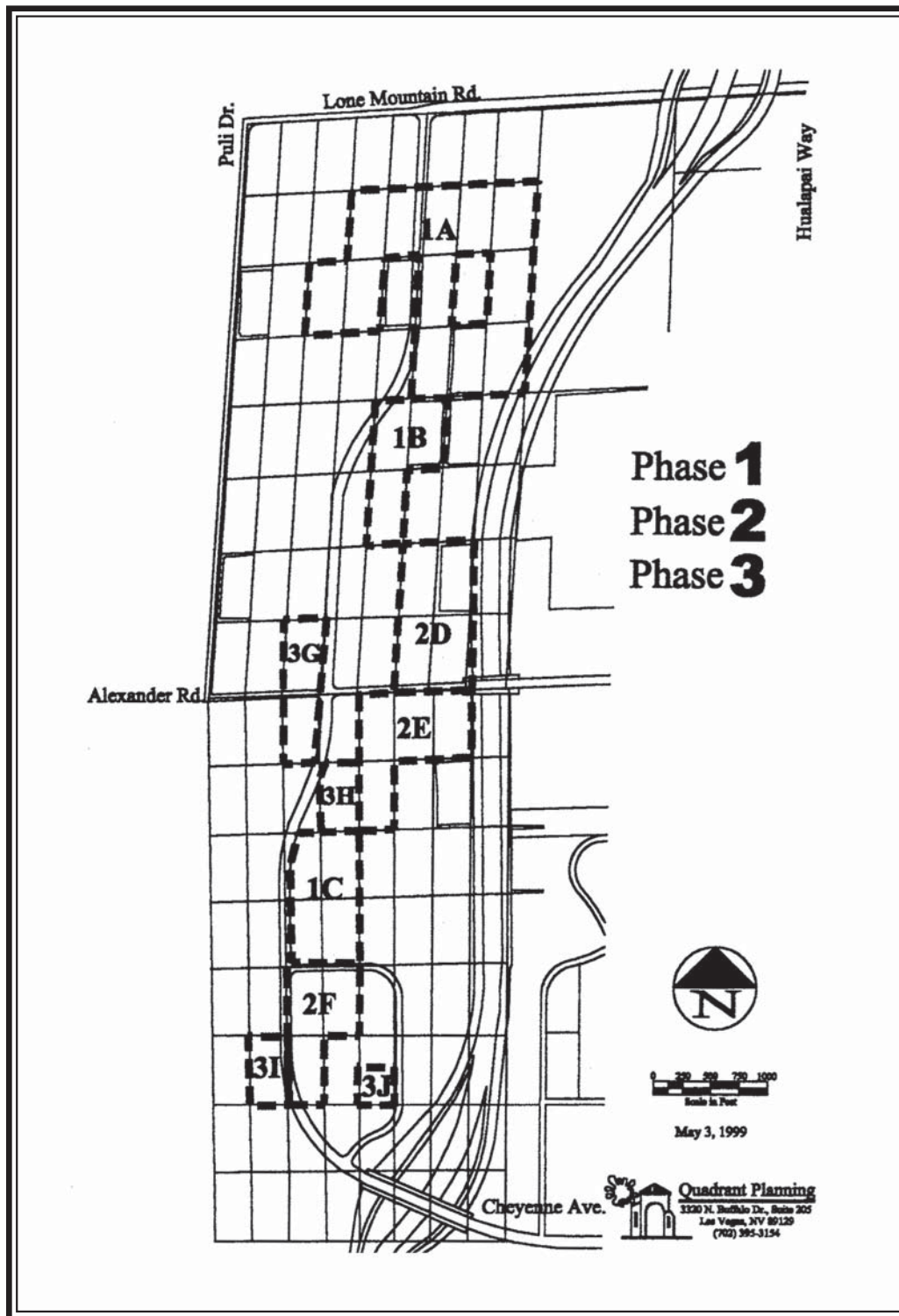


Table 2 – LONE MOUNTAIN WEST LAND USE DESIGNATIONS SUMMARY

LAND USE

PUBLIC FACILITIES / OPEN SPACE	APPROX GROSS ACRES	
PARK 1	5.5	
PARK 2	20	
PARK 3	10	
TRAIL SYSTEM (Within existing power easement)	10.5	
POCKET PARKS / OPEN SPACE (Within LMW Plan)	6.14	
SCHOOL	22.25	
OTHER PUBLIC FACILITY	24.5	
TOTAL PUBLIC FACILITY / OPEN SPACE	98.84	
PUBLIC LANDS		
BUREAU OF LAND MANAGEMENT (Excludes parcels planned for schools, parks and other public facilities shown above.)	90.35	
COMMERCIAL		
APPROX GROSS ACRES		
NEIGHBORHOOD COMMERCIAL	10.6	
VILLAGE COMMERCIAL	12.8	
TOTAL GROSS ACRES COMMERCIAL	23.4	
RESIDENTIAL		
APPROX GROSS ACRES		
MAX. TOTAL UNITS		
LOW DENSITY RESIDENTIAL	76.62	421.4
MEDIUM-LOW DENSITY RESIDENTIAL	20.5	205
MULTI-FAMILY MEDIUM RESIDENTIAL	57.2	1030
TOTAL GROSS ACRES RESIDENTIAL	154.32	
TOTAL DWELLING UNITS		1657
TOTAL PROJECT AREA (Includes 44.39 acres for schools, trail system, Park I and 6.14 acres for open space & pocket parks)	222.11	
TOTAL ACRES IN PCD (Outside of project area, includes BLM parcels planned for PCD)	297.61	
TOTAL PLANNING AREA ACRES	519.72	
GROSS RESIDENTIAL DENSITY (Project only)		7.46

Table 3 – GENERAL LAND USE DESIGNATIONS FOR PARCELS SURROUNDING THE PROJECT AREA (IN PCD)

LAND USE

	APPROX GROSS ACRES	
COMMERCIAL		
NEIGHBORHOOD COMMERCIAL	15	
VILLAGE COMMERCIAL	2.5	
TOTAL GROSS ACRES COMMERCIAL	17.5	
	APPROX GROSS ACRES	MAX. TOTAL ACRES
RESIDENTIAL		
LOW DENSITY RESIDENTIAL	206	1236
MEDIUM-LOW DENSITY RESIDENTIAL	20	240
MULTI-FAMILY MEDIUM RESIDENTIAL	5	90
TOTAL GROSS ACRES RESIDENTIAL	231	
TOTAL DWELLING UNITS		1566
TOTAL LONE MOUNTAIN WEST PROJECT AREA (Includes 44.39 acres for schools, trail system, Park I and 6.14 acres for open space & pocket parks)	222.11	
TOTAL ACRES IN PCD (Outside of Lone Mountain West project area, includes BLM parcels)	297.61	
TOTAL PLANNING AREA ACRES	519.72	
GROSS RESIDENTIAL DENSITY		5.26

Table 4 – LAND USE DESIGNATION TOTALS FOR ALL PARCELS

LAND USE

COMMERCIAL	APPROX GROSS ACRES	
NEIGHBORHOOD COMMERCIAL	0	
VILLAGE COMMERCIAL	11.1	
TOTAL COMMERCIAL	11.1	
RESIDENTIAL LAND USES	APPROX GROSS ACRES	MAX. TOTAL UNITS
LOW DENSITY RESIDENTIAL	208.9	1066
MEDIUM-LOW DENSITY RESIDENTIAL	180.1	1623
MULTI-FAMILY MEDIUM RESIDENTIAL	63.4	1124
TOTAL RESIDENTIAL	452.4	
TOTAL DWELLING UNITS		3813 ¹
PUBLIC FACILITIES / OPEN SPACE	APPROX GROSS ACRES	
TOTAL PUBLIC FACILITY / OPEN SPACE	92.75	
TOTAL INITIAL LONE MOUNTAIN WEST PROJECT AREA (Includes 44.39 acres for schools, trail system, Park I and 6.14 acres for open space and pocket parks)	222.11	
TOTAL ACRES IN PCD (Area outside the initial Project Area, including BLM parcels, since included within the Development Plan Area)	333.77	
TOTAL ACREAGE IN PLANNING AREA	555.88	
GROSS RESIDENTIAL DENSITY FOR ENTIRE PLAN AREA		7.27^{2,3}

NOTES:

- 1 Total units built, under construction, and entitled equals 3,465 units at a density of 6.23 dwelling units per gross acre of the Lone Mountain West Development Plan Area as of December 2008.
- 2 Total gross residential density possible at maximum build-out of remaining undeveloped parcels within the Lone Mountain West Development Plan Area as of December 2008.
- 3 Maximum residential density for the 555.88 acres represented in the Lone Mountain West Development Plan Area shall not exceed 8.0 dwelling units per gross acre.

2.3 Land Use Designations

The Lone Mountain West Master Development Plan area shall be comprised of the eight land use designations listed below.

- (1) Neighborhood Commercial
- (2) Village Commercial
- (3) Low Density Residential (up to 6 du/ac)
- (4) Medium-Low Density Residential (up to 12 du/ac)
- (5) Multi-Family Medium Residential (up to 25 du/ac)
- (6) Public Facilities
- (7) Open Space and Recreation

See Table 1 – Development Parcels for initial project area data.

See Table 2 – Proposed Land Use Designations Summary.

See Table 4 – Land Use Designation Totals for All Parcels for area acreage, unit counts and density information current as of December 2008.

Notwithstanding the density limitations identified for each of the three residential designations, the maximum overall residential density permitted within the Lone Mountain West Master Development Plan Area shall not exceed 8.0 dwelling units per gross acre.

2.3.1 Neighborhood Commercial

The Neighborhood Commercial category addresses parcels of 5 acres or less and provides for the development of convenience retail shopping, services and professional offices principally serving neighborhood needs, and compatible in scale, character and intensity with adjacent residential development. The maximum lot coverage will not exceed 30 percent. In order to maintain a mix of commercial uses to serve the neighborhood, the amount of office professional uses shall not exceed 50 percent of the mix of commercial uses within any given development.

2.3.2 Village Commercial

The Village Commercial land use category allows low to medium intensity retail, office or other commercial uses that serve primarily local area patrons and does not include more intense general commercial characteristics. Village Commercial is typically located on the periphery of residential neighborhoods and should be confined to the intersections of major arterials and major freeways. The map lot coverage will not exceed 30 percent.

2.3.3 Low Density Residential

The Low Density Residential category provides for the development of up to six dwelling units per gross acre. This category allows for detached, single-family product types, including compact lots and zero lot line units, and two story buildings.

2.3.4 Medium-Low Density Residential

The Medium-Low Density Residential category provides for the development of up to 12 dwelling units per gross acre. This land use category allows for higher density detached, single-family product types including, but not limited to, compact lots and zero lot line, and two story buildings.

2.3.5 Multi-Family Medium Residential

The Multi-Family Medium Residential category provides for the development of up to 25 dwelling units per gross acre. Product types include a higher density variety of multifamily units such as condominiums and low density multi-family, and residential buildings with a maximum of three stories.

2.3.6 Public Facilities

(a) **Public Schools**

Two 10 acre sites are currently shown for public schools on BLM property within the Lone Mountain West Master Development Plan.

(b) **Quasi Public**

There is ample opportunity for the location of churches or other quasi public facilities within the Lone Mountain West area, given the availability of BLM land.

2.3.7 Open Space and Recreation

Publicly dedicated open space will include neighborhood parks, community parks, and the Lone Mountain West trail system. Upon installation of the landscaping the Developer will maintain the parks and/or open space until such time that the park is deeded over to the City or to the homeowner's association.

A series of parks and open space trail systems will be linked with the pedestrian pathway system through coordination of individual developer site plans. Neighborhood parks will be built within residential communities to provide passive and active play areas as required by the City of Las Vegas Zoning Ordinance according to the description below.

A total of 54 acres of open space will be required for the entire 520 acre Lone Mountain West Master Development Plan. The 222 acre Lone Mountain West Master Plan will require a total of 22.14 acres of open space. Of that total, 5.5 acres will be constructed as a park by the Master Developer and dedicated to the City of Las Vegas. See Park 1 on Figure 3 for the location. Of the remaining open space requirement (16.64 acres), 10.5 acres will be developed as a trail and 6.14 acres will be distributed as pocket parks and open space throughout the residential portions of the Lone Mountain West Master Plan.

The remaining 297 acre area surrounding the Lone Mountain West Master Plan will be required to provide a total of 31.86 acres of open space. A minimum of 25 percent (8.0 acres) of this required open space will be constructed by developers of that area, on an equal and proportional basis to the Lone Mountain West Master Plan, and dedicated to the City of Las Vegas. See Park 2 on Figure 3 for the location. The remaining open space requirement (23.86 acres) may be accounted for in the form of open space and pocket parks within individual residential communities.

NOTE: Each acre of the 297 acre area surrounding the Lone Mountain West Master Plan will be required to contribute 0.0258 acres of the 8.0 acre total park contribution shown within Park 2 on Figure 3. In addition, each acre of the 297 acre area surrounding the Lone Mountain West Master Plan will be required to contribute 0.0769 acres of open space and pocket parks to the Lone Mountain West Master Development Plan. For example, a developer of a 15 acre project within this area will contribute 0.0258 acres of park per acre multiplied by 15 acres, for a total of 0.387 acres of park contribution to Park 2 on Figure 3. In addition, the developer of this 15 acre piece will also be responsible for contributing 0.0769 acres of open space and pocket parks per acre multiplied by 15 acres for a total of 1.15 acres of open space and pocket park contribution within the individual 15 acre residential community.

Since actual construction of Park 2 on Figure 3 by individual developer contributions is not practical, developers within this 297 acre area will contribute their proportionate acreage share of development of Park 2 through park fees.

The developer improvements shown in Table 4 shall satisfy any and all park fee improvements for the entire 520 acre Lone Mountain West Master Development Plan. No other park fees or contributions will be assessed beyond those shown in Table 4.

Table 5 – OPEN SPACE REQUIREMENTS

	Acres	Total Req. Open Space	Trails	City Park	Pocket Park / Open Space
Entire Project	520	54	–	–	–
Lone Mountain West					
(LMW Master Plan	222	22.14	10.5	5.5	6.14
Area Surrounding					
LMW Master Plan	297	31.86	0	8.0	23.86
Total Needed	–	–	10.5	13.5	30.0

2.4 Permissible Uses – Commercial

Buildings, structures and land shall be used only in accordance with the uses permitted in the following Land Use Schedule:

	Neighborhood Commercial	Village Commercial
Amusement Arcades	P	P
Animal Hospital	SUP	SUP
Antique Shops	SUP	SUP
Appraisal and Related Services	P	P
Architectural (professional and related services)	P	P
Art Gallery	P	P
Artist	P	P
Artist Studios	P	P
Athletic Fields	P	P
Auditorium	P	P
Automobile Accessory Store	P	P
Automobile Maintenance	X	SUP
Automobile Rental	X	SUP
Automobile Sales	X	X
Bakery (retail only)	P	P
Bank	P	P
Banquet Facilities	X	P
Barber Shops	P	P
Bars	SUP	SUP
Bath House	X	X
Beauty Shops	P	P
Beer Sales	SUP	SUP
Bicycle Repair Shops	P	P
Bookkeeping, Accounting Services	P	P
Bookstores	P	P
Brew Pubs	X	SUP
Building Material Sales	X	SUP
Car Rental Agencies	X	SUP
Car Wash	SUP	SUP
Catering Establishments	X	P
Cemeteries	X	X
Child Care Institutions	P	P
Christmas Tree Sales	TCP	TCP
Churches	P	P
Clinics	P	P
Clubs	SUP	SUP
Collectible Shops	P	P
Colleges	SUP	SUP
Communication Towers/Antennas	SUP	SUP
Computer Based Businesses		P
Computer Graphics Services		P
Congregate Care	X	SUP
Consulting Service	P	P
Convenience Store	SUP	SUP
Convention Facilities	X	SUP
Cooperative Apartments	X	SUP
Copy Center	SUP	P
Costume Rental	P	P

P=Permitted X=Use Prohibited WC=With Conditions SUP=Special Use Permit TCP=Temporary Commercial Permit

	Neighborhood Commercial	Village Commercial
Court Reporting	P	P
Crematories	X	X
Custodial Institutions	X	SUP
Day Care	P	P
Diaper Services	P	P
Dressmaking Shops	P	P
Dry Cleaner	X	X
Dry Cleaning Office	P	P
Eating and Drinking Places (non alcoholic)	P	P
Education/Scientific Research	SUP	P
Educational Offices	P	P
Electronic Equipment Sales and Service	P	P
Engineering (professional and related services)	P	P
Entertainer (outcall only, no escort services)	P	P
Equipment Rentals	X	SUP
Exotic Animals	SUP	SUP
Flower Arrangements	P	P
Gaming (incidental gaming machines only)	SUP	SUP
Gaming (unrestricted)	X	X
Gasoline Sales	SUP	SUP
Government Facilities	SUP	SUP
Gravel Pits	X	X
Grocery Stores (< 5000 Sq. Ft.)	P	P
Grocery Stores (> 5000 Sq. Ft.)	X	P
Gunsmiths	X	SUP
Handicraft (including gift basket assembly)	P	P
Hardware Stores	P	P
Health Clubs	SUP	P
Health Fitness Training Center	SUP	P
Heliports	X	SUP
Hospitals	X	P
Hotels	X	SUP
House Cleaning/Repairs	SUP	P
Information Services	P	P
Inns	X	SUP
Insurance Adjustment	P	P
Insurance Sales	P	P
Interior Decorating	P	P
Janitorial Services	P	P
Jewelry Making (excluding smelting and casting of metal)	SUP	P
Laboratories, Medical and Dental	X	P
Libraries	P	P
Liquor Sales	SUP	SUP
Live Entertainment	TCP	TCP
Locksmiths	P	P
Maintenance Business	SUP	P
Manufactured Home Sales	X	X
Mausoleums	X	X
Medical Supplies	SUP	P
Memorabilia Shops	P	P
Miniature Golf Courses	SUP	SUP
Mini Warehouses	X	SUP
Mobile Home Dealers	X	X
Mortgage Company	P	P

P=Permitted X=Use Prohibited WC=With Conditions SUP=Special Use Permit TCP=Temporary Commercial Permit

	Neighborhood Commercial	Village Commercial
Mortuaries	X	X
Motels	X	SUP
Movie Theaters	SUP	P
Museums	SUP	SUP
News Dealers/Stand	P	P
Nudist Camps	X	X
Offices, Business and Professional	P	P
Outdoor dining	P	P
Parking Lot/Garages	X	P
Parks	P	P
Party Planning Services	P	P
Pet Store	P	P
Pharmacy	P	P
Photographic Studios	P	P
Photographic Supplies	P	P
Photography and Related Services	P	P
Plant Nurseries	X	P
Playgrounds	SUP	P
Postal Services	P	P
Print Shops	X	SUP
Psychic Arts	X	SUP
Public Utility Buildings and Structures	SUP	SUP
Public/Quasi Public/Institutional Buildings and Uses	SUP	SUP
Race Tracks	X	X
Railroad/Bus/Truck/Air Terminals	X	X
Real Estate Services	P	P
Recreational Facilities – private	X	SUP
Recording Studios	SUP	SUP
Resort Hotels	X	X
Restaurants	P	P
Rest Homes	SUP	SUP
Retail Sales	P	P
Riding/Rental Stables	X	X
Rock Concert	SUP	SUP
Sales Representatives	P	P
Sanitariums	X	SUP
Schools	SUP	SUP
Secondhand Sales	SUP	SUP
Secretarial Services	P	P
Security Sales	P	P
Security Services	P	P
Service Business (except repair business)	SUP	P
Service Stations	SUP	SUP
Shoe Repair Shops	P	P
Sign Painting Stores	SUP	P
Sporting Goods Stores	P	P
Sporting Goods with Firearms	X	SUP
Stock Brokerages	P	P
Sun tanning Centers	SUP	SUP
Supper Clubs	SUP	SUP
Swap Meets	X	SUP
Swimming Pool Cleaning	P	P
Tailoring, Sewing Services	P	P
Tailors	P	P

P=Permitted X=Use Prohibited WC=With Conditions SUP=Special Use Permit TCP=Temporary Commercial Permit

	Neighborhood Commercial	Village Commercial
Tattoo Parlor	X	X
Taverns	SUP	SUP
Tax Preparation Services	P	P
Taxidermist	X	P
Teaching, Tutoring (maximum four students at once)	P	p
Tire Sales (as principle use)	X	SUP
Travel Agencies	P	P
Upholstery Shops	X	SUP
Vacations Sales	P	P
Veterinary Services	SUP	SUP
Video Stores	P	P
Watch/Clock Repair	P	P
Watchman's Trailer with Commercial Use	SUP	SUP
Water Sales	P	P
Wine Sales	SUP	SUP
Wireless Communication Facility, Stealth Design	WC (See Title 19)	WC (See Title 19)
Writers	P	P

P=Permitted X=Use Prohibited WC=With Conditions SUP=Special Use Permit TCP=Temporary Commercial Permit

2.5 Lone Mountain West Master Development Plan

The acreage included in the Lone Mountain West Master Development Plan was designated Planned Community Development (PCD) in the Northwest Plan Amendment to the City of Las Vegas General Plan adopted by City Council December 18, 1996.

2.5.1 Development Phasing

Development of the Lone Mountain West Master Planned Community will commence at locations where the provision of infrastructure is most immediate and progress in a logical fashion from there. See Figure 4, Phasing map, for details.

Due to differences in land use emphasis and the dependence upon market conditions, individual areas are expected to develop at different rates. It is possible that more than one area may be under development at any given time, or that development may not occur in the exact order as shown on Figure 4. Therefore, each individual phase will be required to extend all necessary utilities to that phase in order to provide adequate service. Additionally, full street improvements will be required adjacent to each individual phase as constructed. Temporary access roads and/or widened paving will be constructed to each phase as needed in order to satisfy City of Las Vegas requirements.

WATER SERVICE

The Las Vegas Valley Water District (LVVWD) indicates the Lone Mountain West Master Plan to be within Area II of Water District oversizing area map. The Water

District will provide service to the Lone Mountain West Master Plan area subject to their service rule requirements.

The Lone Mountain West Master Plan Development is bisected by the 2975, 3090 and 3205 Pressure Zones as defined by the LVVWD. The majority of the site lies within the 3090 Pressure Zone. Pressure Zones are based on topography and act as independent service areas. The LVVWD has an existing 30-inch main extension generally located on the south side of Cheyenne Road 6000 feet east of the Beltway that provides service to the 3090 Zone. The District is currently extending a 42-inch oversize main through the Lone Mountain Master Plan area to service the 2975 Pressure Zone. The Lone Mountain West master Development will require an extension from this 42-inch line in Gowan Road west to service the 2975 Pressure Zone portion of this development and an extension of the 3090 Zone Main. See Figure 5 – Water Service.

SEWER SERVICE

The Sanitation Division of the City of Las Vegas Department of Public Works provides sewer service to areas adjacent to the Lone Mountain West Master Plan Development. There are existing 12-inch sewer mains located at the intersection of Hualapai Way and Gowan Road and a 12-inch sewer main in Alexander road at Jensen Street.

The City of Las Vegas Sewer Master Plan shows the extension of a 12-inch sewer west in the Gowan Road alignment intended to service all development south of Gowan Road to Cheyenne Avenue, west of the proposed Beltway. Perma-Bilt Homes is currently under design to bring the sewer to within approximately 300 feet east of the Barden Road alignment.

The City has required the 12-inch sewer in Alexander Road to be extended west to the limits of the proposed Lone Mountain Heights subdivision. This extension will bring the 12-inch line approximately 1,000 feet east of the Barden Road alignment.

The City Master Plan also indicates an extension of a 12-inch from Alexander road north to Craig road and then extending west to the proposed Beltway alignment. According to the City's Sewer Master Plan, the line extensions mentioned above were sized to provide adequate capacity to service the Lone Mountain West area. See Figure 6 – Sewer Service.

2.5.2 Traffic Study

A master traffic study is being prepared which will evaluate the adequacy of the proposed internal street system. The analysis will also provide recommendations for internal roadway and intersection geometrics and traffic control. Since final development plans are not available for individual parcels at this time, the City of Las Vegas may require updates to the master traffic study or additional traffic studies to evaluate the direct access to the parcels or any significant change of land use density.

Based on the results and conclusions of the preliminary master traffic evaluation, the proposed internal and perimeter street network, as discussed below, is expected to provide adequate circulation and capacity for the master planned development.

Cheyenne Avenue is planned as an arterial roadway with a 100 foot right-of-way (ROW) which curves to the north and connects into the Main Spine Road through the Lone Mountain West Master Planned Development. Cheyenne Avenue east of the future Beltway Interchange will provide three travel lanes in each direction with a two way left turn lane or raised median.

- Lone Mountain Road east of the Main Spine Road is also planned as a 100 foot ROW that will ultimately provide six travel lanes and left turn lanes.
- Alexander Road is planned to be an 80 foot ROW east of the Main Spine Road and will ultimately have a grade separated crossing at the Beltway. Alexander Road west of the Main Spine Road is planned as a 60 foot ROW.
- The Main Spine Road will connect Cheyenne Avenue to Lone Mountain Road through the Lone Mountain West Master Planned Development. This road is planned to be an 80 foot ROW and provide two travel lanes in each direction.

A Traffic Study (see Appendix D) for the overall 520 acres covered by this plan shall be submitted to and approved by the Department of Public Works prior to the issuance of any permits or the recordation of any Final Maps anywhere within this site. The Master Traffic Impact Analysis shall identify necessary roadway infrastructure improvements and overall traffic signalization needs within the proposed PD area and shall propose an implementation program for the dedication and construction of such required improvements including a phasing plan identifying appropriate milestones (such as certain number of units built) that will trigger the timely construction thereof. The Master Traffic Signal Participation Schedule will define each internal development's responsibility on a per acre or per development basis. The Master Traffic Impact Analysis shall address the development of all public streets shown on Figure 2 – Development Parcels.

A Master Drainage Plan (See Appendix E and Figure 11) for the overall 520 acres covered by this plan, and including the parcels noted as “Not A Part” in Figure 2 – Development Parcels, shall be submitted to and approved by the Department of Public Works prior to the issuance of any permits or recordation of any Final Maps anywhere within this site. The Master Drainage Plan shall identify necessary drainage infrastructure improvements within the proposed PD Area and shall propose an implementation program for the construction of such required improvements, including a Phasing plan identifying appropriate milestones (such as a certain number of units built) that will trigger the timely construction thereof. The Master Drainage plan shall clearly identify the parties responsible for each phase of construction and those parties responsible for future maintenance thereof. The proposed PD Zone area established development densities in excess of those assumed by the Lone Mountain Detention Basin Report.

The master Drainage plan shall address the impact of these higher densities on the available storage volume of the Lone Mountain Detention Basin and recommended methods to mitigate the effects thereof. The Master Drainage plan shall address the development of all public drainage facilities shown on Figure 2 – Development Parcels.

Site specific Drainage Plans and Traffic Impact Analyses may be required as each internal site develops as required by the Department of Public Works. The City reserves the right to impose additional site specific conditions with future site development actions.

2.6 Planned Development District

- 2.6.1 The Planned Development (PD) District is the Zoning mechanism for implementing the Lone Mountain West Master Development Plan. See Figure 2 – Development Parcels. See adopted CLV Zoning Ordinance.

LONE MOUNTAIN WEST PLANNED COMMUNITY DEVELOPMENT

Future Land Use for Lone Mountain West

-  Planned Community Development
-  Low
-  Multi-Family Medium
-  Medium-Low
-  Neighborhood Commercial
-  Park/School/Recreation/Open Space
-  Public Facility
-  Village Commercial
-  City Limits

Figure 3

Printed: July 6, 2004



GIS maps are normally produced only to meet the needs of the City. Due to continuous development activity this map is for reference only. Geographic Information System Planning & Development Dept. 702-229-6301

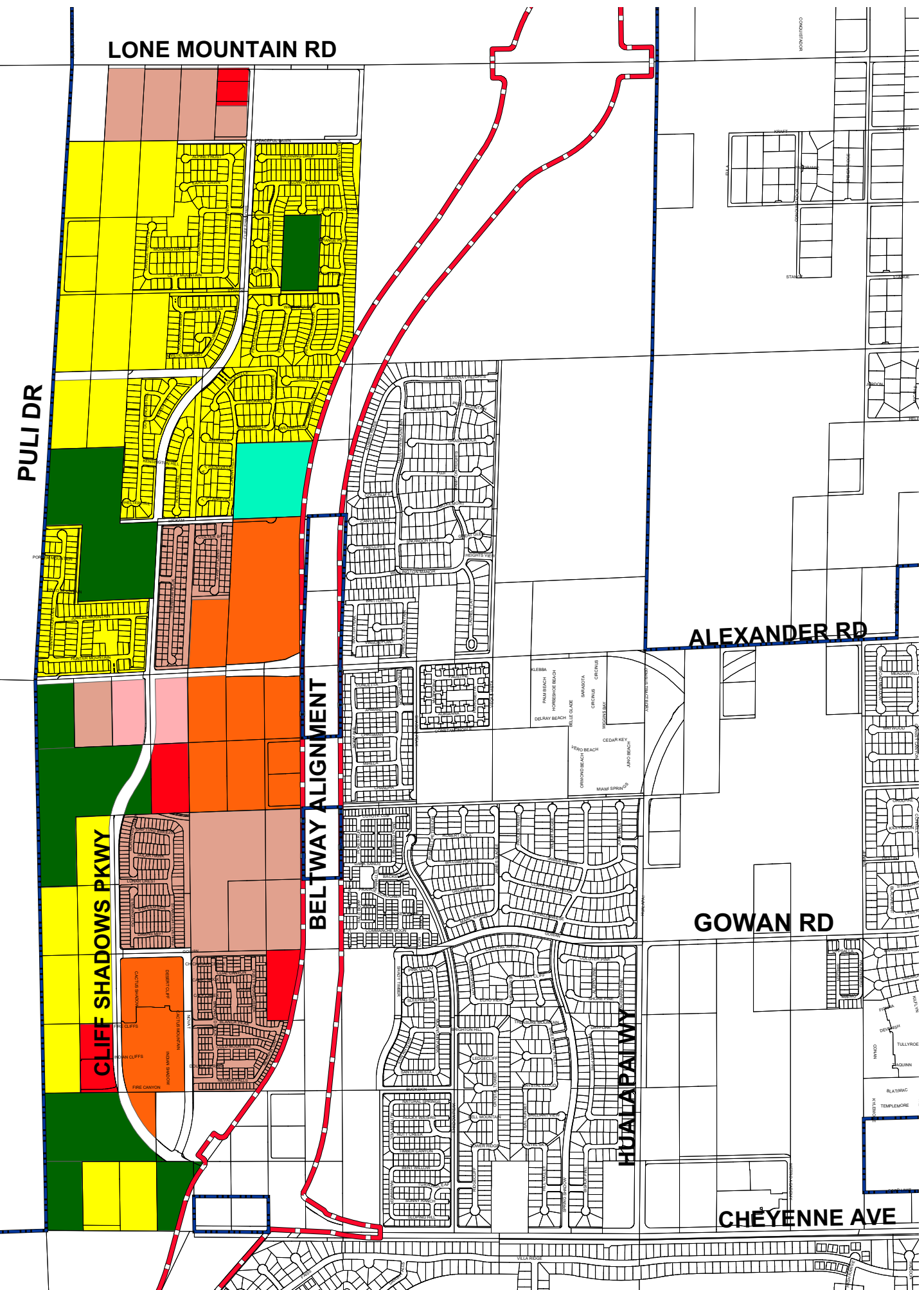
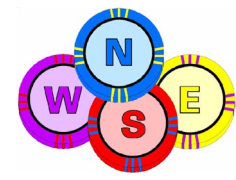


Figure 4 – PHASING MAP

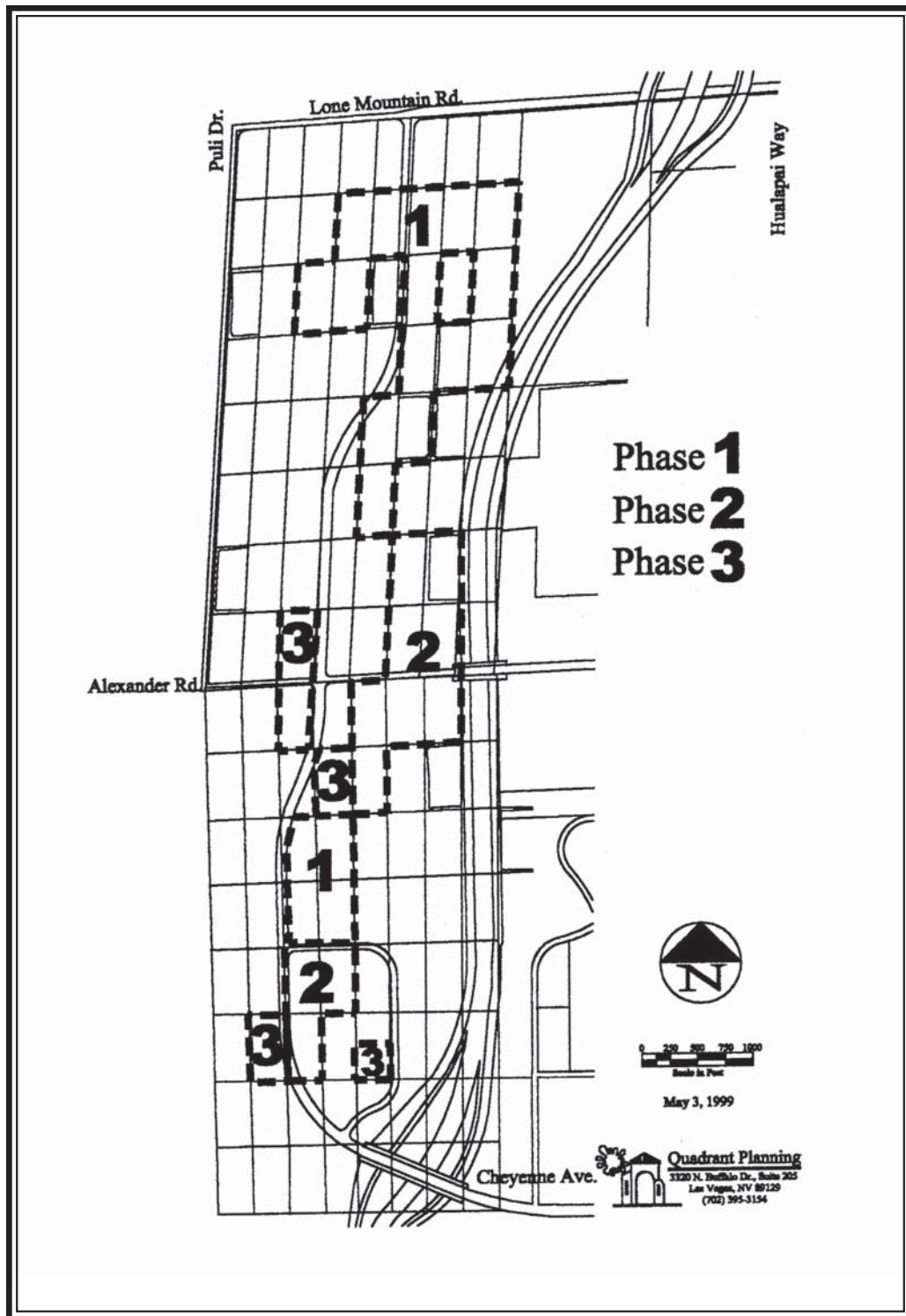


Figure 5 – WATER SERVICE

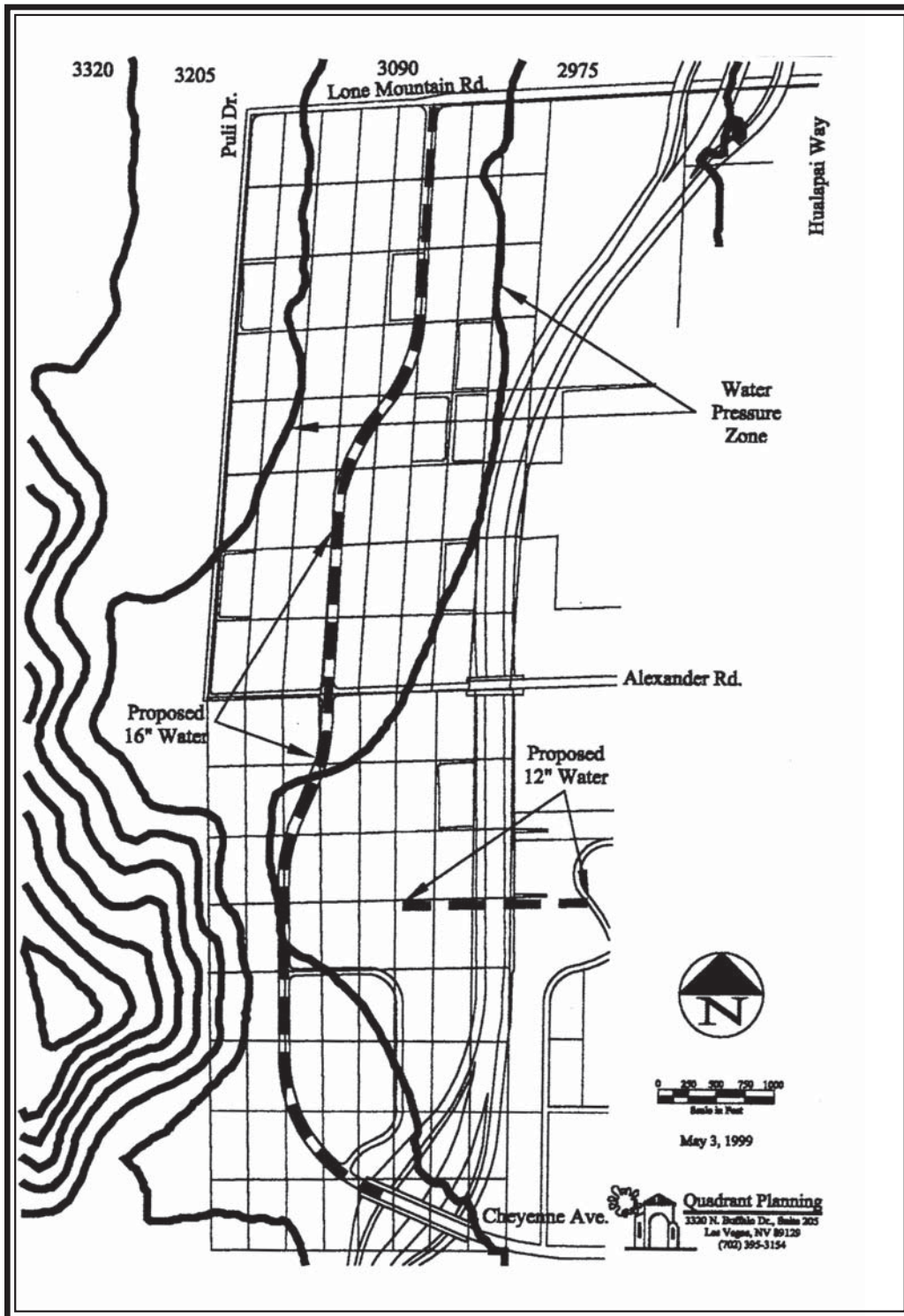
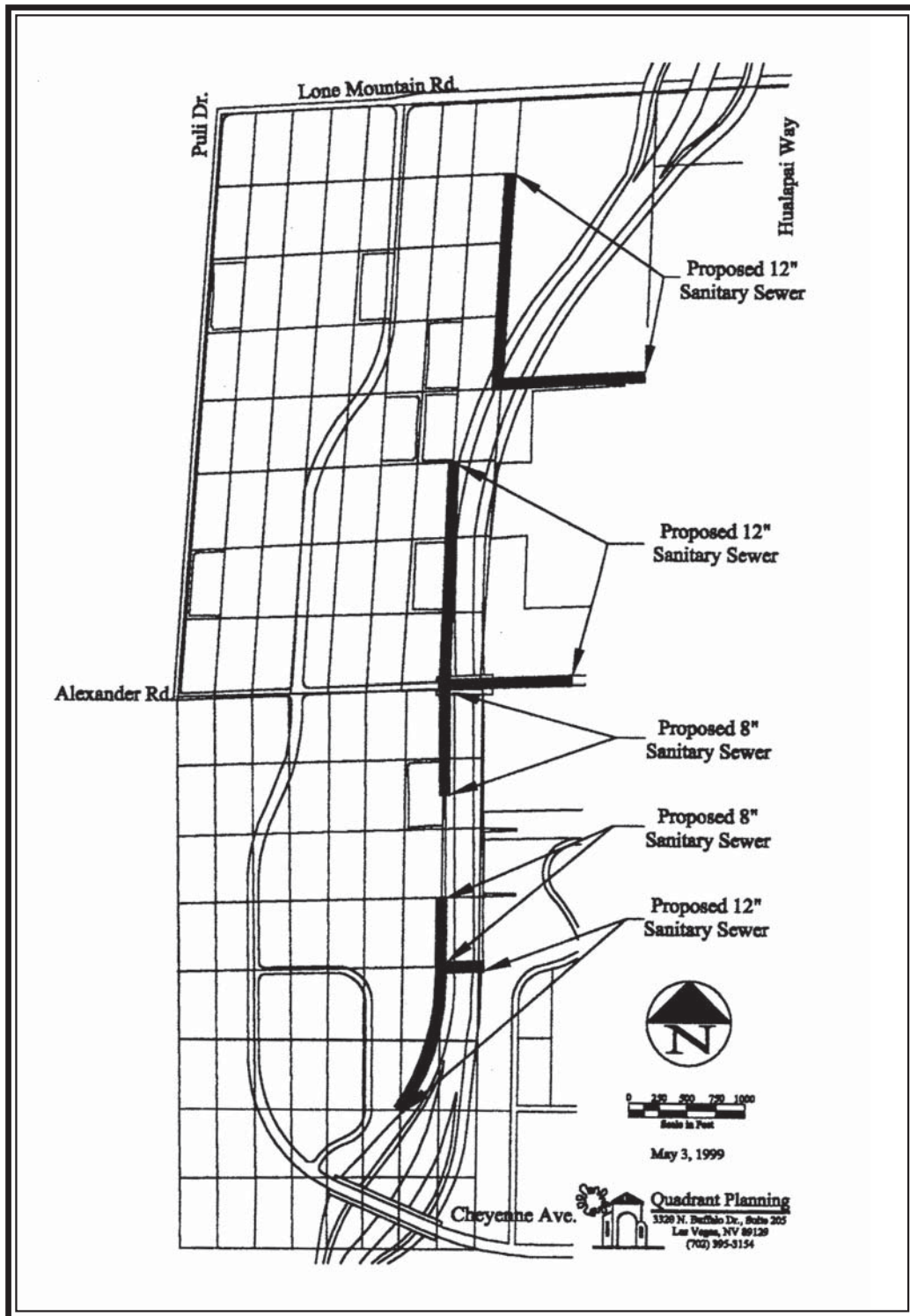


Figure 6 – SEWER SERVICE



3. SITE PLANNING GUIDELINES – GENERAL REQUIREMENTS

3.1 Objectives

3.1.1 The overall intent of the Standards and the Design Review Process is to promote the creation of an attractive, high quality environment for the residences, businesses, and public spaces within the Lone Mountain West Master Development Plan area. The City of Las Vegas shall favor:

- integration of design elements within a project;
- high quality, durable finishes;
- a positive relationship to the pedestrian; and
- visual continuity within the Lone Mountain West Master Development Plan area and with the Northwest community.

3.1.2 When referring to this document, the owner/developer and designer shall keep in mind that these Standards begin with general requirements and progress toward more specific requirements. NOTE: The general requirements apply to an subsequent sections.

3.2 Streets / Circulation Patterns

3.2.1 **Streets:** Streets shall be configured to provide safe, efficient vehicular circulation with streetscapes that provide a pleasant environment. All streets shall be improved by individual builders and designed in accordance with the Standards, which provide flexibility while ensuring that internal streets are appropriately sized, as per the subdivision code, and contribute to a desirable neighborhood. In addition:

- (a) The design of Lone Mountain West streets may incorporate “traffic calming devices” where appropriate;
- (b) The design of internal subdivision streets shall discourage through traffic;
- (c) The design of streets shall favor curvilinear and bent grid patterns; and
- (d) Landscaping shall be incorporated into all major public and private street systems of 60’ ROW or above per the City Landscape, Wall, and Buffering Standards.

3.2.2 When developing adjacent to a planned public facility within the overall Lone Mountain West Master Development Plan (see Figure 3), a developer may be required to provide full width permanent paved access to the planned public facility to ensure their orderly development and appropriate use.

3.3 Streetscapes

The Streetscape shall be that area from the back of the curb to a wall including the sidewalk. Developers shall provide trees and other plantings with drip irrigation, streetlights and appropriate walkways that meet or exceed City of Las Vegas standards. Once completed, the streetscape will be maintained by home owner's associations or adjacent commercial parcels.

Streets will be constructed according to City of Las Vegas Standards.

3.3.1 Streetscape Lighting

- (a) Lighting design and installation shall be in conformance with City of Las Vegas standards.
- (b) Area lighting shall be provided along all public and private streets. Light standards and pole height shall be scaled to the street dimension illumination requirements. All street light fixtures shall utilize high pressure sodium lamps. Cobra heads are not allowed.
- (c) Pedestrian areas, including off street trails, pathways, parks and other public areas shall be illuminated in hours of darkness especially where grade changes involving ramps or stairs occur. Lighting in these areas shall be provided by low overhead fixtures (10'–15' height) and/or bollard lighting.
- (d) Outdoor recreational facilities shall be illuminated when feasible and necessary. The lighting design of these facilities shall not impact adversely adjoining properties with misdirected light and shall be approved by the City of Las Vegas.
- (e) All lighting plans shall be submitted to and approved by the City of Las Vegas.

3.4 Multipurpose Pathways

3.4.1 Pathways and walkways: Multipurpose, non motorized pathways are incorporated into the Lone Mountain West Master Development Plan to link mixed use, residential, and commercial areas with community facilities in a safe, functional and aesthetically pleasing design. The continuous system is accomplished through the use of walkways and pathways. See Figure 7 – Multipurpose Trails.

3.4.2 Multipurpose Pathways, within developments, shall provide:

- (a) Continuously linked walkways within each parcel and connecting adjacent parcels, commercial areas, and schools;
- (b) A pedestrian link onto the site from the public pedestrian walkway system;
- (c) Pedestrian friendly intersections per City of Las Vegas standards;
- (d) Simplified median crossings for pedestrian safety;
- (e) Pathway illumination to complement streetscape lighting if designed as a separate system;
- (f) Clearly designated areas as a "pedestrian zone";

- (g) Concrete is the preferred material for public and private walks, adjacent to the street and within public open space;
- (h) Other pathway materials, such as jogging paths of stabilized material, are to be specified on drawings;
- (i) Enhanced paving details in the form of stains or integral color, stone, textures or stamps, and paving units are encouraged for emphasis or to identify special features and circulation patterns, especially for crosswalks and entries into development parcels; and
- (j) Street furniture, light poles, and other site furnishings shall not encroach upon the required width of the sidewalk.

3.4.3 Sidewalk Hierarchy

- (a) All sidewalks and pathways must meet or exceed City Code.
- (b) Sidewalks within primarily residential areas shall meet or exceed City standards.
- (c) Pedestrian crossing points will be provided along and at all major intersections.
- (d) Specified sidewalk widths shall not include width of curb.
- (e) Sidewalks must be physically separated from vehicular travel lanes by curbing, changes in grade, barriers, landscaping, or other means, except at crosswalks.
- (f) Any particular sidewalk treatments (exposed aggregate, etc.).

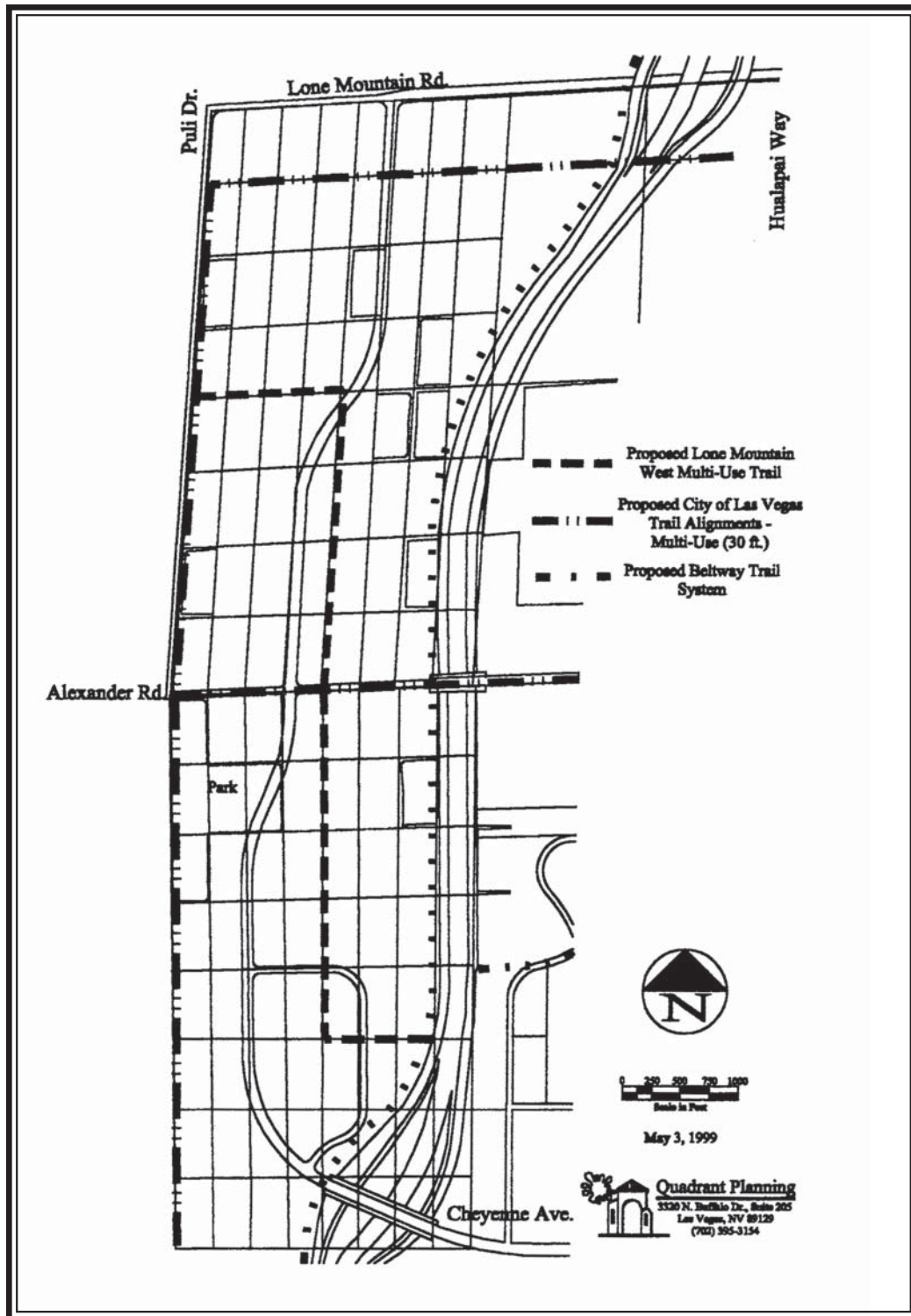
3.4.4 **Internal Pedestrian and Bicycle Movement:** All subdivisions, multi-family developments, commercial and institutional uses will have internal circulation systems. Components of internal systems may consist of both on street and off street facilities. The following guidelines shall be considered in designing these systems:

- (a) Connections shall be made between the internal systems and the overall walkway and pathway system;
- (b) Where access is desired, connections will be made between the internal systems and perimeter facilities. Connections to adjoining subdivisions, neighborhoods and projects are required unless a natural obstacle cannot be reasonably overcome;
- (c) On street sidewalks in residential areas are encouraged to be a minimum of five feet (5') wide on local neighborhood streets. On street sidewalks will not necessarily be required in all locations. Required sidewalk locations will be determined with the tentative map and in accordance with the City of Las Vegas regulations;
- (d) Multi purpose, off street, trails are encouraged as an alternative to on street facilities within builder parcels. These trails shall connect to the overall Multipurpose Pathway pedestrian circulation system. The internal multipurpose trails shall be a minimum of six feet (6') wide and shall be located within a landscaped easement not less than fifteen feet (15') wide, and provide activity points along the pathway to qualify for open space credit;
- (e) Bicycle circulation is an appropriate function of local and neighborhood streets. A separate on street lane for bicycle use only is not required; however, designated on street routes shall be clearly signed if provided.

3.4.5 Bicycle Lanes, Routes and Paths

The bicycle circulation system within Lone Mountain West Master Plan is provided for recreational purposes as well as to encourage alternate means of transportation within the community. Bike routes may be established within neighborhoods connecting to arterial and collector level roads and the open space, multi purpose pathway system. Bike routes will utilize neighborhood and local streets.

Figure 7 – MULTIPURPOSE TRAILS



3.4.6 Pathway Lighting

The Multipurpose Pathway system will be well lighted to maintain security and encourage use of the pedestrian network. In many cases street lighting will provide sufficient lighting when pathways are integrated within the street cross section.

3.5 Setback Requirements / Adjacency Issues

3.5.1 **Setbacks** are measured from the property line along street frontages, and from the respective property line for internal conditions. Vehicular areas include parking areas and vehicular circulation drives.

3.5.2 **Landscape of Setback Area:** All required setback areas shall be landscaped in a manner complementary to the on site architecture and right-of-way design concept. Portions of the landscaping between the back of the curb and the sidewalk may have to be coordinated with the street landscape design.

3.5.3 **Internal Property Lines:** Because maintenance of areas narrower than ten feet (10') wide is impractical, building setbacks along internal property lines (side property lines not fronting on a public right-of-way) shall be either two feet (2') and smaller, or ten feet (10') and greater. For example, a setback of five feet is not allowed.

3.5.4 **Vehicular and Building Setbacks:** Vehicular and Building Setbacks will be designed and constructed according to City of Las Vegas standards.

3.6 Walls – All Primary Streets

3.6.1 **Walls:** Walls are discouraged in places where they are not necessary for security, screening, or privacy. Notwithstanding, walls can provide decorative appeal and help to establish continuity within the community; therefore, consistency in the design of walls is essential. The City of Las Vegas Landscape, Wall, and Buffer Guidelines are the minimum standards that must be followed. The following guidelines apply to the design of walls within the project area that go beyond the CLV standards:

- (a) Walls along primary streets shall be the Lone Mountain West theme wall. The wall material will be Cin-der-lite brand block consisting of split face (brown) 8" x 8" x 16", CMU (brown) 8" x 8" x 16", and fluted (chocolate brown) 8" x 8" x 16" or equal. See Figure 8;
- (b) The materials, color, and finish of all other walls and fences shall be compatible with the community theme wall, the site architecture, and the overall character of the Lone Mountain West Plan area;
- (c) Low walls and open rail walls are encouraged and shall be used to allow views into residential areas, parks and open space, and to minimize the length of solid wall surfaces;

- (d) Long stretches of unrelieved flat wall surfaces shall be avoided. The design of walls shall incorporate columns, off sets, open rail segments, and plantings. A standard run will consist of a 200' run with a 2' offset minimum on street exposed walls. See Figure 9;
- (e) To accommodate grade changes, walls shall step rather than slope, with individual steps not to exceed eight inches. Ends of walls shall return into the site to maintain a finished appearance;
- (f) Wall height is limited to six feet, in general, not including pilasters;
- (g) Within any required sight triangle, wall heights shall be less than thirty inches;
- (h) Walls that join the community theme wall shall join at the same top of wall elevation or lower. Walls higher than the theme wall shall step down (each step maximum of 8") to the same top of wall elevation a minimum of 4' horizontal distance from the point of connection. Individual steps shall not exceed eight inches;
- (i) Retaining walls shall not exceed three feet, six inches (3'-6") in height. Grade changes that require retaining over 3'-6" must be terraced with a minimum of five feet (5'-0") clear horizontal separation between walls;
- (j) A retaining system that combines planting pockets with soil retention is an acceptable alternative to the above under certain circumstances. Use of such a system will be subject to the approval by the City of Las Vegas;
- (k) Retaining walls require waterproofing treatment that consists of asphalt waterproofing along with a strip drain seepage barrier, as well as weep holes, crushed rock or perforated pipe drainage;
- (l) The overall height of a retaining wall combined with a freestanding wall, if visible from any street or open space area, shall not exceed nine feet, six inches (9'-6");
- (m) Curvilinear sections in walls are permitted only if compatible with the overall desired character of the development;
- (n) Walls shall be regularly maintained and refinished as needed. Damaged walls shall be repaired within a reasonable period of time. In order to minimize water damage to walls, any landscaping within 3 feet of walls shall employ subsurface irrigation;
- (o) Visible barbed or razor wire fencing is prohibited except during construction.

3.6.2 Screen Walls and Fences: Screening treatments must be designed as an integral part of the overall architectural and landscape design. The City of Las Vegas Landscape, Wall, and Buffer Guidelines are minimum standards. The following guidelines are in addition to those minimums:

- (a) Streetscape fences and screens within landscaped setbacks shall match the Lone Mountain West theme wall;
- (b) Landscaping may be used as an acceptable screen for passenger vehicles. However, landscaping alone is not acceptable for service area screening;
- (c) Screen walls are to be used only where required for service area security and screen purposes. Otherwise, walls without a demonstrable purpose, that create the impression of a walled compound, are not allowed;

- (d) Screen walls, fences, and retaining walls shall observe the parking setback requirement along public rights of way;
- (e) Retaining walls visible from any street or open space area shall not exceed three feet six inches (3' 6") in height. Grade changes that require more retention must be terraced with a minimum of five feet (5'-0") separation between retaining walls;
- (f) A retaining system that combines planting pockets with soil retention to achieve a steeper slope is an acceptable alternative to the above under certain circumstances;
- (g) Retaining walls combined with freestanding walls, if visible from any street or open space area, shall not exceed nine feet six inches (9'-6") in height;
- (h) Construction materials for screen walls, fences, and retaining walls shall be of durable materials. The design and construction of these elements shall have the same level of finish on all sides (i.e. no front or "good" side, nor back or "bad" side). Acceptable materials are painted wrought iron, split face masonry, stuccoed masonry, plaster coated or decorative textured finished concrete block, and tilt up concrete panels;
- (i) Prohibited materials are wood fencing, plain galvanized chain link with or without slats, and painted and untinted CMU, and barbed wire/razor ribbon;
- (k) Contrasting colors that are project consistent.

3.7 Signage: Signage shall be used to reinforce the desired character of the Lone Mountain West Plan area, and to call attention to certain features. All signs erected or installed in the Lone Mountain West Master Development Plan area shall be reviewed by the City of Las Vegas.

- (a) The specifications for and location of all signs shall be submitted for City of Las Vegas approval. See City of Las Vegas Sign Code;
- (b) Sign materials shall be compatible with associated architecture. Acceptable materials include brass, bronze, galvanized and painted or prefinished steel, anodized or painted aluminum, painted or prefabricated steel, ceramic tile, various types of stone, brick, and painted stuccoed CMU. Wood, because of rapid deterioration in our climate, is unacceptable except as temporary signage;
- (c) Bases for free standing signs shall be of architectural concrete, masonry, or similar material. Pole mounted signs are not allowed;
- (d) Lighting for any sign shall be of even intensity and from a concealed source. Signs in commercial areas must be internally illuminated. Sign colors shall be consistent with the associated architecture and the overall architectural theme of the Lone Mountain West PCD, yet provide sufficient contrast for legibility;
- (e) Design of all traffic control signage shall be in accordance with the Manual of Uniform Traffic Control Devices published by the U. S. Department of Transportation, the applicable Nevada Department of Transportation Standards, and the requirements of the City of Las Vegas Traffic Engineer;
- (f) Consolidate street and stop signs and mount to street light standards to minimize the number of sign poles;
- (g) Preserve clear sight triangles of roads and driveways when placing signs. Signs fasteners shall be maintained in good repair at all times;

- (h) ALL signs shall be less than twelve feet (12') in height;
- (i) Raceway lights and billboards are prohibited; and
- (j) Monument and tower/ kiosk signage shall meet City Las Vegas sign standards.

3.8 Entry Features: Participating developers and builders shall install neighborhood or other project entryways to identify the entry and establish an image for the project. The following guidelines shall be considered in design of project entries:

- (a) The area reserved for project entries shall be limited to geometric designs at each entry corner measuring forty feet (40') from the right-of-way lines of the intersecting streets. The design of project entries shall maintain all City Las Vegas required site triangles;
- (b) The project entry shall encourage the incorporation of featured landscape treatments, enhanced paving details, signage and lighting where appropriate;
- (c) Controlled uplighting for trees, signs, and sculptural elements is encouraged;
- (d) Two project identification walls, monuments, or ground signs are permitted for each major street frontage. One or two signs per entry, based on perimeter street frontage, will be allowed;
- (e) The sign surface area shall not exceed 48 square feet. Sign copy is limited to the name and, in some cases, the name and address of the development.

Figure 8 – LONE MOUNTAIN THEME WALL, COLUMN AND CAP

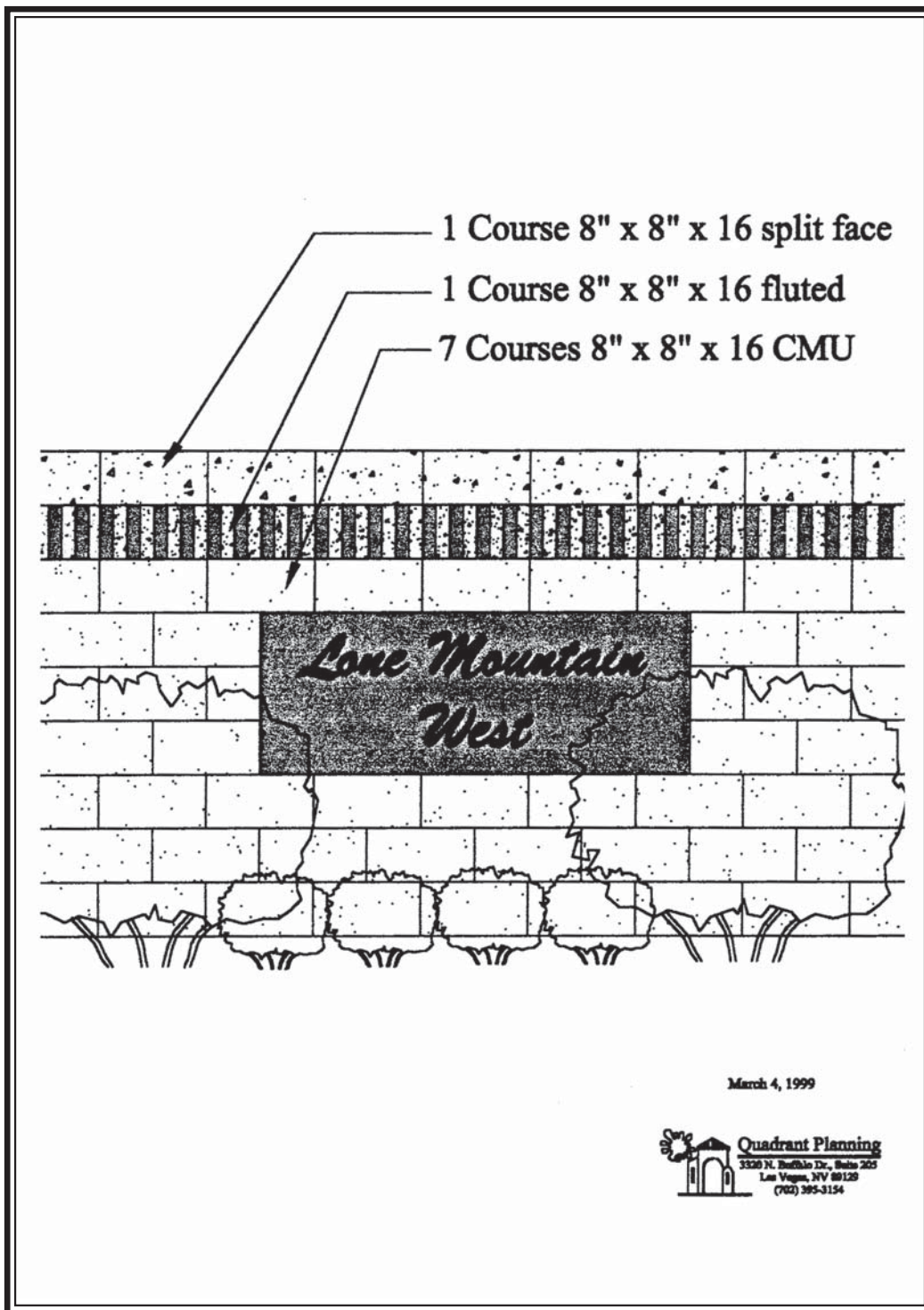
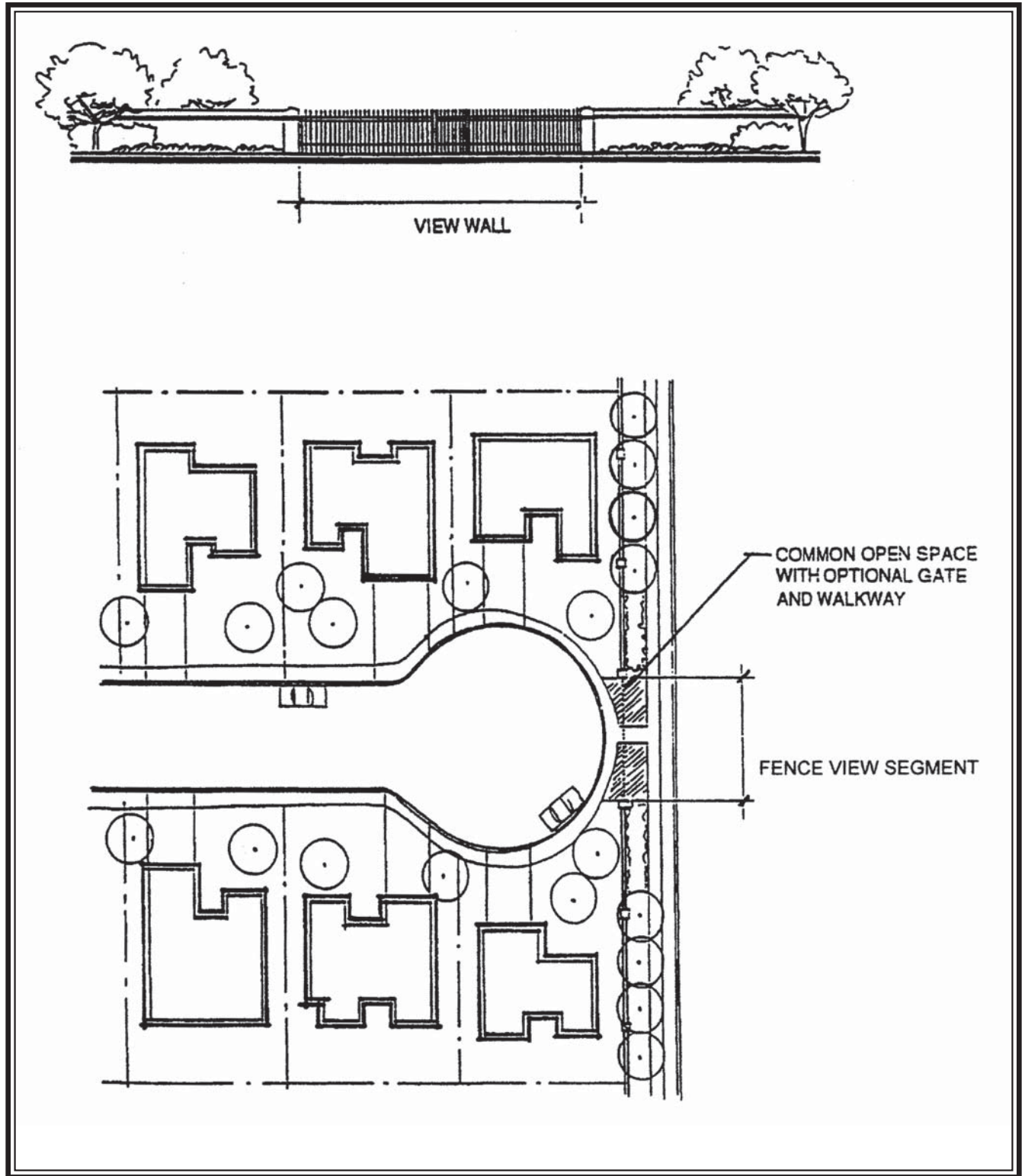


Figure 9 – VIEW ALL



3.9 Site Furnishings: Location of all site furnishings must be indicated on plans submitted for approval by the City of Las Vegas. The following guidelines shall be considered in the design, selection, and placement of site furnishings such as mail boxes, newspaper dispensers, benches, drinking fountains, bicycle parking structures, bus shelters, public telephones, exercise stations and trash receptacles:

- (a) Where feasible, site furnishings shall be clustered and behind sidewalks and combine seating, telephones, lighting, newspaper dispensers, and mail boxes;
- (b) Grouped residential mail boxes shall meet the requirements of the United States Postal Service, and may be designed to reflect the architectural theme of the project;
- (c) Bollards shall be used wherever a separation of vehicular and pedestrian traffic is required, and must be visible to drivers of vehicles. Bollards shall be a minimum of 18" high, a maximum of 42" high, with a diameter not less than 4". Bollard design shall fit into the overall architectural character of the project and community;
- (d) The location of bus shelters shall be coordinated with City Traffic and Planning Engineers and appropriate transportation officials. Recommended bus shelter locations include near commercial areas and other areas generating significant bus passengers, such as multi-family developments. Advertising will not be permitted on any bus shelter in Lone Mountain West. Minimum requirements for bus shelters include provision of shade, a place to sit, protection from the elements, and a trash receptacle. The materials and design of the structure shall be consistent with the overall character of the development, and will be on a separate easement behind the sidewalk. Developer will supply or build bus shelters;
- (e) Benches, trash receptacles, and drinking fountains are appropriate in areas where heavy pedestrian traffic is anticipated, such as commercial areas, multi-family developments, and parks. The design of these elements shall be compatible with the overall character of Lone Mountain West, and shall not pose a safety hazard to pedestrians, bicyclists, or motor vehicles;
- (f) Newspaper vending machines, mail boxes and similar elements shall be inconspicuously located, set back from the public right-of-way. The placement of these elements shall not pose a safety hazard to pedestrians, bicyclists, or motor vehicles, and shall not infringe on the required sidewalk width or pathways.

3.10 Lighting: The design intent is to provide safe and functional lighting in an aesthetically pleasing, visually unobtrusive manner. All lighting plans, whether for safety or aesthetics, must be submitted for approval by City of Las Vegas Planning and Development.

- (a) Street lighting and installation shall conform to the City of Las Vegas standards;
- (b) Area lighting shall be provided along all public and private streets. Light standards and pole heights shall be scaled to the street dimension illumination requirements as per code. See Appendix E;

- (c) Hidden source lighting is required. Lamp sources shall not be visible or obtrusive into any neighboring area as per code;
- (d) Pedestrian areas, including off street trails, pathways, parks and other public areas, shall be illuminated during the hours of darkness;
- (e) Task lighting shall be installed to emphasize major project entry signage and selected landscape features;
- (f) Grade changes involving ramps or steps in major public areas shall be lighted. Lighting in these areas shall be provided by low overhead fixtures (<16' height) and/or bollard lighting especially on commercial properties;
- (g) Outdoor recreational facilities shall be illuminated when feasible or permissible. The lighting design for these facilities shall have a minimal impact on adjoining properties. See City of Las Vegas Zoning Ordinance;
- (h) All pedestrian underpasses shall have lighting fixtures to illuminate the areas during darkness.

3.11 Site Drainage: An attractively designed drainage system with adequate capacity to handle runoff of heavy rains is critical in maintaining the desired appearance in the Lone Mountain West Master Development Plan area.

- (a) The design objective for drainage improvements is to provide safe, efficient, and non detrimental storm drainage. All areas of a project must be designed to prevent ponding unless detention is required. The drainage plan includes major drainage concepts and underground facilities. Each parcel shall adhere to the drainage plan;
- (b) Downspouts shall be internally routed and have a continuous paved path to the storm drain system for all commercial properties;
- (c) All roof overflow drain openings on commercial buildings shall require a cover piece at the rooftop level, if overflow drains are not used.

3.11.1 Conceptual Drainage Analysis: Approximately 2,100 cfs will be collected by berm/ channels at the southwest corner of the overall plan. That flow can be collected at a point 660' north of the Cheyenne alignment. It will be carried in Channel B which will be a concrete lined channel which is 5' deep and 40' wide at the top. It will be constructed from the western project boundary to the west side of the future Cheyenne Avenue/Beltway intersection. At that point, it will discharge into the Beltway right-of-way. An additional 15' right-of-way will be required by the City of Las Vegas for a maintenance access road.

The 1,800 cfs drainage into the Gilmore Avenue alignment can be collected on BLM property and routed eastward in the Gilmore alignment in Channel A to the western edge at the Beltway. This channel will be a 5' deep concrete channel with a 35' top. As with Channel A, an additional 15' right-of-way will be required by the City of Las Vegas for maintenance purposes.

On site flow quantities have been calculated and are shown on the Figure 11. They will basically flow west to east and discharge in the Beltway right-of-way at locations as shown. It should be noted that we have assumed that all drainage improvements in the Beltway right-of-way will be the responsibility of Clark County/Beltway construction.

Flow which impacts the overall project north of Channel B will be handled in the following manner. It is assumed that either berm/channels or a public street will be constructed along the western boundary. They will be utilized to route flow either north or south as shown on the attached plan. The off site and on site flows have been quantified as combined at low points which will be utilized to carry flow from east to west via streets (surface flow). The street network should be used to route these flows in “non frontage” streets to minimize the amounts of flow carried in front of residential units. Temporary structures may be used to mitigate flows in advance of permanent facilities.

3.12 Site Grading: Proper site and building design will minimize required grading by corresponding with the natural lay of the land. The design objectives for parcel grading are to create smooth slope transitions between grade changes, to integrate buildings and site improvements, and to encourage the use of land form grading as a landscape design element. In addition:

- (a) Graded slopes shall meet the standards established by the City of Las Vegas;
- (b) Grading and drainage design shall provide for adequate site drainage. All parcel drainage shall conform to the approved Master Drainage Plan;
- (c) The grading of the site shall conform as closely as possible to the natural topography. Transitions shall be as smooth, gradual and incremental as possible, recognizing existing slope conditions. Where topographic constraints exist, use architectural design solutions, such as low walls;
- (d) Tops and toes of slopes shall be rounded, and fall lines shall be varied, to create natural appearing changes in grade unless a rigid transition is a deliberate part of the site development design concept;
- (e) Grading large, flat building pads on sloping sites shall be avoided wherever possible. The architecture shall be designed to work with the grade by using smaller building pads with more frequent and smaller transitions in grade;
- (f) Building pads shall be set to promote positive drainage around the structure. All erosion slopes shall be landscaped with trees, shrubs, ground cover, and rock mulch in accordance with the approved plant palette, or mulched with approved landscaping rock, and/or a combination of planting and mulch. The maximum slope for such areas is 2:1. An exception may be granted, subject to review, for use of retaining wall system noted below;
- (g) Grading shall be manipulated to allow for a maximum of three feet, six inches (3’-6”) retaining wall height. Terracing, with a minimum of four feet (4’-0”) clear horizontal separation between walls, is required to mitigate the needed retaining wall height. The maximum slope for planted areas is 3:1;

- (h) A retaining system that combines planting pockets with soil retention to achieve a steeper slope is an acceptable alternative to the above under certain circumstances;
- (i) Positive landscape drainage behind the backs of curbs shall be provided to minimize surface and irrigation run off;
- (j) Retaining walls immediately adjacent to or connecting with a building shall be constructed of a material that visually blends with the building exterior, or is an integral material in the landscape. All retaining walls require waterproofing treatment that consists of asphalt waterproofing along with a strip drain seepage barrier, as well as weep holes, crushed rock or perforated pipe drainage;
- (k) Grading shall be contained within parcel property lines. No cutting, filling, nor any other earthwork disturbances from construction may overlap onto adjacent properties unless specific written approval is granted by both the affected parcel owner(s);
- (l) Erosion control and fugitive dust control are required. Grading activity shall closely correspond with the start of construction; water and soil stabilization techniques shall be used during grading activity; and top dressing and/or planting of disturbed areas shall be completed within thirty days of final grading completion;
- (m) Completed landscaping of individual lots and graded areas is required within 30 days of a certificate of occupancy granted by the City of Las Vegas.

3.13 Utilities: The design of utilities will incorporate utility distribution systems in a visually unobtrusive manner.

- (a) Excluding electrical transmission lines (optional), utilities shall be located underground;
- (b) Utility fixtures, such as transformers, underground, traffic control pedestals, irrigation controllers, and fire protection assemblies (except hydrants) shall be set back from the public right-of-way and screened from view when possible outside of sight triangle;
- (c) Utility easements shall be provided under the street or sidewalk section and, where required, alongside the street right-of-way;
- (d) Installation and maintenance of utilities shall avoid disrupting paving, landscaping, and off site utilities;
- (e) Telephone and electricity may be installed overhead, temporarily, during construction only.

3.14 Easements: Easements are restrictions placed on parcels to provide for a specific use, such as the service of a public utility line or drainage system. Structure erected within easements may be subject to removal at the expense of the parcel owner, if requested by the easement holder.

3.15 Mechanical Equipment: Mechanical equipment shall be incorporated in a visually unobtrusive manner. Therefore:

- (a) Mechanical equipment and meters shall be integrated into the building or screened from public view as much as possible. Roof mounted mechanical equipment is not allowed on any residence;
- (b) Electrical equipment shall be interior mounted wherever feasible. Exterior mechanical equipment, including utility meters, may not be placed on any lot without specific approval of the Committee. Conditions of approval will include side or rear location and screening from adjacent properties and public areas;
- (c) For commercial buildings, roof mounted mechanical equipment must be concealed by a parapet wall or screen, and not visible from adjacent properties;
- (d) For commercial buildings, all back flow preventers, including fire sprinkler back flow preventers and above ground utility connections, shall be screened by walls and/or landscaping;
- (e) Approximate locations of this equipment shall be indicated on plans submitted for review.

3.16 Construction Activities: Good housekeeping practices at construction sites are critical to maintaining an attractive marketing image. Trash and debris can easily become a nuisance because of the frequency of winds. Therefore:

- (a) Owners and builders shall clean up all construction site trash and debris at the end of each working day, and remove and properly dispose of trash and debris each week from the construction site;
- (b) The builder shall install chain link fencing around the perimeter of commercial parcels to contain construction debris. Lightweight materials, packaging, and similar material shall be constrained from blowing off the site;
- (c) Concrete truck chutes must be washed in the parcel developer's on site concrete washing area. The owner/builder must protect drainage ways, storm drainage structures, and other sensitive site features from concrete waste. Washing trucks into storm drainage systems, adjacent parcels, or open space is prohibited;
- (d) The parcel developer shall protect from damage all existing pavement, and remove from paved areas all mud deposits left by construction equipment;
- (e) The parcel developer shall locate and protect existing underground utilities prior to construction. The developer is responsible for repair and restoration of all existing improvements damaged by construction activity, including, but not limited to, walls, landscape, paving, signage, and utilities;
- (f) The owner shall maintain all buildings and improvements in good condition, and repair and adequately paint or finish when required;
- (g) The owner shall maintain all landscape materials in the parcel in a neat and attractive condition, to include proper watering, fertilizing, pruning, maintenance, and replacement of all dead or dying plant materials;

- (h) The parcel developer shall be responsible for fencing all existing plant material to be preserved or natural areas designated for protection, prior to the start of construction;
- (i) The location and appearance of any construction trailer and related facilities must be maintained in an acceptable manner. These structures shall be removed promptly upon completion of construction.

4. ARCHITECTURE AND LANDSCAPE OVERVIEW

4.1 Objectives

4.1.1 The intent of the Design Standards is to:

- (a) Define a minimum standard of quality for the design of buildings and landscape in the Lone Mountain West Master Development Plan area;
- (b) Establish a consistent design character for the Lone Mountain West area; and
- (c) Ensure compatibility within the Lone Mountain West Plan area, and between it and the Northwest Area Plan.

4.1.2 Good architectural and landscape design is closely associated with good site planning, the guidelines for which are provided in the previous section. Because guidelines are conceptual, latitude in interpretation within the defined theme is necessary; however, the City of Las Vegas will not approve designs that appear arbitrary or inconsistent with the guidelines.

4.2 Architectural Themes: The architectural theme for Lone Mountain West residential projects will be derived from Southwest Contemporary, Mission, or Italian Renaissance. The commercial areas, village and neighborhood commercial, will also be designed to be integrated into the overall feel of the plan using the same elements as the residential areas. In the transitional areas between commercial and residential development, the commercial areas shall employ the design elements of the residential in a simpler, more restrained way, scaled appropriately for the larger buildings, and with a modern influence. This blended style will be called Southwest Contemporary. See Appendix A for a description and typical characteristics of each style.

4.2.1 Design considerations shall be given to weather protection through the use of arcades, porticoes, canopies, awnings or other means including the use of fogging systems. Extending architectural lines into the landscape and defined spaces is encouraged as a means for enhancing architectural interest, continuity and the creation of livable spaces.

4.3 Landscape Architectural Concept

4.3.1 In order to conserve water, the landscape concept for the Lone Mountain West Master Development Plan area shall be drought tolerant. It is understood that coordination and some blending with the existing Northwest landscape is required to avoid a harsh interface of styles; however, the overall theme of the Lone Mountain West area shall be water conserving. This shall be achieved through the use of basic xeriscape techniques such as drought tolerant plant material and water efficient irrigation systems, and the design precepts that follow. Appendix B contains the approved Lone Mountain West Plant Palette.

4.3.2 The landscape concept throughout Lone Mountain West is based on Desert Southwest, California Mission, and Spanish/Moorish Garden. Industrial and commercial areas, as well as public areas, shall employ a more limited plant palette than the residential areas. The landscape concept includes the following precepts:

- (a) Limited use of turf, primarily for functional recreational areas. As a general guideline, total turf area shall be 50% or less of the total landscaped area. Extension of the architecture into the landscape in the form of low walls, bancos benches, portales, covered arcades, and usable outdoor patio areas with decorative paving, plantings, and shade;
- (b) Limited use of water in small fountains;
- (c) Sun protection provided by covered arcades, trellises, and/or shade trees;
- (d) Extensive use of evergreen shrubs;
- (e) Use of water conserving, drought tolerant, desert adapted plant material;
- (f) Zoning of plants by compatible water use, with the highest water use in areas where the colors and textures of foliage and flower can be most appreciated;
- (g) Use of appropriate technology to achieve the most efficient irrigation systems, including drip irrigation wherever possible;
- (h) Proper maintenance, including the best horticultural practices in pruning, irrigation, and fertilization of all plant material;
- (i) Use of appropriate ground mulches.

4.3.3 **Planting Design**

- (a) Plantings shall be designed to highlight building entries, define parcel edges, soften building masses, provide shade for pedestrian areas, and screen parking and service areas;
- (b) Achieve unity of design by repetition of certain plant varieties, such as street trees and massing of plants, and coordinate planting plans with adjacent properties;
- (c) Limit the number of species to simplify the planting plan. Do not use a wide variety of species at random;
- (d) Massing of plant material by species shall be sized in proportion to the landscaped area, adjoining architectural mass, and/or the adjoining paving area;
- (e) Choose plant material and space appropriately for mature size, to conserve use. Avoid over planting;
- (f) Employ water conservation principles in the design; for example, group together plants of like requirements for water, sun, and soil;
- (g) The designer shall provide a maintenance program as part of the landscape design. If over planting for immediate effect, provide a time table for thinning;
- (h) Preserve and incorporate existing native vegetation wherever possible;
- (i) For commercial properties a continuous planting strip, a minimum of seven feet (7') wide, shall be placed along all side and rear property lines, except where buildings occur in a zero lot line condition;

- (j) City of Las Vegas Standards require 24" box trees be planted 30' on center maximum with requirements of tree quantities in parking lots. See City of Las Vegas Landscape, Wall, and Buffer Standards;
- (k) Recommended shrub size is five (5) gallon;
- (l) Recommended ground cover size is one (1) gallon; additional smaller sizes allowable, subject to review;
- (m) All turf shall be fescue blend or hybrid bermuda, developed for use in the desert. Common bermuda grass is prohibited. Astro turf is prohibited;
- (n) Reliance on excessive, large expanses of turf, except for recreational areas such as parks, is not permitted;
- (o) All plant material shall be nursery grown, free of pests and diseases, of good form and habit, and represent the best qualities of the species;
- (p) Plant material shall be installed in a manner commensurate with the best horticultural practices in the region to maximize the chances of plant survival;
- (q) Inorganic materials shall occupy no more than forty percent (40%) of the total landscaped area after one year of growth. Bare soil is not permitted;
- (r) Boulders and rock groupings shall be set in informal arrangements, and be buried at least one third (1/3) their depth, so that they appear more natural;
- (s) Limit areas devoted to cobbles and gravel mulch. Neither multi colored gravel nor white gravel will be permitted;
- (t) Installation of landscaped areas must begin within 60 days of completion of construction.

4.4 Common Areas

A series of parks and open space trail systems shall be linked with the pedestrian pathway system through coordination of individual developer site plans. Neighborhood parks shall be built within residential communities to provide passive and active play areas as required by the City of Las Vegas Zoning Ordinance at 330 square feet per dwelling unit. These parks and open spaces will be maintained by the homeowners associations.

The main multi purpose pathway will be incorporated into the 55' power easement that traverses the Lone Mountain West planning area. A portion of the easement will be prepared for pedestrian and bicycle traffic. The remaining portion of the easement will be enhanced through the use of drought tolerant landscaping (see 4.3 – Landscape Architectural Concept). Pathway illumination will be designed to not adversely impact adjoining properties. Rest areas, including benches and waste receptacles, as well as play areas, including playground equipment, will be located at regular intervals along the pathway. This trail system will tie into the proposed City of Las Vegas Trail System to the west along Puli Drive as well as the proposed Beltway Trail System to the east. See Figure 7 – Multi purpose Trails.

4.5 Irrigation

- 4.5.1 The climate and soil conditions in Las Vegas Valley create a difficult environment for landscape plants. Therefore it is essential that the irrigation system utilize current technology in both product application and the system design. The design objective is to create an irrigation system that is water efficient, low maintenance, and provides for the immediate and future requirements of the plant material.
- 4.5.2 Provide an automatic underground irrigation system for all landscaped areas. A centrally controlled system is strongly encouraged.
- 4.5.3 Areas to be served by irrigation systems shall be evaluated for peak demand water requirements and estimated annual water usage. The designer shall utilize reference evapotranspiration rate data available from the Nevada Cooperative Extension weather station and apply the appropriate landscape coefficient to estimate water use.
- 4.5.4 The designer shall size and locate the water supply based on serving the calculated peak flow demand. A dedicated water tap, service, and meter are required for site landscape irrigation. All water is to be potable as provided by the local water purveyor, unless alternative sources are available. In no case shall velocities through service lines exceed seven feet per second (7 FPS) for piping two inches and smaller, and 5 FPS for piping 2.5 inches and larger. Flow through the landscape water meter shall not exceed 70% of maximum rated flow determined by the American Water Works Association (AWWA).
- 4.5.5 All potable water supplies shall be protected by the water district's standards using an approved Reduced Pressure Back flow Preventer (RP) device. At no time shall the velocity through the RP device exceed 7.5 FPS.
- 4.5.6 Design shall be based on utilizing available static pressure minus ten percent (10%) for fluctuations. Provide booster pump downstream of RP device if required to operate system within highest level of application efficiency. Include pressure loss calculations with plan submittal.
- 4.5.7 Provide head to head coverage for lawn areas. Heads shall pop up a minimum of 2.5 inches.
- 4.5.8 Minimum width of lawn areas is ten feet with 2 foot swales on both sides.
- 4.5.9 Do not place spray heads adjacent to any wall or structure. The City Las Vegas requires a 24" separation from buildings. If spray irrigation is desired adjacent to wall or structure, irrigate by subsurface means.
- 4.5.10 Design the system for peak summertime irrigation to be completed between 4:00 a.m. and 12 noon, and turf areas to be able to accommodate every other day watering (will require well prepared soil for deep rooting of turf).

- 4.5.11 Irrigation water runoff to the street is not permitted. Therefore, place spray heads 6" from back of curb (or edges of sidewalks) and provide positive drainage so that nuisance water will not flow over curbs and sidewalks or across vehicular drives.
- 4.5.12 Provide drip irrigation to shrubs and trees, with appropriate filtration and pressure regulating devices. Accommodate for adding emitters as trees mature.
- 4.5.13 Closely spaced, low growing ground covers and annuals may be irrigated by pop up spray heads; no fixed risers are permitted.
- 4.5.14 Reliance on spray irrigation, where drip is practical, will not be permitted.
- 4.5.15 Install back flow preventer in expandable locking metal cage or similar enclosure. Screen the equipment and/or locate away from public view.
- 4.5.16 Provide an electric, solid state controller equipped with a master valve terminal and a minimum of two fully independent programs. If controller is installed outside, provide a weatherproof, locking enclosure.
- 4.5.17 Provide remote electric control valves in boxes with bolt down covers; no manual valves are allowed.
- 4.5.18 Install a master electric control valve immediately downstream from each back flow preventer if foundation structure is present within irrigated area. The valve must be capable of fully opening under the lowest designed flow (usually for drip).
- 4.5.19 Install quick coupling valves in boxes with bolt down covers at minimum 200' intervals, and at dead ends of all mainline runs.
- 4.5.20 Provide individual use sleeves under pavement for supply lines, non pressure piping, and control wires.
- 4.5.21 Keep spray irrigation away from building foundation structures, sign faces, sidewalks, and parking lots.
- 4.5.22 Zone properly for plant material needs, including the consideration of exposure.
- 4.5.23 Screen the control system and/or locate away from public view.

5. DESIGN STANDARDS FOR NEIGHBORHOOD AND VILLAGE COMMERCIAL

See also Section 3: Site Planning Guidelines General Requirements and Section 4: Architecture and Landscape Overview.

5.1 Definitions

(a) Neighborhood Commercial

The Neighborhood Commercial category addresses parcels of 5 acres or less and provides for the development of convenience retail shopping, services and professional offices principally serving neighborhood needs, and compatible in scale, character and intensity with adjacent residential development. The maximum lot coverage will not exceed 30 percent. In order to maintain a mix of commercial uses to serve the neighborhood, the amount of office professional uses shall not exceed 50 percent of the mix of commercial uses within any given development.

(b) Village Commercial

The Village Commercial land use designation addresses parcels up to 20 acres in size with a maximum lot coverage of 30 percent. This category allows low to medium intensity retail, office or other commercial uses that serve primarily local area patrons, and do not include more intense general commercial characteristics. Village Commercial is typically located on the periphery of residential neighborhoods and should be confined to the intersections of major arterials and major freeways.

5.2 Site Planning

The design intent is to create visually attractive, value apparent, easily accessible projects within the Lone Mountain West area. These standards shall mitigate negative impacts on surrounding areas through the use of setbacks, height limitations, walls, landscaping and grading, and appropriate building configurations.

5.2.1 Site Grading: Parcel grading shall create smooth slope transitions between grade changes, integrate buildings and site improvements, and encourage the use of land form grading as a landscape design element. Proposed grading schemes will be reviewed during the design review process.

5.2.2 Site Coverage: Gross site area is hereby defined as the area contained within the parcel lines. Building footprint coverage shall not exceed thirty percent (30%) of the gross site area. Parking structures are not included in calculating this coverage figure. Gross site area does not include dedicated easements, landscape easements, and common areas.

5.2.3 Building Placement and Orientation: The orientation of a building or structure upon a site must reflect not only the project's functional needs, but also must be responsive to the individual parcel's characteristics and sensitive to adjacent land uses and the larger surrounding community. It is important that the three dimensional character of each structure be considered as it relates to the specific parcel. These issues must be skillfully addressed in order to obtain design review approval.

- (a) Provide a well defined building entry for pedestrians and vehicular traffic. Enhance entries and connections with landscaping, paving, and architectural elements to create a sense of arrival;
- (b) For each project, provide a handicap accessible pedestrian path from the sidewalk onto the site, and from the site and parking areas to the main building entry. Integrate into the site design all Federal ADA Standards and local public agency accessibility requirements;
- (c) Establish a relationship between the site, each building and adjacent properties. Integrate site features that create a link to the building, to develop a sense of place in every project;
- (d) FOR EXAMPLE: Define the entry area with enhanced paving, frame with special planters/plantings, trellised entry courts, and/or architectural building forms such as recesses and overhangs appropriate to the specifics of the site. Link building entry to the pedestrian pathway and walkway system. Provide linkages to allow connections by alternative means (bike, etc.) to the Multi Purpose Trail System. Employees shall be encouraged to walk to work from public transportation links or be dropped off at the street sidewalk and walk into the site.

5.2.4 Circulation: Overall vehicular and pedestrian traffic must be effectively managed, and shall be addressed early in the design process.

- (a) Site layouts must be designed to route people and vehicles within the site, and not be predicated merely on the required number of parking stalls. Clear, logical, and identifiable circulation paths shall be provided for both vehicles and pedestrians. Non intuitive circulation schemes and lengthy dead end parking arrangements will not be acceptable;
- (b) Each project shall provide a direct pedestrian link onto the site from the pedestrian sidewalk, for each frontage;
- (c) Incorporate loading, unloading, and passenger drop off areas to the overall circulation design, and make such areas safe for pedestrians;
- (d) Driveway entry throats shall be a minimum of thirty feet (30') in width; all vehicular aisles shall be a minimum of twenty five (24') in width. Minimum per City of Las Vegas standard drawing 222A;
- (e) Circulation in parking areas shall be contained within the site, and shall not allow for vehicle short cuts. Continuous parking lots meeting at property lines are encouraged;
- (f) Integrate emergency vehicle access to the overall design.

5.2.5 Parking

The parking lot requirements shall be in conformance with the City of Las Vegas Zoning Ordinance.

5.2.6 Service Areas

- (a) Service areas, docks, and truck loading areas shall be screened and located away from public view. Such areas shall be set back from residential property lines by a minimum of 34 feet;
- (b) Screen outside storage areas from public view and other adjacent uses with a solid 6' tall masonry wall designed and finished to be compatible with the architectural character of the site;
- (c) Screen all refuse areas with 6' tall masonry walls on three sides, and with a trellis or roof, finished to coordinate with the architectural character of the project;
- (d) Enclosures shall have opaque doors on the remaining fourth side. Provide access from within the development to the refuse collection areas, so that such areas shall be accessible by service vehicles, but not be the focal point of a driveway or parking area;
- (e) Design private drives to allow for easy access of service vehicles.

5.3 Architecture

The goal for the architecture is to establish a high standard of quality and long term value. Architectural design shall support the community theme, (see Appendix A) and be of appropriate scale and character, and commensurate with the surrounding developments. See also Section 4 Architecture and Landscape Overview. Design review attention will be devoted to the consistent application of sound design and planning principles.

- (a) All open space visible from a “main street” or public square or plaza shall be designed as public space in the form of pocket parks, plazas planters with seating.
- (b) All design elements shall appear integrated with the overall project concept. Designs that appear arbitrary or are inconsistent in form will not be accepted.
- (c) Detached structures and satellite buildings must be integrated with the overall project design. Pre-fabricated, temporary, or patchwork type constructions shall not be allowed on any portion of the site.

5.3.1 Height of Buildings and Structures

- (a) The maximum total building height, as measured from the finish floor elevation of the ground floor, including parapets, roof mounted equipment, penthouse, and screens, shall not exceed thirty five feet (35') unless stepped back per City of Las Vegas zoning ordinance.
- (b) The height of ground mounted structures and accessories such as flag poles, uninhabited towers, tanks, etc., may extend to a maximum of sixty (60').

5.3.2 Setback Requirements

As per the City of Las Vegas Zoning Ordinance.

5.3.3 **Building Massing and Form:** A relationship between site and building shall be firmly established. Site features that create a link to the building and develop a sense of place must be integrated into every project. Appropriate examples include enhanced hardscape areas framed by special planters and plantings, entry courts, and employee patio areas. Inappropriate examples include a primary building entry served solely by a narrow sidewalk that can be reached only by walking between a row of parked cars.

- (a) The City of Las Vegas will favor visual continuity within multi building projects, and within the context of adjacent projects;
- (b) Building massing shall possess a balance in form and composition. Avoid large, flat, unarticulated building elevations, and long undifferentiated walls;
- (c) Vertical supports such as columns, piers, and fins, shall be visually balanced with the loads they appear to carry;
- (d) Fenestration must be carefully composed to complement a building's basic solid massing. Mullion patterns shall provide scale and modulation that relates to the overall building design;
- (e) Develop a positive relationship between the building and the pedestrian. Design ground story facades to relate to the human scale. For example, break the facade into bays; provide signage and graphics appropriate to the pedestrian; extend the architecture into the landscape by use of arcades, porticoes and shade structures.

5.3.4 **Building Entry and Focal Points:** Primary building entries shall be emphasized by design features such as overhangs, recesses and roof forms that are integrated into the overall building design.

- (a) Primary building entries should be obvious. A clearly defined primary pedestrian entry linking to an enhanced hardscaped foreground is required for each building;
- (b) Enhance entries and connections with landscaping, paving, and architectural elements;
- (c) To reinforce the building to site relationship, incorporate landscape features which visually and functionally complement the architectural design. This creates a link with the building and helps to develop a sense of place;
- (d) Passenger pick up and drop off areas (auto courts) shall use accent trees and specialty paving to identify the entry areas;
- (e) Use flowering trees and shrubs for accent and color;
- (f) Use trees to provide shade for pedestrian areas. For focal points and other areas within thirty five feet (35') of a primary building entry, the minimum size tree specimen shall be 24" box;
- (g) Buildings shall cluster around pedestrian plazas and courts where possible, and pedestrian access shall be integrated into the overall design of facilities.

5.3.5 Employee Patio Areas

- (a) Patio areas shall be integrated into the overall project design. Elements shall include landscaping, shade structures, seating, low walls, and enhanced specialty paving. Patio sizes and features shall be proportional to the project.
- (b) Projects with over 20,000 square feet of building area shall provide an on site outdoor employee patio area which is separate and removed from the main building entry.
- (c) The patio area shall be readily accessible to all on site users. In a single user project, the patio area shall be adjacent to or reasonably accessible to a side building entrance. In a multi user project, the patio area shall be centrally located, or more than one patio shall be provided.

5.3.6 Building Materials, Colors, and Finishes

- (a) Exterior materials selected for a building must be consistently applied and linked throughout a project; e.g., if a building is faced in a veneer of brick or tile, this feature shall in some manner turn the corner or wrap the building;
- (b) Preferred construction material is masonry, or tilt up concrete. Other methods are allowed, subject to City of Las Vegas design review;
- (c) Wood may be used as an accent material only, not as the primary building cladding. All wood must be finished with paint;
- (d) Monolithic glazing may be used in special applications such as an accent to the overall design, but not as a singular design theme. Unarticulated “glass box” design will not be allowed because of its obtrusive reflectivity;
- (e) Tinted or moderately reflective high performance glazing is encouraged (variety in glazing transparency and reflectivity, in hues of green, blue, brown, rose, and gray, is available). Lightly tinted or clear glazing is expected for ground floor retail; however, heat load gain must be considered. Untinted mirrored glass, gold tinted mirrored glass, and opaque appearing (black) glass will not be allowed;
- (f) Building color selection, and its relationship to the surrounding environment and adjacent properties, will be critically evaluated in design review. White, off white, and gray white colors are discouraged unless used for a specific reason and in small areas only.
- (g) A minimum of ten percent contrasting material or color is required on commercial buildings. Glazing will constitute twenty percent at the ground floor.

5.3.7 Roof Design

- (a) Most office or commercial projects in the Lone Mountain West Master Development area will feature parapet screened, built up flat roof forms. Sloped, curved or other roof forms may be used if expressed as a design element and consistently applied. Special purpose roof systems such as tensile structures are acceptable as long as they are well integrated into the project design;
- (b) Built up roofing systems shall be effectively screened on all sides by the building parapet. Parapet height must equal or exceed the height of the highest point of the built up roof and rooftop equipment;
- (c) The City of Las Vegas shall allow limited use of flat roofs with parapet and roof-mounted mechanical equipment.

5.3.8 Mechanical Equipment Screening

- (a) Exterior components, whether roof or ground mounted, shall be screened on all sides by a screening device such as a screen wall or parapet wall that shall be aesthetically compatible with the architectural design of the building.
- (b) Screening of the tops of roof mounted equipment that will be visible from upper levels of an adjacent building may be required, depending upon the project location and adjacent uses.
- (c) Minimum screening height shall be the height of the screened exterior components, and shall effectively screen all equipment from view from within 500 feet.
- (d) Equipment screening shall occur as monolithic units rather than individual smaller units. Multiple individual equipment screen “hats” surrounding individual elements will not be allowed.
- (e) Extruded metal screens, or screens of the same material or cladding as the building and directly linked to the building form, are appropriate screen examples. Wood, expanded metal lath, and chain link are not acceptable.
- (f) Roof access ladders shall be located on buildings so as to be internal to the site, and not visible from the street.

5.4 Signage

All signage and graphics and their lighting shall be complimentary to the overall project design and consistent throughout the project. The signs shall be designed for effective advertising as well as for developing visually balanced and appealing identification within the Lone Mountain West Master Development Plan area.

- 5.4.1 The City of Las Vegas has the specific right to refuse approval of any sign design which does not conform to the criteria. Proposed signage must also be compatible with that of the City of Las Vegas Sign Code. Where differences exist, the more specific and more restrictive shall apply.

- 5.4.2 All property owners/tenants shall be required to submit the proposed sign design for approval to the City of Las Vegas. Special design considerations and unique layouts are encouraged and shall be subject to approval by the City of Las Vegas.
- 5.4.3 **Signage Not Allowed.** No sign, awning, canopy, advertising, or any other item such as decoration, lettering or advertising on the glass of any window or door, or within 48” of any interior/exterior window will be allowed without written approval from the City of Las Vegas. If approval is granted, the owner agrees to maintain such item in good condition and repair at all times.
- 5.4.4 In addition, the following types of signage are not allowed:
- (a) **SIGN CONSTITUTING A TRAFFIC HAZARD.** No person shall install, maintain, or cause to be installed or maintained, any sign which simulates or imitates in size, color, lettering, or design, any traffic sign or signal, or which uses the words “STOP”, “LOOK”, “DANGER”, or any other words, phrases, symbols, or characters in such a manner as to interfere with, mislead, or confuse traffic;
 - (b) **IMMORAL OR PROHIBITED.** No person shall exhibit, post, or display on any sign, or cause to be exhibited, posted, or displayed upon any sign, anything of an obscene, indecent, or immoral nature or unlawful activity (per City Code);
 - (c) **SIGNS, DOORS, WINDOWS, OR FIRE ESCAPES.** No window signs will be permitted except otherwise noted in this document. No sign shall be installed, relocated, or maintained so as to prevent free ingress to or egress from any door. No sign shall be installed which conceals or covers exit signs. No sign shall be attached to a stand pipe except those signs that are required by code or ordinance;
 - (d) **ANIMATED, AUDIBLE MESSAGE, OR MOVING SIGNS.** Signs that have parts that move, swing, or rotate, or have lights that flash, blink, or fluctuate, or are otherwise animated or scintillating, are prohibited;
 - (e) **OFF PREMISE SIGNS.** Any sign, other than owner installed directional, that is installed for the purpose of advertising a project, event, person, or subject not related to the premises upon which the sign is located, shall be prohibited;
 - (f) **VEHICLE SIGNS.** Signs which are on or affixed to trucks, automobiles, trailers or other vehicles which advertise, identify, or provide direction to a use or activity not related to its lawful making of deliveries of sales or merchandise or rendering of services from such vehicles, are prohibited (per City code);
 - (g) **LIGHT BULB STRINGS AND EXPOSED TUBING.** External displays which consist of unshielded light bulbs, or open, exposed neon or gaseous light tubing, are prohibited. An exception may be granted by the City of Las Vegas when the display is an integral part of the design character of the activity to which it relates. Temporary decorative holiday lighting may be installed only with written approval from the City of Las Vegas.

5.5 Lighting

A carefully conceived architectural lighting scheme is required for each project.

- (a) Emphasize building entries and hardscape forecourts with lighting;
- (b) Fixtures shall be complimentary to the overall project design and consistent throughout the project;
- (c) All fixtures in public areas shall be vandal and tamper resistant. Low mounted access panels shall require tools to open;
- (d) Fixtures under twenty feet (20') in height shall have rock guards, and lenses shall be shatter resistant polycarbonate or other substance;
- (e) For architectural lighting, metal halide, halogen, and fluorescent light sources are acceptable for use on site throughout the project;
- (f) "Wall pack" type fixtures are limited to service area use; where allowed, they shall be down lights with reduced glare, or have minimally exposed light sources;
- (g) Horizontal illumination shall be kept to a minimum;
- (h) Uniformity ratios, vertical illumination levels, and fixture cut off levels shall meet or exceed IES recommendations;
- (i) Fixtures shall not be placed to produce glare or significantly cast onto adjoining lots or streets. Light cast onto adjacent properties shall not exceed 0.02 foot candles;
- (j) Outdoor lighting shall not be powered beyond 240V;
- (k) Globe type fixtures with exposed lighting sources are not allowed;
- (l) Cobra heads are not allowed;
- (m) Themed lighting should be consistent with the entire planned area.

5.5.1 Parking and Public Area Lighting: The fixture type shall be from the Quality Lighting line, or approved equivalent.

5.5.2 Luminaires used for drive aisles and parking areas shall be pole mounted. Pole heights shall be between 15 and 36 feet. Pole height shall be determined so as not to exceed the height of adjacent buildings.

5.5.3 Covered Parking Area Lighting: Luminaires for covered parking areas shall be recessed, with tamper proof trims and hardware. Lenses shall be 5/8" polycarbonate or 1/2" laminate riot glass with 3/8" tempered glass. Finish shall be durable architectural paint or surface treatment. Lamps shall be high pressure sodium or fluorescent. Light sources shall be hidden from street view (no "wall pack" type fixtures or fixtures with exposed sources of light).

5.5.4 Low Level Lighting: Bollards, beacons, and wall mounted low level fixtures serve primarily as accent lighting and to provide safety lighting at steps, ramps, and structures. They are not intended for use as area lighting.

5.5.5 Landscape and Accent Lighting: Accent lighting for landscape and site features shall be provided by grade mounted flood lights or housing below grade uplight.

5.6 Landscape

The goal of the landscape design is to help develop a project identity while contributing to a pleasant and attractive environment. The landscape will give structure and image to the overall development, while providing orientation, shade, and comfort for individual areas.

- 5.6.1 **Landscape Concept:** Plant material shall be selected from the Plant Palette in Appendix B. (See also Section 4 – Architecture and Landscape overview)
- 5.6.2 The density and maintenance requirements of plant materials shall be in planned zones, with low maintenance, drought tolerant plants along natural open areas and more formal and intensively maintained areas near building entrances and other areas of higher use, such as public plazas, courtyards, and pedestrian walkways.
- 5.6.3 **General Requirements:** A minimum of fifteen percent (15%) of the total parcel area shall be landscaped. The landscape will include plant (organic) materials as well as inorganic elements such as rock mulch, boulders, etc. The proportion of organic material which comprises the total landscaped area, shall range from forty to sixty percent (40 60%) after one year of growth. Also see the City of Las Vegas Landscape, Wall and Buffer Guidelines.
- 5.6.4 **Landscape Grading and Drainage:** See also Section 5.2.1 – Site Grading and Section 3.11 – Site Drainage.
- 5.6.5 **Parking and Vehicular Areas:** Parking and vehicular circulation areas can detract from a project's appearance if not properly designed. Parking lots and vehicle circulation spaces shall be designed to blend with the building site character through the use of landscape planting and grading. See the City of Las Vegas Landscape, Wall, and Buffer guidelines.

6. DESIGN STANDARDS FOR SINGLE AND MULTI-FAMILY RESIDENTIAL

See also Section 3: Site Planning Guidelines – General Requirements and Section 4: Architecture and Landscape Overview.

6.1 Definitions

(a) Low Density Residential

For the purpose of these Standards, Low Density Residential shall consist of a variety of detached, single-family homes with attached or detached garages and a density of no greater than six (6) dwelling units per acre. These include conventional single-family, patio homes and Z lot configurations.

(b) Medium-Low Density Residential

For the purpose of these Standards, Medium-Low Density Residential shall consist of a variety of detached, or attached, single-family homes with attached or detached garages and a density of no greater than twelve (12) dwelling units per acre. These include conventional single-family, patio homes and Z lot configurations.

(c) Multi-Family Medium Residential

For the purpose of these Standards, the Multi-Family Medium Residential shall be with optional detached garages with a density of no greater than twenty five (25) dwelling units per acre and shall not exceed three stories in height.

6.2 Site Planning

The design objective is to provide community and open space amenities that promote pedestrian and vehicular access for a pleasant living environment. The development shall include central recreation and landscape amenities for residents.

6.2.1 Street Layout and Appearance: The design objective for single-family projects is to design streets that are aesthetically pleasing and provide efficient traffic flow. Adherence to the following is required:

- (a) To create a visual variety and interest and avoid a “tunnel” effect, curvilinear streets offset the width of the ROW are encouraged in single-family areas;
- (b) A variety of front residential setbacks should be encouraged to create interest and articulation along the street scene;
- (c) Various garage orientations and configurations are encouraged to add interest and reduce the visual impact of garage doors on overall street appearance;

- (d) One and two story elements should be utilized to add interest and variety to the building massing, when viewed from the streets;
- (e) Driveway should be perpendicular to the street.

6.2.2 **Building and Lot Orientation:** The orientation of single-family lots and dwellings should focus on creating interesting and inviting street scenes; usable private yards areas; and optimizing open space, recreational and view opportunities.

- (a) Double frontage lots are prohibited;
- (b) A variety of residential and garage orientations and setbacks should be employed to add visual interest to the street scene;
- (c) Along the collector and arterial roadways, some side on orientations add variety to the building massing and opportunities to open perimeter walls. These openings provide visual and pedestrian access and additional landscape opportunities;
- (d) Where appropriate, swing in or side entry arrangements will be encouraged to create visual interest and variety to the street scene;
- (e) Where third car garages are being proposed, a tandem configuration for the third car could be considered, to add flexibility to the floor plan and reduce the visual dominance of garage doors along the street;
- (f) The orientation of multi-family lots and dwellings should focus on creating interesting and inviting street scenes; usable private yards areas; and optimizing open space, recreational and view opportunities while minimizing parking on periphery of project.

6.2.3 **Parking:** Automobile parking and on site circulation, if improperly treated, can degrade the visual quality and integrity of the neighborhood, therefore:

A. **Single-family**

- (a) Resident parking is prohibited on major and minor arterial level streets and discouraged on any other street, drive or other place not specifically approved for automobile parking;
- (b) The project association may restrict vehicular parking on any private street within the development. The project association shall be responsible for signage and enforcement of parking restrictions;
- (c) Each single-family unit shall have a minimum of two enclosed off street parking spaces;
- (d) Trucks, campers, mobile homes or other recreational or off street vehicles may not be parked in any front of fences or corner yards and shall not be parked, maintained, constructed or repaired in any yard unless substantially screened from public view;
- (e) Incorporate landscaping into parking and hardscape areas to break expanses of pavement and provide visual, heat and glare relief.

B. Multi-Family

- (a) All circulation within common parking areas shall be internal to the site;
- (b) The total site design concept shall include the integration of parking areas so that such areas do not dominate the site, and are dispersed throughout the site;
- (c) Incorporate landscaping into parking areas to break expanses of pavement and provide visual, heat and glare relief;
- (d) Covered parking structures shall be compatible with other architectural elements on the site;
- (e) Parking lot lighting shall provide adequate illumination, but not emit light beyond the parking lot area;
- (f) Parking lot design shall incorporate pedestrian circulation within and among parcels.

6.2.4 Common Open Space and Residential Amenities: A minimum of 330 square feet per dwelling unit shall be allocated to open space for each project site. A walkway system with jogging path runs through the Lone Mountain West Master Plan area, and shall connects to the neighboring residential parcels. Developments within Lone Mountain West shall provide amenities to integrate with the system; for example, pedestrian walkways with access gates linking to the trail system and adjacent uses such as common open space areas, the community parks, and commercial areas.

6.3 Architecture

Although the primary design components of any building are massing and scale, the following components require careful consideration to ensure compatibility in the overall appearance.

6.3.1 Building Massing, Setbacks and Height Requirements:

- (a) The buildings shall have simple forms with combinations of one and two story elements;
- (b) Front porches, arcades and second floor loggias are encouraged;
- (c) There shall be articulation in wall planes both vertically and horizontally, with projections and recesses providing shadow and depth on front elevations only.

6.3.2 Elevations and Floor Plans: Builders shall provide sufficient variations to add visual interest to the street scene:

- (a) Diversity of elevations is encouraged. It is recommend that no more than 4 identical elevations shall occur in a row along any street;
- (b) Provide a minimum of two color schemes that can be applied to any elevation. Each color scheme shall have a dominant and accent color;
- (c) Single story units or single story elements are encouraged at corner lots and lots adjacent to open space areas;

- (d) For homes that are visible from public areas or streets, shall provide articulation and detail to the visible elevations from the street that is comparable to the front elevation;
- (e) Design second story elements and locate windows to maintain rear and side yard privacy between units, where possible;
- (f) Vary the floor plans on adjacent lots, use reverse plans, and alternate elevations, where practical;
- (g) Multi-family projects shall provide a color scheme that can be applied to any elevation.

6.3.3 **Roofs:** Roof forms and materials are critical in maintaining the theme. Acceptable roof forms include gable, hip, or shed, and in some instances, flat (1/4" per foot slope) with parapet. Simple pitched roof forms may range from 3 1/2:12 to 5:12. Fascia shall be wood or stucco. Acceptable roof materials include two piece barrel or S shaped concrete or clay tile; terne metal or copper; and built up or single ply membrane (flat roof only). Skylights and solar panels are permitted provided they are suitably integrated into the roof design. Multi-family projects mechanical equipment should be behind project walls and visible asphalt shingles are not allowed. Roof mounted mechanical equipment is prohibited.

6.3.4 **Chimneys:** Fireplace chimneys shall be simple in design, massive in proportion, and use the same materials as the surrounding wall or accent materials. Exposed flues are not permitted. Split vent metal flues shall be covered, and shall not exceed 1'6" in height above the highest point of the attached structure.

6.3.5 **Exterior Materials:** The exterior finishes shall reflect the theme and be compatible with the surroundings. Acceptable finishes include:

- (a) Plaster or stucco using a sand, dash, medium lace, or other light textured finish.
- (b) Exposed wood with a minimum 2" nominal dimension, of clear, all heart, kiln dried material or glulamated members with wood species and adhesive materials rated for desert climate. Exposed sheathing shall be limited to the underside of exposed eaves or porch roofs. All wood shall receive stain or paint finish. Durable substitute materials such as painted polymer aluminum, metal, or fiberglass are recommended;
- (c) Accents and trim of ceramic tile, brick, cast or real stone;
- (d) Flashing, sheet metal, vents, etc., except for decorative copper, shall be painted to match adjacent surfaces.

6.3.6 **Colors:** Base colors shall be earth tones and warm off whites (excluding pink) with contrasting accents. Any color change must occur on an inside corner only or separated by a horizontal cornice or accent band. Developer of the parcel shall submit a color scheme for approval by the City of Las Vegas. It should be noted that desert reflectivity is reduced with darker hues of colors and is encouraged.

- 6.3.7 **Lighting:** Each residence shall have, in addition to a porch light, a garage mounted photo cell light that illuminates the street numbers. Bright security lights are prohibited.
- 6.3.8 **Windows and Doors:** Mill finish aluminum window or door frames are prohibited. Reflective glass is prohibited.
- (a) **WINDOWS,** regardless of elevation:
- Divided lights and factory finished white or accent color frames encouraged.
 - Half round or flat arched openings encouraged.
 - Accent windows, octagonal or circular, encouraged.
 - Shutters and pot shelves, scaled to the window size, encouraged.
 - Use of fiberglass or polymer wood substitutes recommended for shutters.
- (b) **EXTERIOR DOORWAYS:**
- Shall be sheltered by overhangs.
 - Shall be emphasized by door surrounds (i.e. “pop outs” on front doors)
 - Have the appearance of raised panels.
- (c) **GARAGE DOORS:**
- Shall be recessed from the adjacent walls.
 - Shall be metal sectional.
 - Decorative glass panels encouraged.
- 6.3.9 **Porches:** Porches provide shade and shelter, are conducive to neighborliness and the enjoyment of the outdoors. The porch also lends shadow and depth to the exterior walls and presents a human scale element to the street. Front porches and patios are encouraged.
- 6.3.10 **Balconies:** The use of balconies is strongly encouraged. The balcony shall be incorporated into the building form to provide articulation and visual interest to large wall masses. The railings shall be consistent in character and detail with the structure. Multi-family balcony railings shall be opaque.
- 6.3.11 **Columns:** Columns and arches are an important element in both Italian Renaissance and Mission architecture. They can be expressed as freestanding supports for porches or roofs or as attached pilasters to enhance depth and interest at windows and entries. Columns shall be square or cylindrical, of stucco, pre cast concrete, stone, or cast polymers finished to have the look of cement. Columns shall have both capital and base, either through pre cast elements or by application of stucco trim. Arches shall have a minimum thickness of twelve inches, and a half round, flattened or rectangular.
- 6.3.12 **Exterior Stairs:** Exterior stairs shall compliment the architectural massing and form of the building, and shall use materials similar to that of the balcony.

6.3.13 Private Walls and Fences: Private walls and fences are encouraged to provide security, privacy and landscape definition.

- (a) Block wall treatments visible from the interior street or public spaces shall be consistent in design with adjacent buildings in materials, form, character, and color;
- (b) Walls shall meet governing codes;
- (c) Landscaping, particularly vines and espaliered plant materials, shall be used to visually soften garden walls;
- (d) Stepped or arcaded walls are encouraged;
- (e) To create a massive appearance, minimum thickness of walls shall be eight inches, or four to six inches with pilasters of eight inches or greater;
- (f) Natural tinted block walls are encouraged;
- (g) Fences and view segments in private walls shall be of wrought iron, painted aluminum, polymer or pre-cast baluster rails, or stacked and permanently fixed roofing tiles to form a grille. Gates shall be of wrought iron or painted aluminum.

6.3.14 Accessory Structures

- (a) Patio covers, trellises, gazebos or any other accessory structures shall be compatible with the materials, forms and colors of the adjacent homes and shall be constructed as permitted by governing codes, particularly in respect to height, size and setbacks;
- (b) Mailboxes shall be placed in and detailed to contribute to the overall community theme, as per United States Post Office specifications.

6.4 Landscape

The developer shall provide a landscape concept to establish continuity with the streetscape design.

- (a) The landscape concepts will be subject to approval by the City of Las Vegas;
- (b) Plant materials shall be selected from the approved Plant Palette. See Appendix B;
- (c) Provide a minimum of one (1) 24' box tree per single-family unit front yard;
- (d) The front yard planting shall be designed so that a minimum of 60% coverage is achieved within two years under normal growing conditions. This includes shrubs, turf, and vegetative ground covers;
- (e) Plantings shall be a minimum of 5 gallon size, adequately spaced to provide full screen after two years' growth;
- (f) An appropriate rock mulch, such as decomposed granite, shale, etc., shall be used in shrub beds, and shall be of earth tone (non white);
- (g) Provide landscaping for front and side yards of corner lots.

6.4.1 Perimeter Area Landscaping

Perimeter Area Landscaping shall be in accordance with City of Las Vegas Landscape, Wail, and Buffer Guidelines.

6.4.2 Irrigation: All planting areas held in common and maintained by a project association or property management group shall be supplied with an automatic irrigation system. Individual lots are the responsibility of the homeowner. Common area greenbelts and streetscapes shall use, if available, reclaimed water under the Reclaimed Water Management Plan approved by the State of Nevada. All other areas will use potable water.

7. DESIGN STANDARDS FOR PUBLIC FACILITIES / OPEN SPACE

Public facilities and open space are an integral component of the Land Use Plan which utilizes streets, sidewalks and pathways to connect parcels to each other and encourage pedestrian activity. The Common Area is made up of the components listed below. All open space and public facilities are to be designed by City of Las Vegas.

The Park Residential Construction tax allows for collection of whichever is less, one (1) percent of the valuation of each building permit issued, or \$1,000.00 per residential unit. The basis of valuation is \$.32 per square foot. An "in lieu of program is also allowed, whereby 330 square feet of open space is provided by the developer in lieu of payment. Either program is acceptable. If the City of Las Vegas Parks Department is to build the park/open space, the land is to be located in the Lone Mountain West Plan area.

7.1 Parks and Open Space

A series of parks and open space trail systems shall be linked with the pedestrian pathway system through coordination of individual developer site plans. Neighborhood parks shall be built within residential communities to provide passive and active play areas as required by the City of Las Vegas Zoning Ordinance at 330 square feet per dwelling unit.

- (a) Neighborhood Parks of less than 5 acres in size Designed to City of Las Vegas standards.
- (b) City Parks of 5 acres or larger (up to 25 acres) Designed as per City of Las Vegas standards.

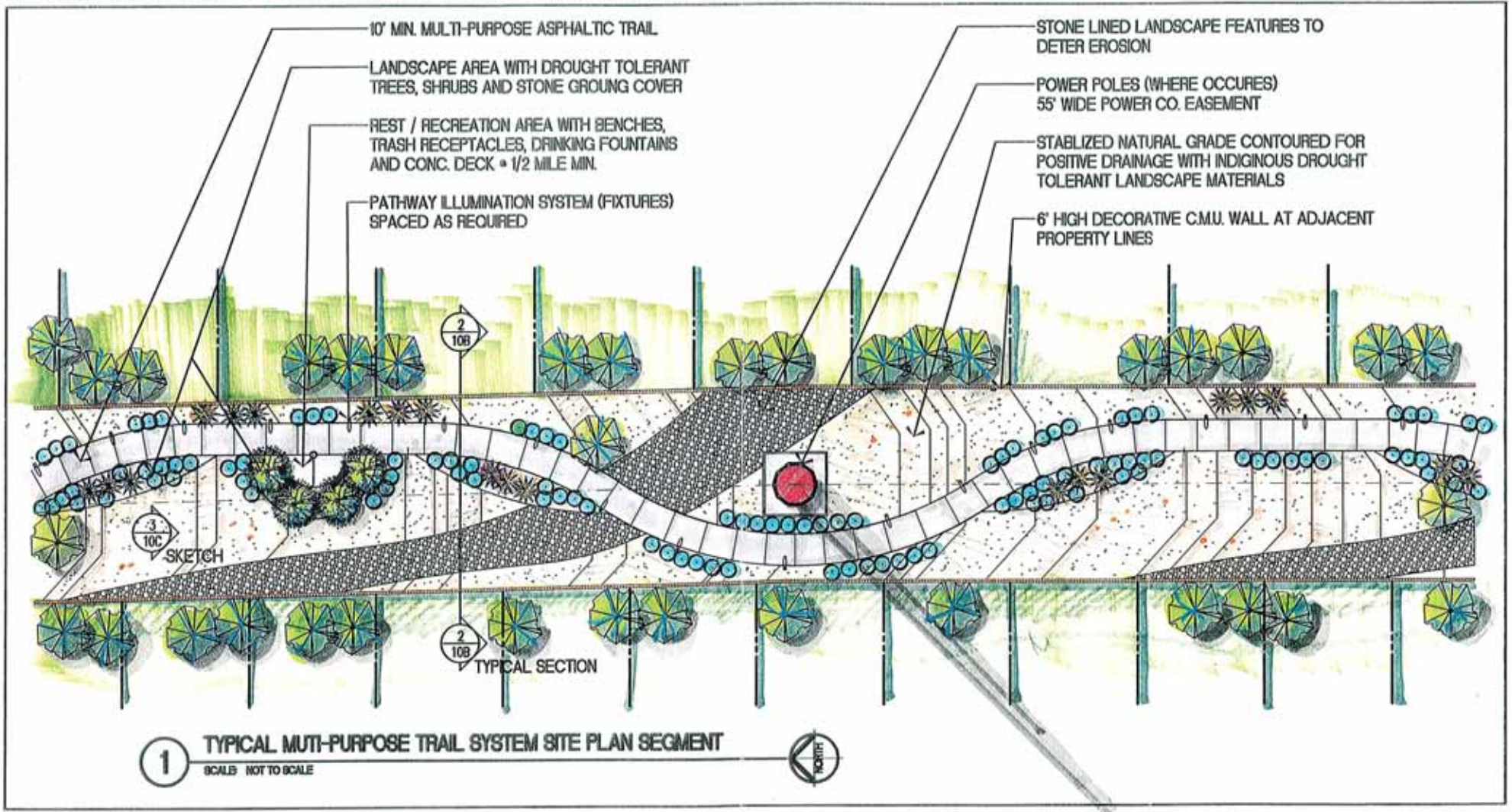
7.2 Multi Purpose Trails

The main multi purpose pathway will be incorporated into the 55' power easement that traverses the Lone Mountain West planning area. A portion of the easement will be prepared for pedestrian and bicycle traffic. The remaining portion of the easement will be enhanced through the use of drought tolerant landscaping (see 4.3 Landscape Architectural Concept). Pathway illumination will be designed to not adversely impact adjoining properties. Rest areas, including benches and waste receptacles, as well as play areas, including playground equipment, will be located at regular intervals (at a maximum of half a mile apart) along the pathway. This trail system will tie into the proposed City of Las Vegas Trail System to the west along Puli Drive as well as the proposed Beltway Trail System to the east. See Figure 7 – Multi purpose Trails and Figure 10 – Multi purpose Trails Cross Sections.

7.3 Developer Funding of Parks and Open Space

Prior to the start of construction of each phase, the developer will enter into an agreement with City of Las Vegas Parks and Leisure Activities. This agreement will be for the application of their Residential Park Impact Fees to fund the construction of the parks and open spaces contained within the master plan.

FIGURE 10A: TYPICAL MULTI-PURPOSE TRAIL SYSTEM SITE PLAN SEGMENT



1 TYPICAL MULTI-PURPOSE TRAIL SYSTEM SITE PLAN SEGMENT
SCALE: NOT TO SCALE

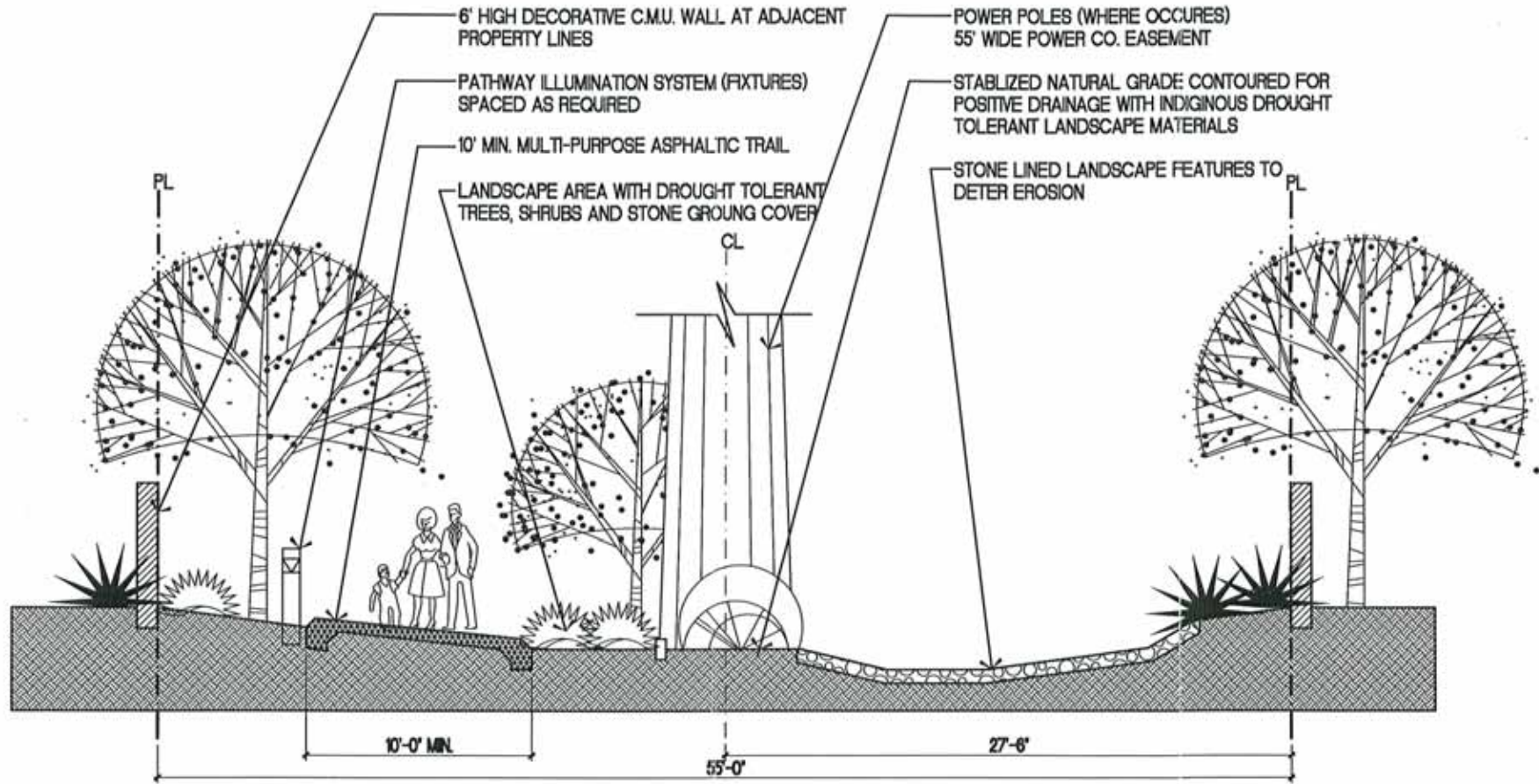
DATE	8/2000
SCALE	1"=50'
DESIGNED	DJB
DRAWN	DJB
JOB NO.	9007

DJ BUTTKE & ASSOCIATES, P.C.
ARCHITECTURAL DESIGN STUDIO
1000 W. GILCHRIST CT. LAS VEGAS, NEVADA 89102

PROJECT: **LONE MOUNTAIN WEST MASTER PLAN**
FOR FOCUS COMMERCIAL GROUP, INC.
LOCATION: LAS VEGAS, NEVADA

DRG. PLAN SEGMENT
10A

FIGURE 10B: TYPICAL MULTI-PURPOSE TRAIL SYSTEM CROSS SECTION



2 TYPICAL MULTI-PURPOSE TRAIL SYSTEM CROSS SECTION
SCALE: NOT TO SCALE

DATE	8/20/17
SCALE	3/8"=1'-0"
DESIGNED	D.J.B.
DRAWN	D.J.B.
JOB NO.	1007

D. J. BUTTKE & ASSOCIATES, P.C.
ARCHITECTURAL DESIGN STUDIO
1511 W. BELSHON CT. • LAS VEGAS • NEVADA • 89102 • 702.735.8877

PROJECT: **LONE MOUNTAIN WEST MASTER PLAN**
FOR FOCUS COMMERCIAL GROUP, INC.

LOCATION: LAS VEGAS, NEVADA

CROSS SECTION
10B

FIGURE 10A: TYPICAL MULTI-PURPOSE TRAIL SYSTEM SKETCH



3

TYPICAL MULTI-PURPOSE TRAIL SYSTEM SKETCH

SCALE: NOT TO SCALE

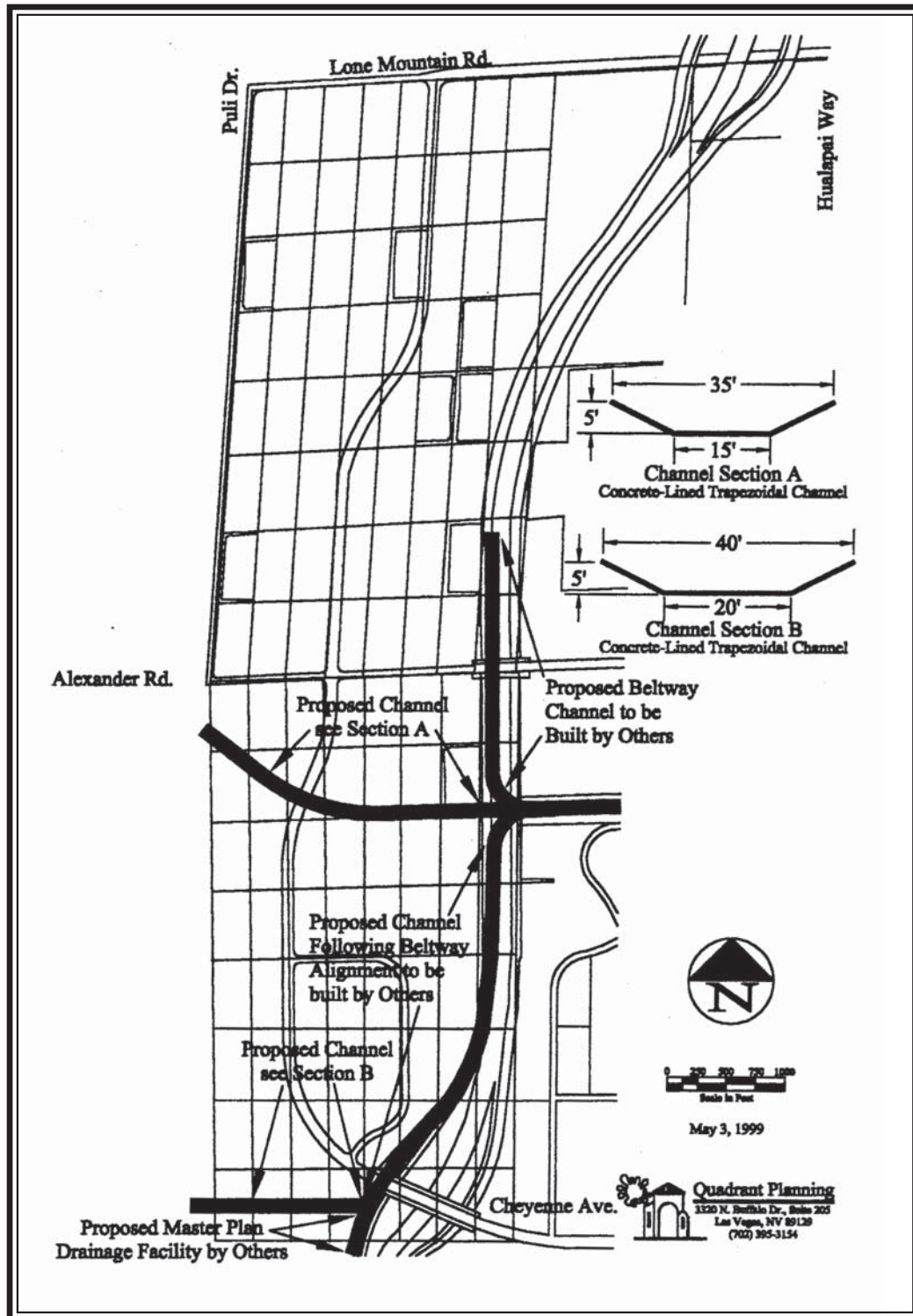
DATE	8/20/09
SCALE	N/A
DESIGNED	DJB
DRAWN	DJB
JOB NO.	9807

DJ BUTTKE
& ASSOCIATES, P.C.
ARCHITECTURAL DESIGN STUDIO
2175 W. BLOSSOM CT. • LAS VEGAS • NEVADA • 89102 • 702.233.8877

PROJECT: LONE MOUNTAIN WEST
MASTER PLAN
FOR FOCUS COMMERCIAL GROUP, INC.
LOCATION: LAS VEGAS, NEVADA

SKETCH
10C

Figure 11 – DRAINAGE MASTER PLAN



8. GLOSSARY

BUILDER / DEVELOPER

“Builder/Developer” shall mean a developer/builder of an individual parcel other than the master developer and home builders.

CITY OF LAS VEGAS

City of Las Vegas (CLV) includes, but is not limited to the Planning Department, Development Department, Public Works, or any other Department that would review the Lone Mountain West PCD design Standards and/ or plans.

COMMUNITY OPEN SPACE

Community open space is defined as any improved public recreational facility or grounds including but not limited to: park areas provided for passive recreation including gardens, walking areas, picnic areas. Linear open space connections were developed to provide pedestrian and bicycle linkages between village centers, neighborhood focuses, parks and residential areas. These connections can make dual use of preserved natural drainage, new drainage ways and utility easements.

CURB RAMP

A sloping walkway, which provides access between a walkway to a surface located above or below an adjacent curb face.

DESIGN THEME

A conceptual theme that is established for an area of the Lone Mountain West Master Plan which forms the basis for all design decisions that are made toward realizing the final form of the area. The Design Theme provides a visual basis for architecture, engineering, site planning and landscape architecture.

DRAINAGE WAY

A drainage channel or swale that serves to carry surface run off.

HANDICAPPED ACCESSIBLE

Means of access and egress that are easily utilized by people having temporary activity, or mobility impairments, as defined by American’s with Disabilities Act.

LANDSCAPE

An outdoor area that is improved with one, or a combination of, ground cover, shrubbery, trees, water features, sculptures, earth berms, walls, or fences, based on a design that maximizes function, aesthetics and maintenance considerations.

LANDSCAPE AREA

A tract of land, usually adjacent to street right-of-way that is provided for the purpose of community landscape.

LANDSCAPE BUFFER

An area of land landscaped with earth forms and plant materials for the purpose of minimizing adverse effects of smoke, odor, noise, dust, glare or visual pollution from incompatible adjacent uses.

NEIGHBORHOOD

The neighborhood as a development concept applied to Lone Mountain West promotes the combination of residential, commercial, religious, educational and recreational facilities into a balanced land use development pattern. This pattern balances the number of residential units with appropriately sized, easily accessible levels of commercial uses and community facilities.

ON SITE

Within the boundary of the development parcel or development site referenced.

PARCEL

A parcel of land, established by the primary developer, to be developed according to a specific program and planning and design criteria.

PARCEL DESIGN AND ENGINEERING CRITERIA

Documents that provide planning, site design and engineering criteria specifically for an individual development parcel.

PEDESTRIAN ACCESS CUL DE SAC

A cul de sac that provides pedestrian circulation through the end of the cul de sac to connect with walkways along streets, parks, public open areas or other cul de sacs.

RAMP

A portion of a handicapped accessible walkway with a slope greater than 1 foot vertical in 20 feet horizontal (5%).

RESIDENTIAL WALLS

Walls adjoining residential lots that are constructed to provide privacy for the residential parcel, and are not required to be constructed according to Lone Mountain West wall standards.

SERVICE AREAS AND YARDS

Areas required to provide loading facilities and storage of waste products and trash at commercial buildings, offices, community facilities or residential projects.

SETBACK BUILDING

The distance between the property line of a lot and the closest point on the exterior face of a building. In the proximity of streets, building setbacks shall be measured from the edge of the landscape area adjacent to the street. Parts of a building such as cantilevered eaves, decks, or bay windows may encroach into the setback.

SETBACK PARKING

The distance between the property line of a lot and the back curb of a parking area.

SIGNAGE

Any device, structure, fixture or placard using graphics, symbols and/or written copy for the primary purpose of identification or advertising any establishment, product, goods or services.

SITE FURNISHING

Utilitarian outdoor elements intended for public use such as benches, trash receptacles, public telephones, newspaper dispensers, postal delivery units and lighting standards.

STREETSCAPE

All of the plant material, walkways, walls, street furnishings, and building facades adjacent to a roadway that establish the visual character of the public street.

WALKWAY

Paved pedestrian connections or walkways designated as handicapped accessible should not exceed 5%.

WATER CONSERVING PLANT MATERIALS

Plant materials that may or may not require irrigation, but do so in a limited way, as opposed to exotic plant material that is not indigenous to the area and require large amounts of irrigation.

APPENDIX A: ARCHITECTURAL STYLES

The Lone Mountain Master Plan will offer the same range of architectural styles offered by the adjacent Lone Mountain Master Plan in order to maintain visual continuity, project integrity and an overall sense of place.

Mission

Mission architecture combines the building patterns of the Pueblo Indians with Spanish Colonial design, incorporating Mediterranean influences. Mission style uses low pitched tile roofs, with hipped or gabled forms and wide overhanging eaves. Missions were commonly built around a central patio or garden, with extended building eaves creating a covered arcade supported by rounded arches. Clay tiled roofs, white stucco walls, and colonnades, or covered walkways, are typical features.

Italian Renaissance

Aspects of Italian Renaissance architecture include classical elements such as columns, pediments, cornices, arches, and niches, with emphasis on overall symmetry of form. Roof forms are flat with a parapet, or hipped with a shallow slope. Balconies are projecting or recessed, with iron rails or concrete balustrades. Exteriors are stucco or masonry, frequently with lower story rustication.

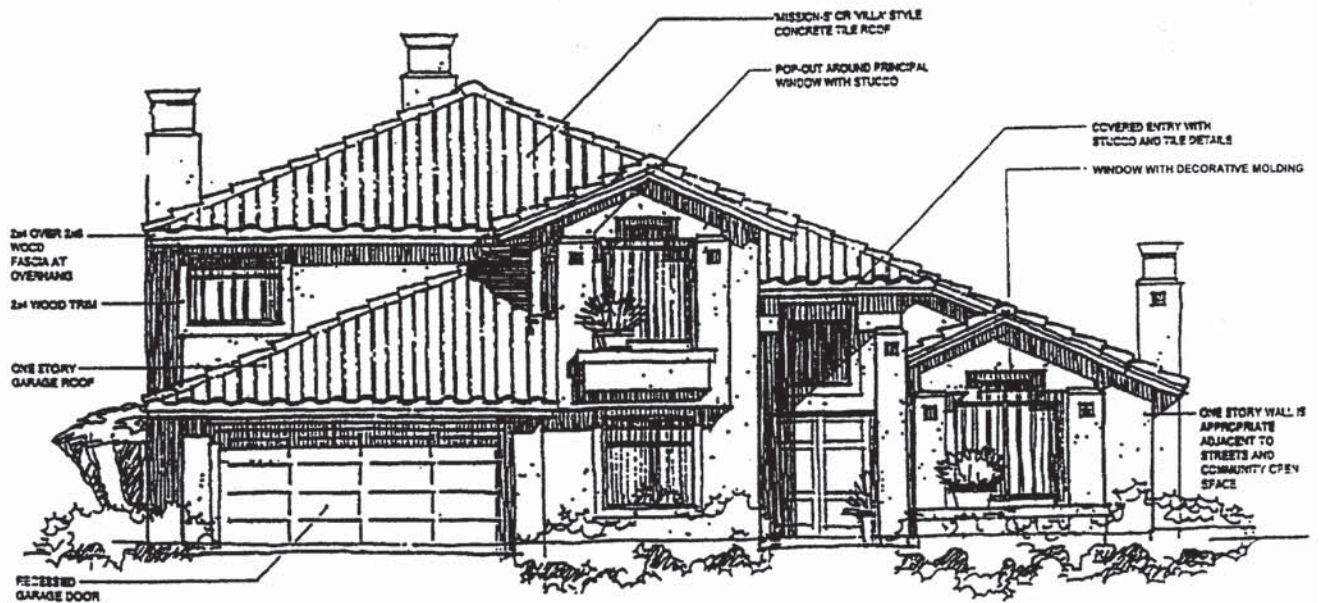
A brief list of typical characteristics of the residential style includes the following.

- Flat roofs with parapets.
- Shallow pitched roofs with a slope of 3 1/2:12 to 5:12.
- Gable, shed and hip roof forms.
- S shaped clay or concrete tile roofing.
- Stucco, smooth or textured, and masonry exteriors.
- Generous overhangs with closed eaves; fascia and eave soffits wood
- Half round or flat arches above doors, windows and porch roofs.
- Entry accented by columns.
- Simple massing with projecting porches or wings.
- Balconies, projecting or recessed, with iron railing or concrete balustrade.
- Accent details such as shutters, medallions, quoins, tiled gables, molded cornices, window pediments, continuous belt course trim, and ground story rustication.
- Exterior entry courts, courtyards, patios, and arcaded wing walls that are an extension of the architecture.

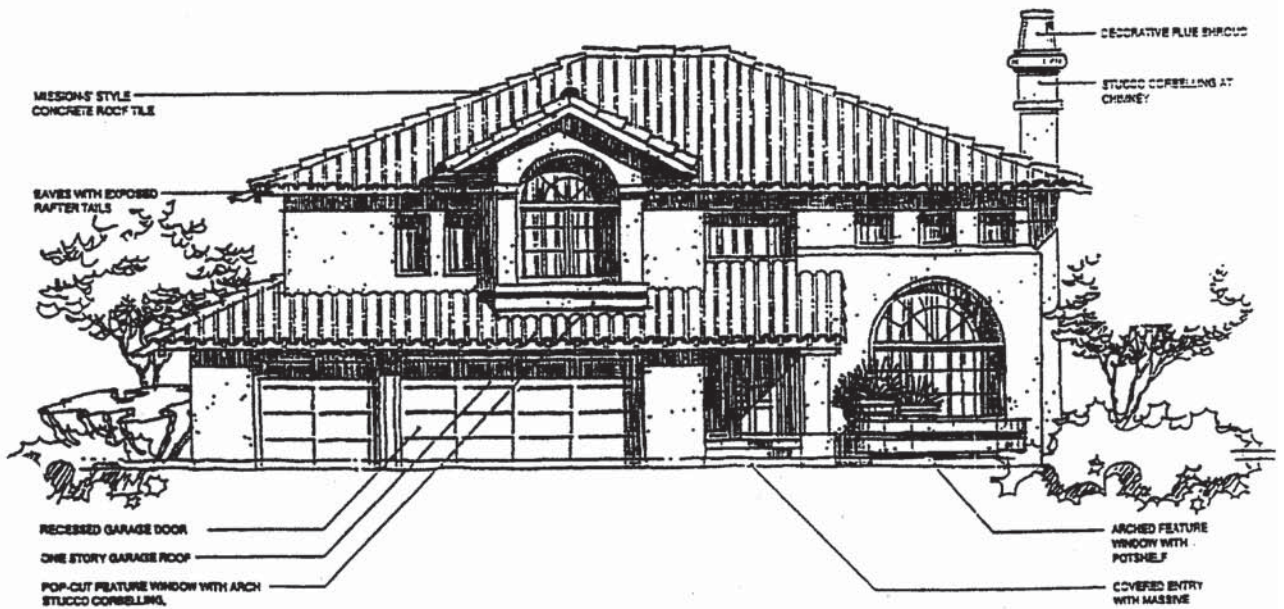
Southwest Contemporary

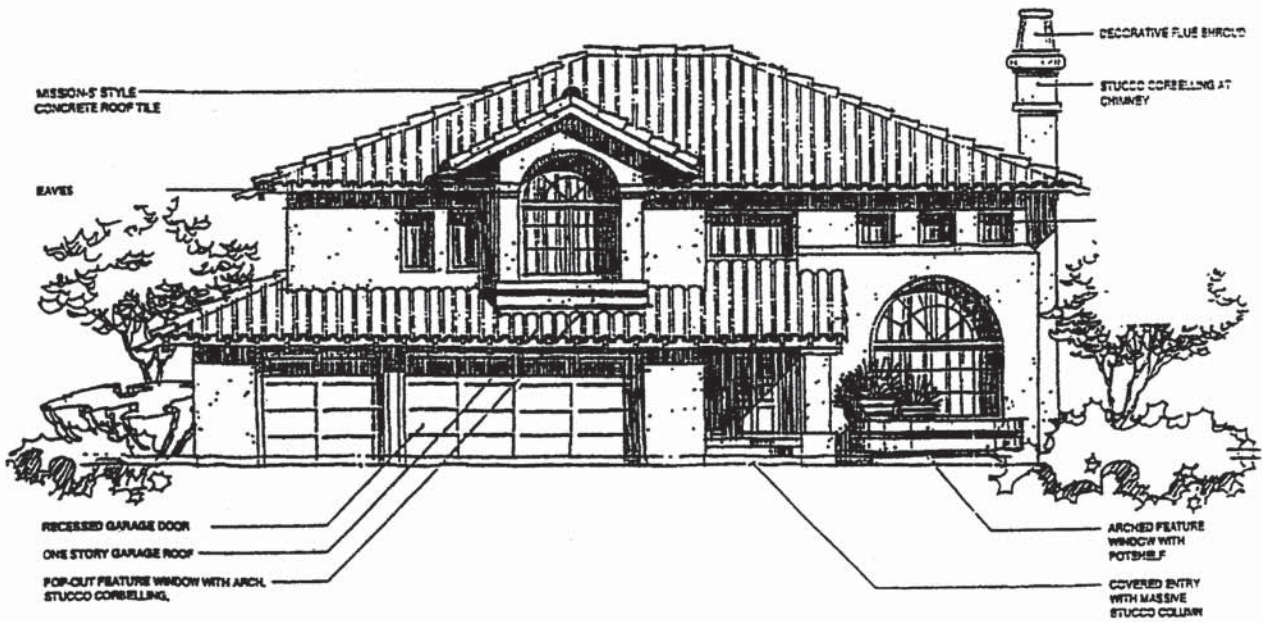
Retains the basic elements from Mission and Italian Renaissance stucco walls, clay roof tiles, arcades and courtyards with fountains, white and off white to sand and coral exterior colors but executed with cleaner lines, simplified forms and contemporary materials.

Elevations



Single Family Elevation - Contemporary Southwest





APPENDIX B: PLANT PALATTES

LONE MOUNTAIN WEST PLANT PALETTE TREES

	BOTANICAL NAME	COMMON NAME
1	<i>Acacia aneura</i>	Mulga
2	<i>Acacia greggii</i>	Catclaw acacia
3	<i>Acacia minuta</i>	Southwest sweet acacia
4	<i>Acacia rigidula</i>	Blackbrush acacia
5	<i>Acacia schaffneri</i>	Schaffner's acacia
6	<i>Acacia smallii</i>	Sweet acacia
7	<i>Albizia julibrissin</i>	Silk tree
8	<i>Arbutus unedo</i>	Strawberry tree
9	<i>Bauhinia con gesta</i>	Anacacho orchid tree
10	<i>Brahea armata</i>	Mexican blue palm
11	<i>Cedrus atlantica</i> 'Glauca'	Blue atlas cedar
12	<i>Celtis reticulata</i>	Western hackberry
13	<i>Celtis sinensis</i>	Chinese hackberry
14	<i>Cercidium floridum</i>	Blue palo verde
15	<i>Cercidium micophyllum</i>	Littleleaf palo verde
16	<i>Chilopsis linearis</i>	Desert willow
17	<i>Chitalpa</i>	Chitalpa (Chilopsis x Catalpa)
18	<i>Cupressocyparis leylandii</i>	Leyland cypress
19	<i>Eriobotiya deflexa</i>	Bronze loquat
20	<i>Eriobotrya Japonica</i>	Loquat
21	<i>Eriobotiya Rahpiolepis</i>	Coppertone
22	<i>Eucalyptus formanii</i>	Forman's eucalyptus
23	<i>Fejoa sellowiana</i>	Pineapple guava
24	<i>Fraxinus greggii</i>	Little leaf ash
25	<i>Fraxinus oxycarpa</i> 'Raywoodii'	Raywood ash
26	<i>Fraxinus velutina</i>	Arizona ash
27	<i>Fraxinus velutina</i> 'Modesto'	Modesto ash
28	<i>Fraxinus velutina</i> 'Rio Grande'	Rio Grande ash
29	<i>Gleditsia triacanthos inermis cultivars</i>	Honey locust
30	<i>Juniperus chinensis</i> 'Torulosa'	Hollywood twisted juniper
31	<i>Koelreutena paniculata</i>	Goldenrain tree
32	<i>Lagerstroemia indica</i>	Crape myrtle
33	<i>Laurus nobilis</i>	Grecian laurel
34	<i>Ligustrum lucidum</i>	Glossy privet
35	<i>Olea europaea</i> 'Swan Hill'	Swan Hill Olive
36	<i>Olea europaea</i> 'Wilsonii'	Wilson's olive
37	<i>Phoenix dactylifera</i>	Date palm
38	<i>Pinus edulis</i>	Colorado pinyon pine
39	<i>Pinus eldarica</i>	Mondel pine
40	<i>Pinus halapensis</i>	Aleppo pine

LONE MOUNTAIN WEST PLANT PALETTE

41	<i>Pinus pinea</i>	Italian stone pine
42	<i>Pinus roxburghii</i>	Chir pine
43	<i>Pistacia chinensis</i>	Chinese pistache
44	<i>Pithecellobium flexicaule</i>	Texas ebony
45	<i>Pittosporum phillyraioides</i>	Willow pittosporum
46	<i>Platanus acerfolia</i>	London plane tree
47	<i>Platanus wrightii</i>	Arizona sycamore
48	<i>Podocarpus macrophyllus</i>	Japanese yew pine
49	<i>Populus alba</i> 'Bolleana'	Bolleana white poplar
50	<i>Populus fremontii</i>	Fremont cottonwood
51	<i>Prosopis</i> species	Mesquite
52	<i>Prunus caroliniana</i>	Carolina laurel cherry
53	<i>Prunus cerasifera</i>	Purple leaf plum
54	<i>Punica granatum</i>	Pomegranate
55	<i>Pyrus calleryana</i> 'Bradford'	Bradford callery pear
56	<i>Pyrus kawakamii</i>	Evergreen pear
57	<i>Quercus buckleyi</i> 'Redrock'	Redrock oak
58	<i>Quercus hex</i>	Holly oak
59	<i>Quercus suber</i>	Cork oak
60	<i>Quercus texana</i>	Texas red oak
61	<i>Quercus virginiana</i>	Southern live oak
62	<i>Quercus virginiana</i> 'Heritage'	Heritage live oak
63	<i>Robinia ambigua</i> 'Idahoensis'	Idaho locust
64	<i>Robinia ambigua</i> 'Purple Rose'	Purple robe locust
65	<i>Sophora japonica</i>	Japanese pagoda tree
66	<i>Sophora secundiflora</i>	Texas mountain laurel
67	<i>Ulmus pa,vifolla</i> 'Sempervirens'	Evergreen elm
68	<i>Vitex agnus-castus</i>	Chaste tree
69	<i>Zizyphus jujuba</i>	Chinese jujube

LONE MOUNTAIN WEST PLANT PALETTE

SHRUBS

	BOTANICAL NAME	COMMON NAME
1	<i>Atriplex species</i>	Saltbush
2	<i>Baccharis pilularis</i> 'Twin Peaks'	Dwarf coyote bush
3	<i>Baccharis sarothroides</i>	Desert broom
4	<i>Cassia species</i>	Cassia and senna
5	<i>Cotoneaster species and cultivars</i>	Cotoneaster
6	<i>Dalea species</i>	Indigo bush
7	<i>Encelia farinosa</i>	Brittlebush
8	<i>Ericameria laricifolia</i>	Turpentine bush
9	<i>Euonymus species</i>	Euonymus
10	<i>Fallugia paradoxa</i>	Apache plume
11	<i>Feijoa sellowian</i>	Pineapple guava
12	<i>Ilex species</i>	Holly
13	<i>Juniperus species</i>	Juniper
14	<i>Lagerstroemia indica</i> cultivars	Crape myrtle
15	<i>Larrea tridentata</i>	Creosote
16	<i>Leucophyllum species and cultivars</i>	Texas ranger
17	<i>Ligustrum japonicum</i>	Japanese privet
18	<i>Ligustrum lucidum</i>	Glossy privet
19	<i>Myrtus communis</i>	Myrtle
20	<i>Myrtus communis</i> 'Compactus'	Dwarf myrtle
21	<i>Nandina domestica</i> cultivars	Heavenly bamboo
22	<i>Photinia fraseri</i>	Fraser's photinia
23	<i>Pittosporum tobira</i>	Mock orange
24	<i>Pittosporum tobira</i> 'Variegata'	Variegated mock orange
25	<i>Pittosporum tobira</i> 'Wheeler's Dwarf'	Dwarf mock orange
26	<i>Pyracantha species</i>	Pyracantha
27	<i>Raphiolepis indica</i> cultivars	Indian hawthorn
28	<i>Rhus ovata</i>	Sugar bush
29	<i>Simmondsia chinensis</i>	Jobba
30	<i>Tecoma stans angustata</i>	Yellow bells
31	<i>Vauquelinia cahifomica</i>	Arizona rosewood
32	<i>Viburnum tinus</i>	Viburnum
33	<i>Viburnum tinus</i> 'Compacta'	Dwarf viburnum
34	<i>Xylosma con gestum</i>	Xylosma

LONE MOUNTAIN WEST PLANT PALETTE

SUBSHRUBS AND GROUND COVERS

	BOTANICAL NAME	COMMON NAME
1	<i>Abelia grandiflora</i>	Abelia
2	<i>Acacia redolens</i> 'Desert Carpet'	Prostrate acacia
3	<i>Aptenia cordifolia</i>	Hearts and flowers
4	<i>Baccharis</i> 'Centennial'	Centennial baccharis
5	<i>Baileya multiradiata</i>	Desert marigold
6	<i>Calliandra eriophylla</i>	Fairy duster
7	<i>Convolvulus cneorum</i>	Bush morning glory
8	<i>Convolvulus mauritanicus</i>	Ground morning glory
9	<i>Dietes iridoides</i>	Fortnight lily
10	<i>Gazania</i> species	Gazania
11	<i>Hemerocallis</i> species	Daylily
12	<i>Hymenoxys acaulis</i>	Angelita daisy
13	<i>Justicia</i> species	Justicia
14	<i>Lantana</i> species	Lantana
15	<i>Melampodium leucanthum</i>	Blackfoot daisy
16	<i>Osterospermum fruiticosum</i>	Trailing African daisy
17	<i>Psilostrophe cooperi</i>	Paperflower
18	<i>Rosmarinus officinalis</i> cultivars	Rosemary
19	<i>Salvia</i> species	Sage
20	<i>Santolina</i> species	Lavendar cotton
21	<i>Sphaeralcea ambigua</i>	Globe mallow
22	<i>Teucrium</i> species	Germander
23	<i>Trachelospermum asiaticum</i>	Asiatic jasmine
24	<i>Trachelospermum jasminoides</i>	Star jasmine
25	<i>Verbena</i> species	Verbena
26	<i>Vinca minor</i>	Vinca

LONE MOUNTAIN WEST PLANT PALETTE

ACCENTS, CACTI AND SUCCULENTS

	BOTANICAL NAME	COMMON NAME
1	<i>Agave</i> species	Agave
2	<i>Aloe</i> species	Aloe
3	<i>Brahea armata</i>	Mexican blue palm
4	<i>Caesalpinia</i>	Bird of paradise
5	<i>Chamaerops humilis</i>	Mediterranean fan palm
6	<i>Dasyilirion wheeled</i>	Desert spoon
7	<i>Echinocactus</i> species	Barrel cactus
8	<i>Echinocereus</i> species	Hedgehog cactus
9	<i>Ferocactus</i> species	Barrel cactus
10	<i>Fouquierna splendens</i>	Ocotillo
11	<i>Hesperaloe parviflora</i>	Red yucca
12	<i>Muhlenbergia</i> species	Muhley grass
13	<i>Nolina microcarpa</i>	Bear grass
14	<i>Opuntia</i> species	Prickly pear and cholla
15	<i>Penstemon</i> species	Penstemon
16	<i>Pennisetum setaceum</i> 'Rubric'	Ruby fountain grass
17	<i>Trachycarpus fortunei</i>	Windmill palm
18	<i>Washingtonia filifera</i>	California fan palm
19	<i>Washingtonia robusta</i>	Mexican fan palm
20	<i>Washingtonia filifera x robusta</i>	Hybrid fan palm
21	<i>Yucca</i> species	Yucca

VINES

	BOTANICAL NAME	COMMON NAME
1	<i>Campsis</i> species	Trumpet creeper
2	<i>Ficuspumila</i>	Creeping fig
3	<i>Gelsemium sempeivirens</i>	Carolina jasmine
4	<i>Hedera</i> species	Ivy
5	<i>Jasminium mesneyi</i>	Primrose jasmine
6	<i>Lonicera</i> species	Honeysuckle
7	<i>Madfadyena unguis cati</i>	Cat's claw
8	<i>Parthenoclsus quinquefolia</i>	Virginia creeper
9	<i>Parthenocissus tricuspida</i>	Boston ivy
10	<i>Rosa banksiae</i>	Bank's rose
11	<i>Trachelospermum asiaticum</i>	Asiatic jasmine
12	<i>Trachelospermum jasminoides</i>	Star jasmine

LONE MOUNTAIN WEST PLANT PALETTE PROHIBITED PLANTS

	BOTANICAL NAME	COMMON NAME
1	Cynodon dactylon	Common bermuda
2	Morus alba	Fruitless mulberry
3	Olea europaea	Olive tree
4	Nerium oleander	Oleander

NOTE 1: Each project shall coordinate its plant palette with existing street trees and landscape design concept.

NOTE 2: All other plants not listed on the Lone Mountain West Plant Palette, but which are not expressly prohibited above, may be allowed subject to approval by the City of Las Vegas.

NOTE 3: Not all species or cultivars of each genus listed will be allowed, depending on the suitability of the selected plant, with respect to its use or adaptability.

NOTE 4: For commercial and industrial applications, a limited number of species shall be used for the plant palette; whereas more latitude will be allowed for residential uses.

APPENDIX C: LEGAL DESCRIPTION OF PLANNED COMMUNITY DEVELOPMENT

BARNSON SURVEYING, INC.
5160 So. Eastern Ave. Ste. F
Las Vegas, Nv. 89119
(702) 597 0041 FAX(702) 256 3466
LEGAL DESCRIPTIONS

PORTIONS OF SECTIONS 1 AND 12, T.20S., R.596., M.D.M.
CITY OF LAS VEGAS, CLARK COUNTY, NEVADA,
MORE PARTICULARLY DESCRIBED AS FOLLOWS:

PORTIONS OF THE NW1/4 AND THE SW1/4, SECTION 1:

THE E1/2 SE1/4 NW1/4 NW1/4 AND THE S1/2 NE1/4 NW1/4 AND THE N1/2 SE1/4 NW1/4
AND THE NE1/4 SW1/4 NW1/4 AND THE E1/2 SW1/4 SF1/4 NW1/4 AND THE SE1/4 SF1/4
NW1/4 AND THE NW1/4 NE1/4 SW1/4 AND THE W1/2 SW1/4 NE1/4 SW1/4 AND THE
SW1/4 NW1/4 SW1/4 AND THE E1/2 NW1/4 SW1/4 SW1/4 AND THE W1/2 NE1/4 SW1/4
SW1/4 AND THE E1/2 NW1/4 SF1/4 SW1/4 AND THE W1/2 NE1/4 SF1/4 SW1/4 AND THE
W1/2 SE1/4 SE1/4 SW1/4 AND THE E1/2 SW1/4 SE1/4 SW1/4 AND THE W1/2 SE1/4
SW1/4 SW1/4.

PORTIONS OF THE NW1/4 AND THE SW1/4, SECTION 12:

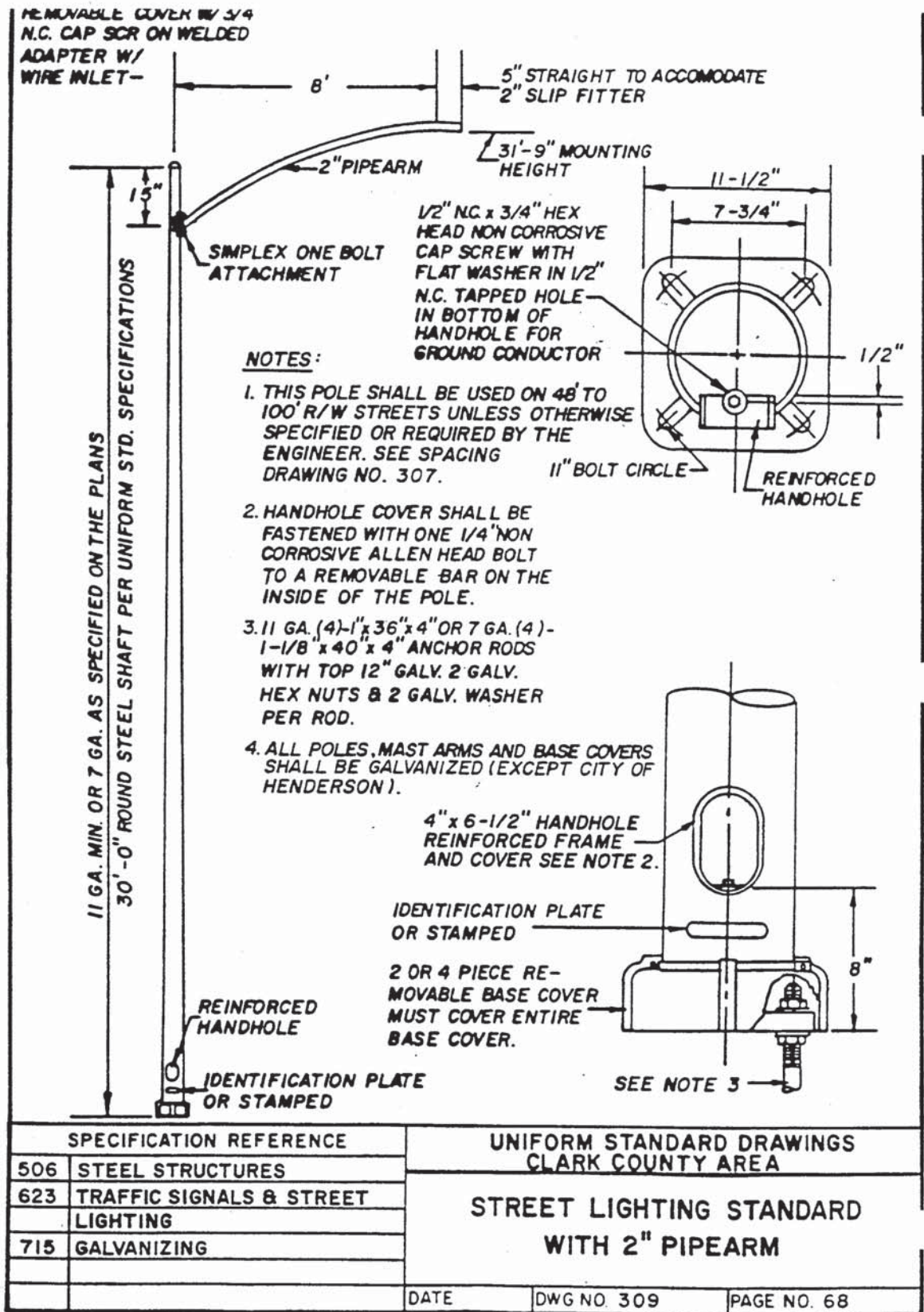
THE E1/2 NE1/4 NW1/4 NW1/4 AND THE NW1/4 NE1/4 NW1/4 AND THE W1/2 NE1/4
NE1/4 NW1/4 AND THE W1/2 SW1/4 NE1/4 NW1/4 AND THE E1/2 SE1/4 NW1/4 NW1/4
AND THE NE1/4 SW1/4 NW1/4 AND THE SF1/4 SW1/4 NW1/4 AND THE NE1/4 NW1/4
SW1/4 AND THE E1/2 SW1/4 NW1/4 SW1/4 AND THE W1/2 SE1/4 NW1/4 SW1/4 AND
SW1/4 SW1/4 NE1/4 SW1/4.



APPENDIX D: TRAFFIC STUDY

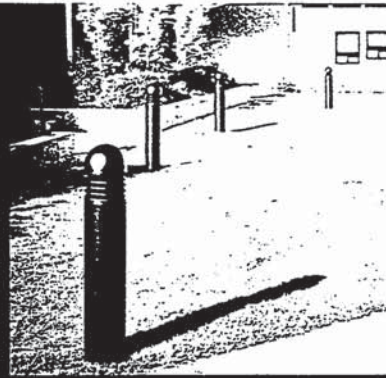
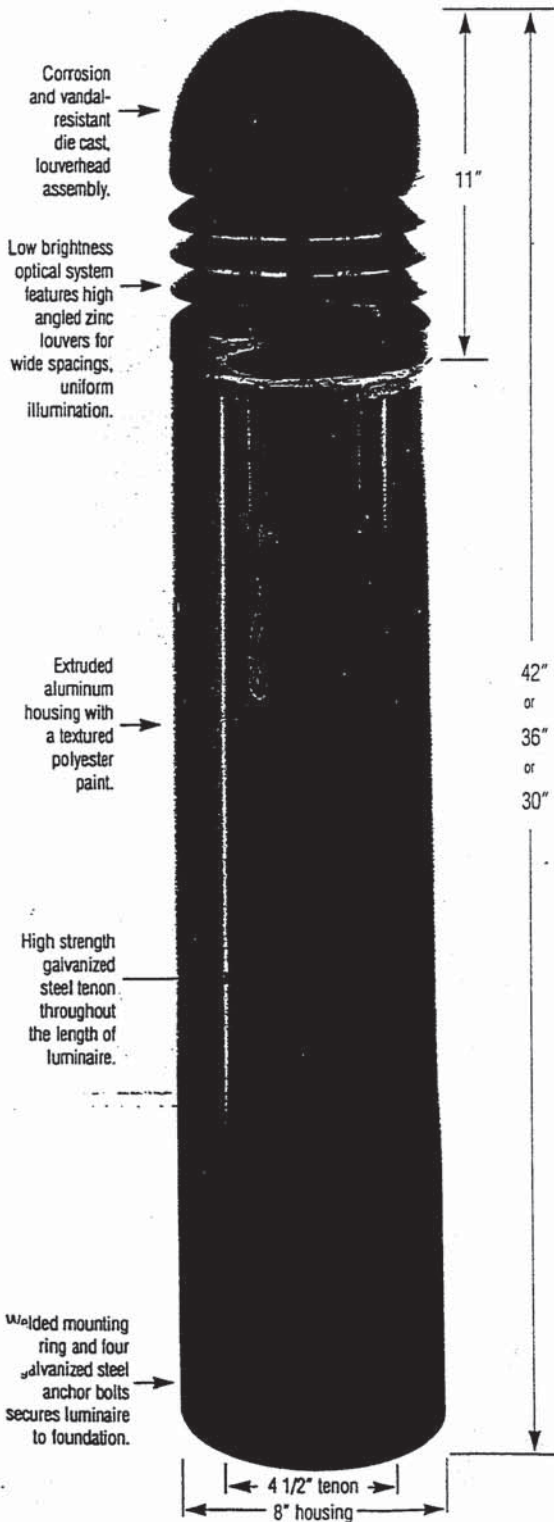
APPENDIX E: MASTER DRAINAGE STUDY

APPENDIX F: LIGHTING



GALVANIZED STEEL MOUNTING SYSTEM

BRM 822



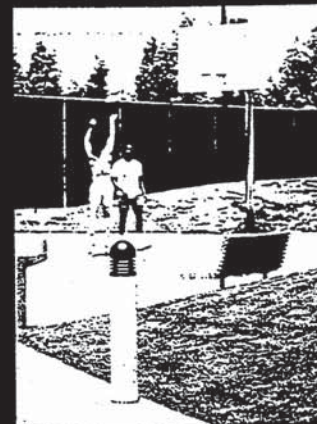
In the **school yard**, bollards become objects for climbing on, hanging from, crashing into.

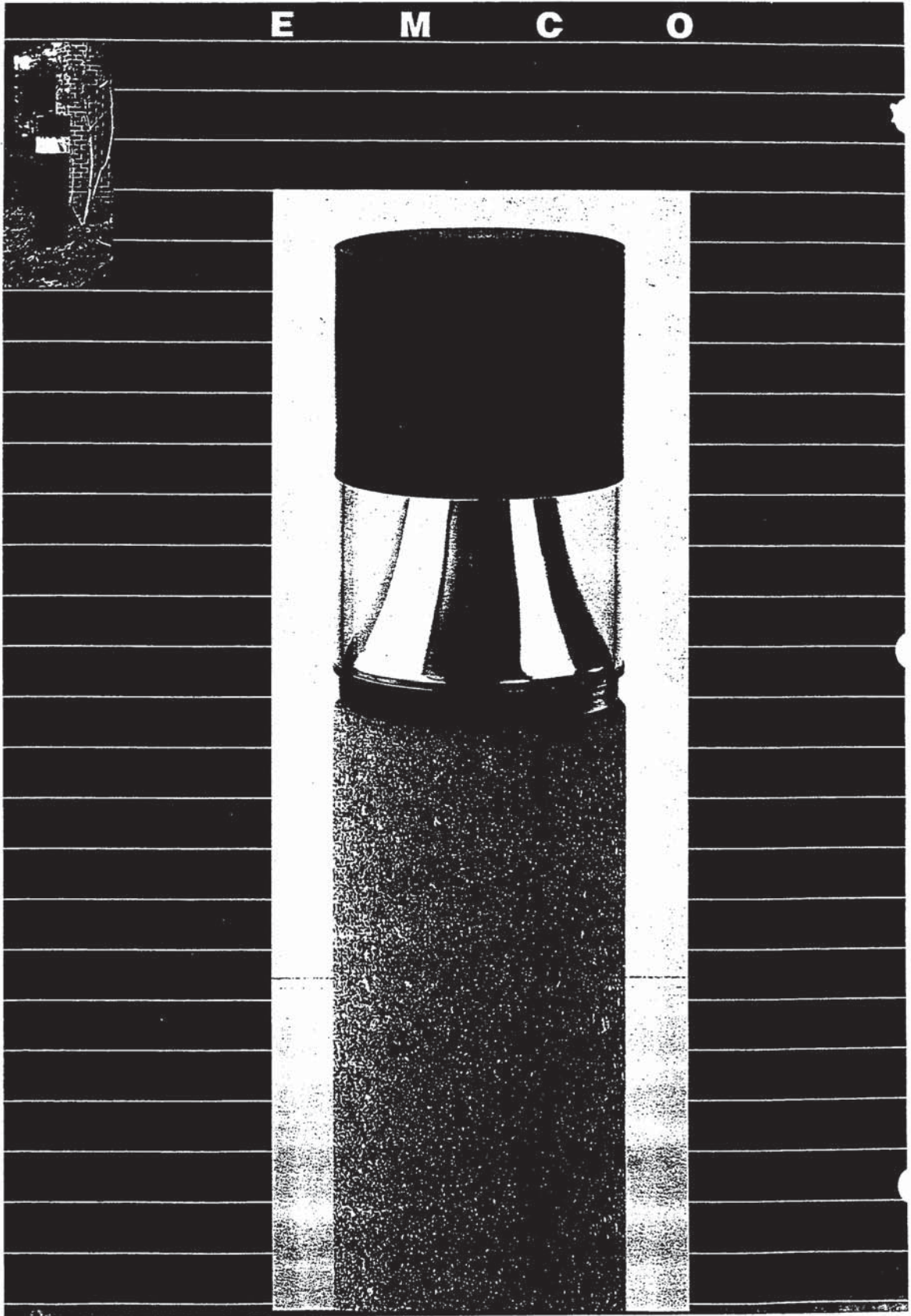
Add the weathering effects of the elements and irregular maintenance and it's easy to see why there may be no more **punishing**

environment for low level lighting.

Gardco School Bollards are specifically designed and **field-tested** to meet the most extreme challenges kids can dish out. Their

Gardco heritage assures optical performance

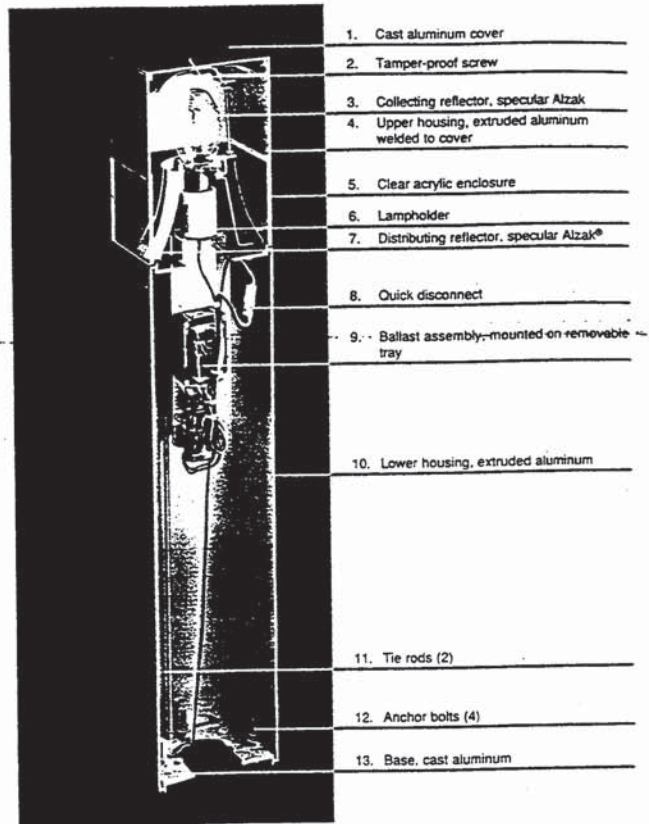




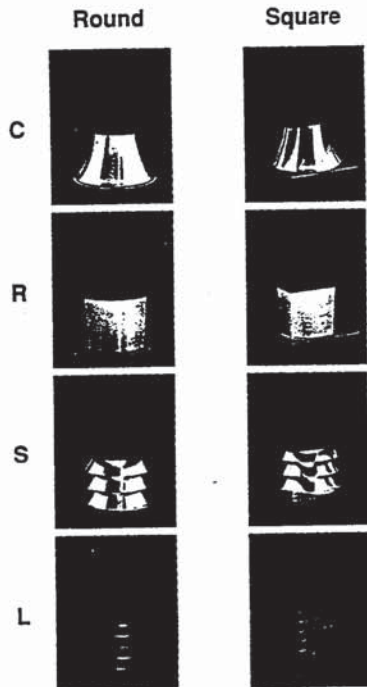
Bollards

In a low level lighting environment, a luminaire must address not only specific lighting criteria, but more importantly, the issues of vandalism, durability, and ease of maintenance.

EMCO's design philosophy exhibits an understanding and solution to these issues. In our line of bollards, you will find such features as seamless extruded housings, tamper resistant hardware, and silicone seals and gaskets to assure years of trouble free operation. By using basic geometric forms that blend well into the landscape, matched with a wide variety of optical systems, EMCO can provide a specific bollard to fit your particular project.



Optical Systems



Cross Section



Round Reflector is cone-shaped specular Alzak® to project light outward in a 360° circle below eye level. Collecting reflector conceals light source and directs illumination to distributing Alzak® reflector. A clear acrylic window seals unit.



Prismatic Glass Refractor diffuses light and distributes it outward and downward with Type V distribution. Assembly is protected from the weather and vandals by a clear acrylic shield.

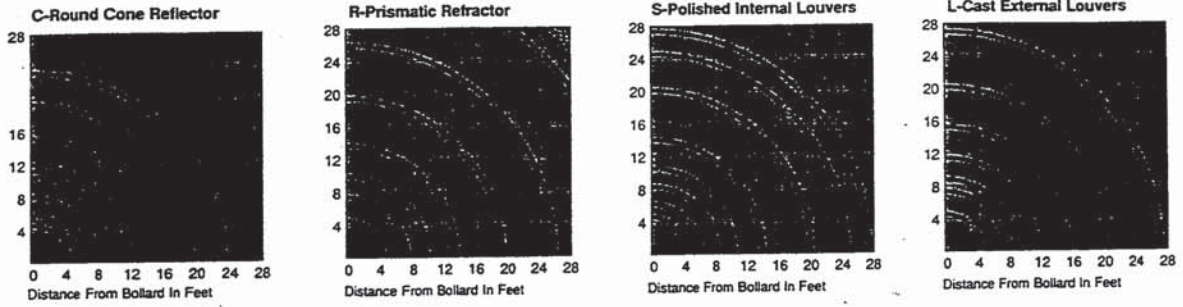


Round Polished Aluminum Louvers hide light source and direct light downward in a 360° circular pattern. A clear acrylic shield protects the system.



Cast Louvers conceal the light source while directing illumination outward and downward. Finished to match fixture. Glass cylinder mounted inside protects the lamp.

Photometrics



Initial footcandles for 100W HPS 42" bollard (center of optics 36" above grade).

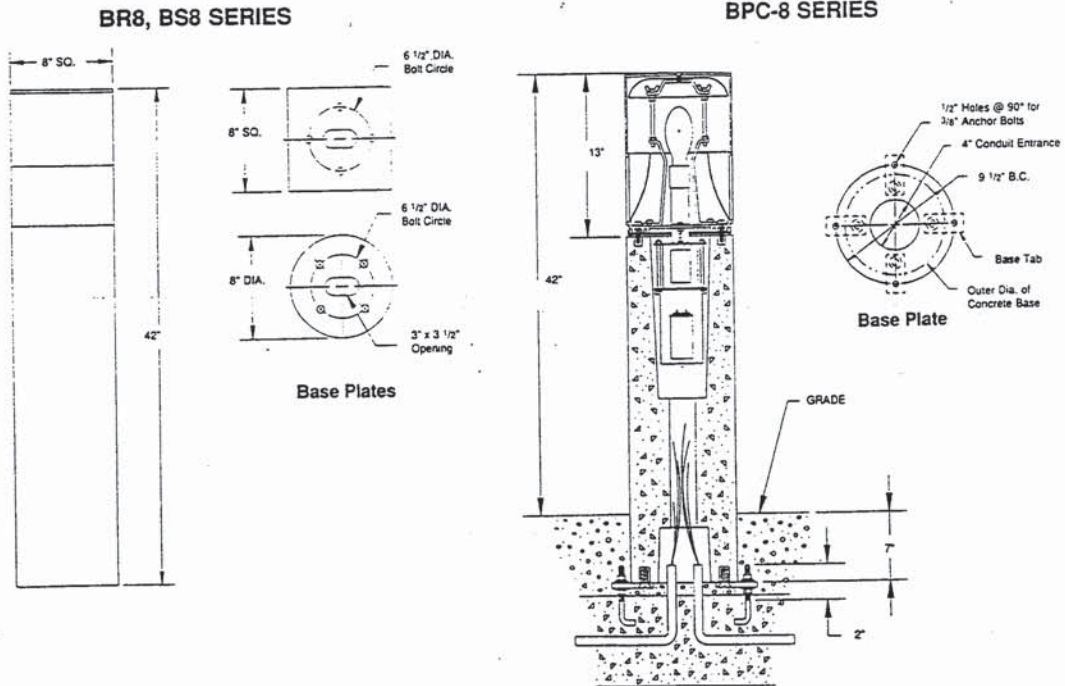
Curve	F.C. Values
A	10.0
B	5.0
C	2.0
D	1.0
E	.50
F	.20
G	.10
H	.05

Lamp Factor Table	
Lamp	Factor
50W HPS	.42
70W HPS	.66
100W HPS	1.00
150W HPS*	1.68
50W MH	.36
70W MH	.53
100W MH	.89
175W MH*	1.47
75W MV	.33
100W MV	.46
100W Inc.	.18

*L style only

For approximate f.c. levels, the factors shown may be multiplied by the 100W HPS value.
 Ex: 70W HPS at C curve
 = .66 x 2.0 = 1.32 f.c.

Dimensions & Mounting Detail



Specifications

UPPER HOUSING

Extruded aluminum sides are welded to cast aluminum top and secured with single pin-in-head socket tamper-proof screw. BR8 and BS8 units are finished to match lower housing.

LOWER HOUSING

BR8, BS8 - One-piece seamless, extruded aluminum.

BPC8 - Pre-cast concrete base is reinforced with welded wire mesh and steel rebar and finished with an environmentally safe water based graffiti deterrent sealant. Standard available colors are natural, beige or dark gray concrete.

LENS

BR8, BPC8 - 1/4" one-piece extruded clear virgin acrylic.

BS8 - Four sections of 5/16" mitered clear virgin acrylic are chemically bonded.

OPTICAL SYSTEMS

(C) *Cone* - Upper collecting and lower distributing Alzak® aluminum reflectors provide efficient distribution of light.

(R) *Reflector* - Prismatic borosilicate glass designed

to direct light outward and downward.

(S) *Polished Aluminum Louvers* - Angled to provide maximum spacings while shielding the light source.

(L) *Cast Louvers* - Individually cast aluminum blades are fastened in a unitized assembly.

ANCHORAGE

Cast aluminum base is secured to mounting foundation with four (4) 3/8" x 16" anchor bolts on a 6 1/2" bolt circle. Two (2) threaded 3/8" tie rods internally secure housing to anchor base.

Pre-cast concrete base (designed for direct burial) retains four (4) galvanized steel base tabs which are secured and leveled to the mounting foundation with four (4) 3/8" x 9" x 1 1/2" anchor bolts on a 9 1/2" bolt circle.

ELECTRICAL

Standard medium base (mogul base is standard for Cast louvers with 175MH, 175MV, 150HPS lamps) lampholder is glazed porcelain with nickel plated reinforced screwshell and spring loaded contact. Ballast and lampholder are prewired with quick electrical disconnects and mounted on a one-piece assembly secured internally to lower housing with two (2) captive screws.

Each high power factor ballast is the separate component type, capable of providing reliable lamp starting down to -20° F. High Pressure Sodium ballasts operate lamps within ANSI trapezoidal limits. Metal Halide and Mercury Vapor ballasts are medium regulation auto transformers providing ± 10%(MH) and ± 5%(MV) power regulation with a ± 10% variation from rated input voltage. Component-to-component wiring within the luminaire will carry no more than 80% of rated current and is listed by UL for use at 600 VAC, at 150° C or higher. Plug disconnects are listed by UL for use at 600 VAC, 15A or higher.

FINISH

Each luminaire receives a fade and abrasion resistant thermally cured and textured electrostatically applied polyester powder finish.

LABELS

All fixtures bear UL wet location (CSA where applicable) and I.B.E.W. labels.

EMCO reserves the right to change materials or modify the design of its product without notification as part of the company's continuing product improvement program.

Ordering

Bollard

- BS8 - Square
- BR8 - Round
- BPC8 - Round Natural Concrete Base
- BPC8B - Round Beige Concrete Base
- BPC8G - Round Dark Gray Concrete Base

Wattage / Source

- 100INC
- 50HPS
- 70HPS
- 100HPS
- 150HPS (L only)
- 50MH
- 70MH
- 100MH
- 175MH (L only)
- 100MV
- 175MV (L only)

Options

- HS-90 - 90° House Side Shield
- HS-180 - 180° House Side Shield
- PCB - Button Photocontrol. (Not available on concrete bollards).
- 30 - 30" High
- 36 - 36" High

BR8 - L - 100MV - 120 - BLP - PCB

Optics

	Cone		Polished Louvers	Cast Louvers
	Round Reflector	Reflector		
BS8	C	R	S	L
BR8	C	R	S	L
BPC8 Series	C		(Consult Factory)	

Voltage

- 120
- 277

Finish

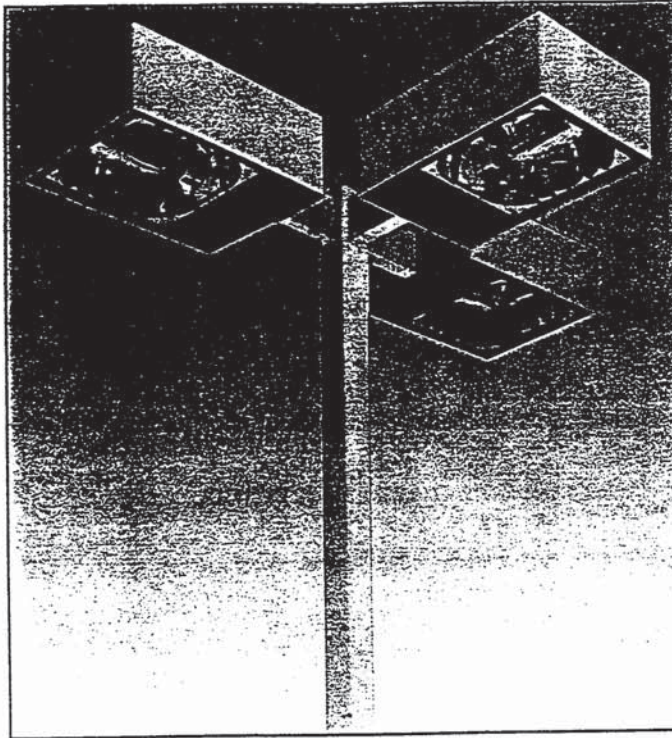
- BRP - Bronze Paint
- BLP - Black Paint
- NP - Natural Aluminum Paint
- WP - White Paint
- SC - Special Color (Specify)



Emco
2661 Alvarado St.
San Leandro, CA 94577
800/227-0758
510/357-6900
FAX: 510/357-3088



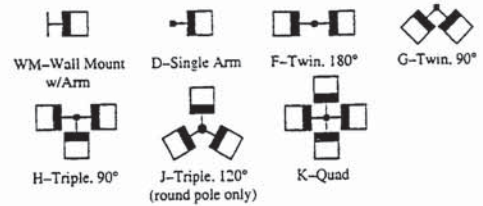
THOMAS
LIGHTING
First Name in Innovation
79204-8 / 395



INFINITY II Rectangular Cutoff Luminaire

The Infinity II from EMCO® is a rectangular area luminaire which provides sharp cutoff, even illumination, and wide fixture spacings. Housings are manufactured in rugged extruded or economical formed aluminum. All units are thoroughly sealed and gasketed preventing intrusion of moisture, dust, pollutants, and insects. Segmented Alzak® aluminum facets form a choice of five (5) optical systems providing the desired photometric distribution and illumination levels.

Luminaire Mounting Configurations:



Ordering Information:

Mounting

- WM = Wall Mount w/Arm
- D = Single Arm
- F = Twin, 180°
- G = Twin, 90°
- H = Triple, 90°
- J = Triple, 120°, (round pole only)
- K = Quad

Wattage/Source

Small Housing		
50HPS	70MH ¹	75MV
70HPS	100MH ¹	100MV
100HPS	175MH	175MV
150HPS	250MH	
Medium Housing		
250HPS	400MH	400MV
400HPS		
Large Housing		
1000HPS	1000MH	1000MV

¹Medium Base Lamp

Voltage

- 120
- 208
- 240
- 277
- 347
- 480

Finish

- BRP = Bronze paint
 - BLP = Black paint
 - NP = Natural Aluminum paint
 - WP = White paint
 - BLA = Black Anodized**
 - BRA = Bronze Anodized**
 - NA = Natural Anodized**
 - SC = Special Color paint (Specify)
- **Extruded Units Only

PAED - 3H - 250HPS - 120 - BRP - HS

Prefix

- PAE = Extruded
- PAF = Fabricated

Distribution

- Horizontal Lamp
- 1H = Type I
- 2H = Type II
- 3H = Type III
- QH = Type V Square
- FB = Front Beam

Options

- PCB* = Button Type Photocontrol Receptacle
- PCT* = Locking Type Photocontrol Receptacle w/Photocontrol
- PCR* = Locking Type Photocontrol Receptacle
- F = Single Fuse In Head (120V & 277V)
- FF = Double Fuse In Head (208V, 240V & 480V)
- TP = Tamper-Resistant Hardware
- LS = Polycarbonate Shield
- HS = Internal House Side Shield (Types II, III and Front Beam only)
- AP = Pole Mount Adj. Knuckle
- AT = Tenon Mount Adj. Knuckle
- MF = Mast Arm Fitter

*Photocontrols not available in 480V (1000W Maximum)



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SPECIFICATIONS

GENERAL DESCRIPTION:

The Infinity II is a rectangular sharp cutoff luminaire for high intensity discharge lamps. Internal components are totally enclosed, rain-tight, dust-tight and corrosion resistant. Arm mounted units attach to pole with no visible hardware or welding. Luminaire is divided into separate optical and ballast compartments.

HOUSING:

Extruded Units: The sides are dieformed from one piece .125" extruded aluminum. The top piece is .09" sheet aluminum, crowned for strength and water runoff. The top is secured to the housing with a continuous weld completely sealing luminaire from the elements.

Fabricated Units: The housing wrapper is one piece dieformed aluminum with an integrally formed bottom hem for increased rigidity. The top cover is .063" sheet aluminum, internally secured to the sides and silicone sealed for weathertight integrity.

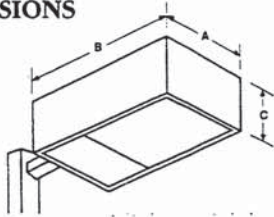
LENS:

A mitered, extruded, anodized aluminum door frame retains the optically clear, heat and impact resistant, tempered flat glass in a sealed manner using hollow-section, high compliance, memory-retentive extruded silicone rubber. A single, flush 1/4 turn captive fastener permits easy access to the luminaire.

OPTICAL SYSTEMS:

The segmented reflector system consists of individually formed semi-specular Alzak® aluminum facets precisely aligned to provide IES Type I, Type II, Type III, Type V Square or Forward Throw lighting distributions. All distributions meet IES roadway cutoff criteria.

DIMENSIONS



Housing Size	Dimensions (In.)			Weight (Lbs.)
	A Width	B Depth	C Height	
Small	13 1/2	20	7	34
Medium	20	26 1/2	9 1/8	58
Large	24	30	11	95

MOUNTING:

Lampholders are glazed porcelain with nickel plated screw shells. Luminaires are designed for mogul base lamps except 70W and 100W metal halide units which feature medium base lampholders. All mogul base lampholders in metal halide units are position oriented. HPS units all feature pulse-rated lampholders.

ELECTRICAL:

Each high power factor ballast is the separate component type capable of providing reliable lamp starting to -20°F. The ballast compartment is completely separated from the lamp compartment. The ballast is mounted on a unitized tray and prewired with quick disconnects. The compartment is accessed with a single quarter turn fastener and ballast assembly is easily removed for servicing.

High pressure sodium ballasts operate lamps within ANSI trapezoidal limits.

Metal halide ballasts are medium regulation autotransformer providing ±10% power regulation with ±10% variation from rated input voltage. Component-to-component wiring within the luminaire will carry no more than 80% of rated current and is listed by UL for use at 600 VAC at 150° or higher. Plug disconnects are listed by UL for use at 600 VAC, 15A or higher.

FINISH:

Extruded units are offered with bronze or black non-fading Duranodic anodized finish applied after fabrication. Powder coat finishes are also available.

Fabricated products receive a fade and abrasion resistant, electrostatically applied, thermally cured polyester powder finish after fabrication.

LABELS:

All luminaires bear UL Wet Location and IBEW labels.

EMCO® reserves the right to change materials or modify the design of its product without notification, as part of the company's continuing product improvement program.

EPA - Effective Projected Area (ft. ²)					
D Single Arm	F Twin, 180°	G Twin, 90°	H Triple, 90°	J Triple, 120°	K Quad
1.37	2.74	2.15	3.52	2.89	3.92
2.40	4.80	3.86	5.80	5.28	6.56
3.35	6.70	5.51	8.81	7.47	9.92

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79215-25/496



POLES

4" STRAIGHT SQUARE ALUMINUM

SPECIFICATIONS

POLE SHAFT: The pole shaft is a one piece, 4" square, seamless 6000 series extruded aluminum tubing and is heat treated to achieve a T6 temper with a guaranteed minimum yield strength of 31 KSI. Pole wall thickness is .100".

BASE TENON ASSEMBLY: The tenon anchor base assembly consists of structural quality A53 carbon steel tubing welded to an A36 structural steel base with a guaranteed minimum yield strength of 36 KSI. The base plate telescopes the pole shaft and is circumferentially welded on both top and bottom. The base is provided with slotted bolt holes to accommodate a $\pm .5^\circ$ variation in the rotational flexibility. The entire assembly is hot dipped galvanized. Four (4) mechanically galvanized fasteners secure the aluminum pole shaft to the base tenon assembly.

ANCHOR BOLTS: Anchor bolts are fabricated from a commercial quality hot rolled carbon steel bar that meets or exceeds a minimum guaranteed yield strength of 50,000 psi. Bolts have an "L" bend on one end and threaded on the opposite end a minimum of $4\frac{1}{2}$ ". Anchor bolts are completely hot dipped galvanized. Four (4) properly sized bolts, each furnished with two (2) regular hex nuts, two (2) flat washers and one (1) lock washer are provided per pole, unless otherwise specified.

BASE COVER: A two piece, fabricated aluminum cover completely conceals the entire base plate and anchorage. The base cover is secured to the base assembly with four (4) stainless steel fasteners.

HANDHOLE: The handhole has a nominal rectangular 2" X 4" inside opening in the pole shaft and tenon assembly. Included is an aluminum cover plate with attachment screws. The handhole is located 18" above the base and 180° clockwise with respect to the luminaire arm when viewed from the top of the pole for one arm. For two arms the handhole is located directly under one arm.

POLE TOP CAP: Each pole assembly is provided with a removable pole top cap. The pole top cap is secured with two (2) stainless steel alien head set screws.

FINISH: Poles are available with bronze, natural or black Aluminum Association Architectural class 1 anodized finish. Electrostatically applied, thermally cured TGIC polyester powder finish is also available.

DESIGN: The standards as charted are designed to withstand dead loads and predicted dynamic loads developed by variable wind speeds with an additional 30% gust factor under the following conditions:

The charted weights include luminaire(s) and/or mounting bracket(s).

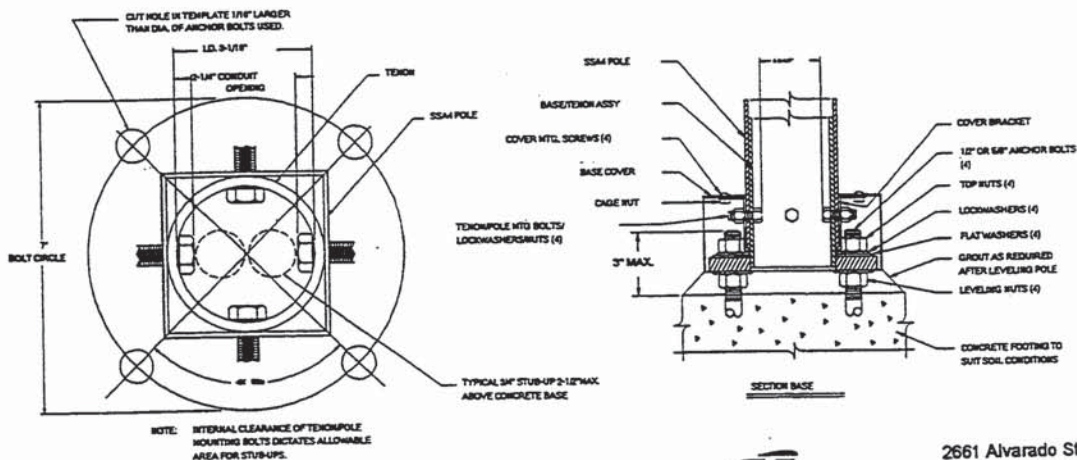
The wind velocities are based on 10 mph increments from 80 mph through 100 mph. Standards to be located in areas of known abnormal conditions may require special consideration. For example: coastal areas, airports and areas of special winds.

Standards are designed for ground mounted applications. Standards mounted on structures (such as buildings and bridges) may also necessitate special consideration requiring EMCO's recommendation.

Height correction factors and drag coefficients are applied to the entire structure. An appropriate safety factor is maintained based on the minimum yield strength of the material incorporated in the standard.

GENERAL INFORMATION: Mounting height is the vertical distance from the base of the lighting standard to the center of the luminaire arm at the point of luminaire attachment.

Twin arms as charted are oriented at 180° with respect to each other. For applications of two (2) arms at 90° or other multiple arm applications, consult the factory.



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POLES

4" STRAIGHT SQUARE ALUMINUM

GENERAL DESCRIPTION: The EMCO SSA4 straight aluminum pole consists of a one piece 4" square extruded aluminum lighting standard mounted to a structural quality carbon steel base tenon. This construction offers the corrosion resistance and flexibility of aluminum with the strength and integrity of steel. The poles are finished with either Architectural Class 1 anodizing or electrostatically applied TGIC polyester powder coat. All poles include anchor bolts, full base cover, hand hole, ground lug and top cap.

ORDERING

POLE	HEIGHT	DRILLING	FINISH	OPTIONS
SSA4	8	D1	BRA	PC
SSA4	8' 10' 12' 15' 18' L,M,H* 20' L,M,H*	D1: 1 way D2: 2 way D3: 3 way D4: 4 way T2: 2 3/8" OD Tenon T3: 3" OD Tenon	BRA: Bronze Anodized BLA: Black Anodized NA: Natural Anodized BRP: Bronze Paint NP: Natural Aluminum Paint BLP: Black Paint WP: White Paint SC: Special Color Paint	PC: Photocell and Receptacle (in top cap) PCR: Receptacle only SR: Single Receptacle

*Refers to steel base tenon size (length and thickness) based on wind load factors - L = light, M = medium, H = heavy

TYPE	POLE	HEIGHT	DRILLING	FINISH	OPTIONS

CATALOG NUMBER	POLE SIZE	MAXIMUM* LUMINAIRE LOADING					ANCHOR BOLT DATA**			
		90 MPH EPA-FT ²	80 MPH EPA-FT ²	70 MPH EPA-FT ²	BOLT CIRCLE (inches)	BOLT SIZE (inches)	MAX PROJ. (inches)			
PREFIX-HEIGHT	ACTUAL HEIGHT	BASE TENON HEIGHT (ft.)	WALL THICKNESS (inches)	90 MPH EPA-FT ²	80 MPH EPA-FT ²	70 MPH EPA-FT ²	BOLT CIRCLE (inches)	BOLT SIZE (inches)	MAX PROJ. (inches)	
SSA4-8	7' 8"	1.25	.100	14.0	17.3	22.5	7.0	1/2 x 18 x 4	3.0	
SSA4-10	9' 8"	1.25	.100	9.6	12.1	15.8	7.0	1/2 x 18 x 4	3.0	
SSA4-12	11' 8"	1.25	.100	6.8	8.5	11.5	7.0	1/2 x 18 x 4	3.0	
SSA4-15	14' 9"	2	.100	3.4	6.1	8.5	7.0	1/2 x 18 x 4	3.0	
SSA4-18L	17' 9"	2	.100	-	2.0	3.3	7.0	1/2 x 18 x 4	3.0	
SSA4-18M	17' 9"	4	.100	2.5	3.3	4.9	7.0	5/8 x 18 x 3	3.0	
SSA4-18H	17' 9"	6	.100	3.1	3.9	6.0	7.0	5/8 x 18 x 3	3.0	
SSA4-20L	19' 9"	2	.100	-	1.5	3.0	7.0	1/2 x 18 x 4	3.0	
SSA4-20M	19' 9"	4	.100	1.4	3.0	4.8	7.0	5/8 x 18 x 3	3.0	
SSA4-20H	19' 9"	6	.100	1.8	4.7	6.8	7.0	5/8 x 18 x 3	3.0	

*EPA ratings calculated using AASHTO Standards.
**Factory supplied template must be used when setting anchor bolts. EMCO Lighting will not honor any claim for incorrect anchorage placement resulting from failure to use factory supplied templates.



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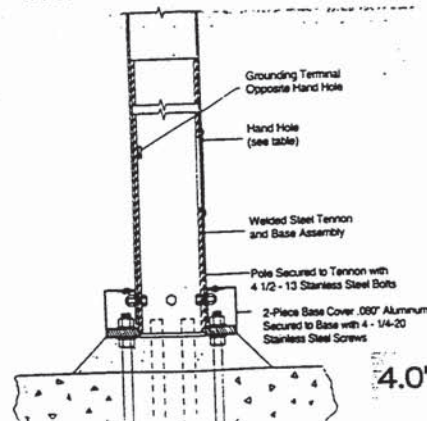
extruded aluminum tubing and heat treated to achieve a T6 temper. The Cruciform pole cross section is square with stepped corner recession.

Base Tenon Assembly: A53 carbon steel tube is welded to A36 structural steel base to form base tenon assembly. Tube and base are both hot dip galvanized. Four (4) stainless steel fasteners secure aluminum pole shaft to base tenon.

Anchorage: Four (4) anchor bolts are fabricated from hot rolled carbon steel bar with a minimum yield strength of 50 K.S.I. Bolts are fully galvanized.

Base Cover: Two-piece heavy wall formed aluminum cover conceals anchor base. Cover is secured with 4 stainless steel tamper resistant fasteners.

Finish: Units are available with bronze, natural, or black Aluminum Association Architectural Class I anodized finish. Electrostatically applied thermal cured polyester powder finish is also offered.



PREFIX	HEIGHT (FT.)	BASE TENON HEIGHT (FT.)	90 MPH EPA-FT ²	80 MPH EPA-FT ²
CA4-8	8	1.25	14.5	18.8
CA4-10	10	1.25	9.8	13.1
CA4-12	12	1.25	6.8	9.3
CA4-15	15	2	3.9	6.0
CA4-18L	18	2	1.8	3.0
CA4-18M	18	4	3.0	4.4
CA4-18H	18	6	4.4	6.2
CA4-20L	20	2	1.8	1.8
CA4-20M	20	4	1.3	2.6
CA4-20H	20	6	2.2	4.0

4.0"

CA4.5-10	10	1.5	22.9	29.7
CA4.5-12	12	1.5	17.5	22.9
CA4.5-15	15	1.5	9.6	12.8
CA4.5-18	18	1.5	6.2	8.8
CA4.5-20	20	1.5	4.5	6.7

4.5"

CA5-12	12	2.5	18.6	24.3
CA5-15	15	2.5	11.0	16.1
CA5-18	18	2.5	9.3	14.2
CA5-20	20	2.5	4.3	7.0
CA5-25L	25	2.5	1.2	3.4
CA5-25M	25	4	2.1	4.2
CA5-25H	25	7	4.0	6.3
CA5-28L	28	2.5	-	-
CA5-28M	28	4	-	2.0
CA5-28H	28	7	2.2	4.1

5.0"

CA6-15	15	3	32.4	42.1
CA6-18	18	3	18.6	24.6
CA6-20	20	3	11.4	16.7
CA6-25	25	3	6.2	10.2
CA6-28	28	3	4.0	7.4
CA6-30L	30	3	2.2	5.4
CA6-30M	30	6	4.6	8.0
CA6-30H	30	9	7.0	11.1
CA6-33L	33	3	-	3.0
CA6-33M	33	6	2.7	5.3
CA6-33H	33	9	5.0	8.1

6.0"

STRAIGHT SQUARE AL

CATALOG NUMBER POLE SIZE MAXIMUM WIND SPEED

PREFIX	HEIGHT (FT.)	BASE TENON HEIGHT (FT.)	90 MPH EPA-FT ²	80 MPH EPA-FT ²
SSA4-8	8	1.25	17.3	22.5
SSA4-10	10	1.25	12.1	15.8
SSA4-12	12	1.25	8.5	11.5
SSA4-15	15	2	6.1	8.5
SSA4-18L	18	2	2.0	3.3
SSA4-18H	18	6	3.9	6.0

4.0"

SPECIFICATIONS

HOUSING: A one-piece die cast aluminum housing mounts directly to a pole or wall without the need for a support arm. The low profile rounded form generates wind loading requirements of 1.2 EPA.

LENS ASSEMBLY: A single-piece die cast aluminum lens frame hinges down from the housing and is secured by a stainless steel lanyard and hinge pin.

An optically clear, heat and impact resistant tempered flat glass lens is mechanically secured with eight retainers. The electrical and optical chambers are thoroughly sealed with a one-piece memory retentive hollow core EPDM gasket to prevent intrusion by rain, dust and insects.

OPTICAL SYSTEMS: The segmented optical systems are manufactured from homogenous sheet aluminum which has been electrochemically brightened, anodized and sealed. The multifaceted arc image duplicating systems are designed to produce IES Types 1 (1), 2 (2XL), 3 (3XL), 4 (4XL), and 5 (0). With the 2XL, 3XL and 4XL luminaires, the reflector facets form a conical fan around the arc tube with each facet positioned to be precisely tangent to the top of the arc tube.

A mogul base lampholder is glazed porcelain with a nickel plated screw shell. Position-oriented sockets are supplied standard to accept super metal halide lamps. All units feature lamp stabilizers except 150 HPS.

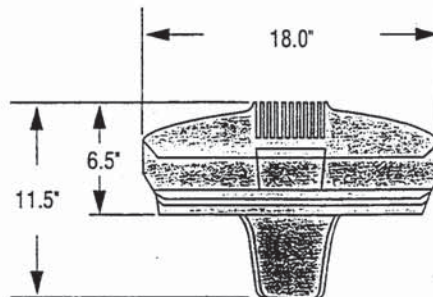
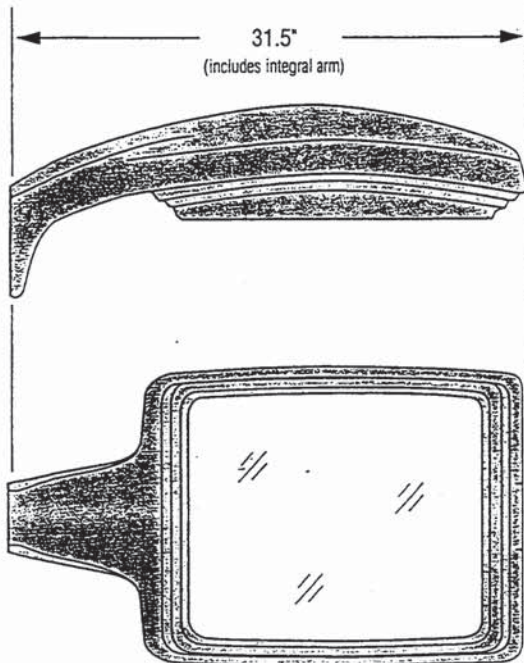
ELECTRICAL: All electrical components are UL recognized, factory tested, and mounted on a unitized plate with quick electrical disconnects. Each high power factor ballast is the separate component type capable of providing reliable lamp starting down to -20°F.

FINISH: Luminaires are finished with a fade and abrasion resistant, electrostatically applied, thermally cured TGIC powder coat. Units are thoroughly cleaned and provided with a patented chromate acid pretreatment.

LABELS: All fixtures bear UL and CSA (where applicable) wet location and I.B.E.W. labels.

Gardco reserves the right to change materials or modify the design of its product without notification as part of the company's continuing product improvement program. Design and optical patents are pending.

DIMENSIONS



E.P.A. (SQ.FT.)

- 1-way - 1.2
- 2-way - 2.4
- 4-way - 3.2

ORDERING

G18	1	2XL	250HPS	208	BRP	PC
PREFIX	CONFIGURATION	DISTRIBUTION	WATTAGE	VOLTAGE	FINISH	OPTIONS
G18	1 2 3 4 W WS	1 2XL 3XL 4XL Q	150 HPS 250 HPS 400 HPS 600 HPS 100 MH 150 MH 175 MH 250 MH 400 MH <small>All lamps are mogul base.</small>	120 208 240 277 347 480	BRP BLP WP NP SC	HF LF PC PCR POLY HS QS RPA1** RPA2** PTF

CONFIGURATION

- 1 - Single Fixture Assembly
- 2 - Twin @ 90° or 180° - Indicate
- 3 - Triple @ 90°
- 4 - Quad
- W - Wall Mount, Recessed J - Box
- WS - Wall Mount, Surface Conduit (splice compartment within luminaire) *

FINISH

- BRP - Bronze
- BLP - Black
- WP - White
- NP - Natural
- SC - Special Color

DISTRIBUTION

- 1 - Type 1 Horizontal Lamp*
- 2XL - Type 2 Horizontal Lamp
- 3XL - Type 3 Horizontal Lamp
- 4XL - Type 4 Horizontal Lamp
- Q - Type 5 Horizontal Lamp*

* Not available with 600W.

OPTIONS

- HF - In-Head Fusing
- LF - In-Pole Fusing
- PC - Receptacle and Photo Control
- PCR - Photo Control (Receptacle Only)
- POLY - Polycarbonate Sag Lens (Not Available in 400W or Higher)
- HS - Houseside Shield
- QS - Quartz Restrike

****NOTE:** RPA1 is required for 3" o.d. poles or tapered round poles where top o.d. is less than 4". RPA2 is used for 4" to 5" round poles.

CONFIGURATIONS

Gullwing is designed around square poles, which are inherently more economical than round. In single, twin and four-way configurations the luminaire-to-pole transition is smooth and natural.

For wall-mounted applications, the design allows mounting to both a j-box and surface conduit. For surface conduit, the splice is made inside the luminaire. Splice box volume is 19.8 cubic inches.

Gullwing is UL approved for through wiring.



1



2



4